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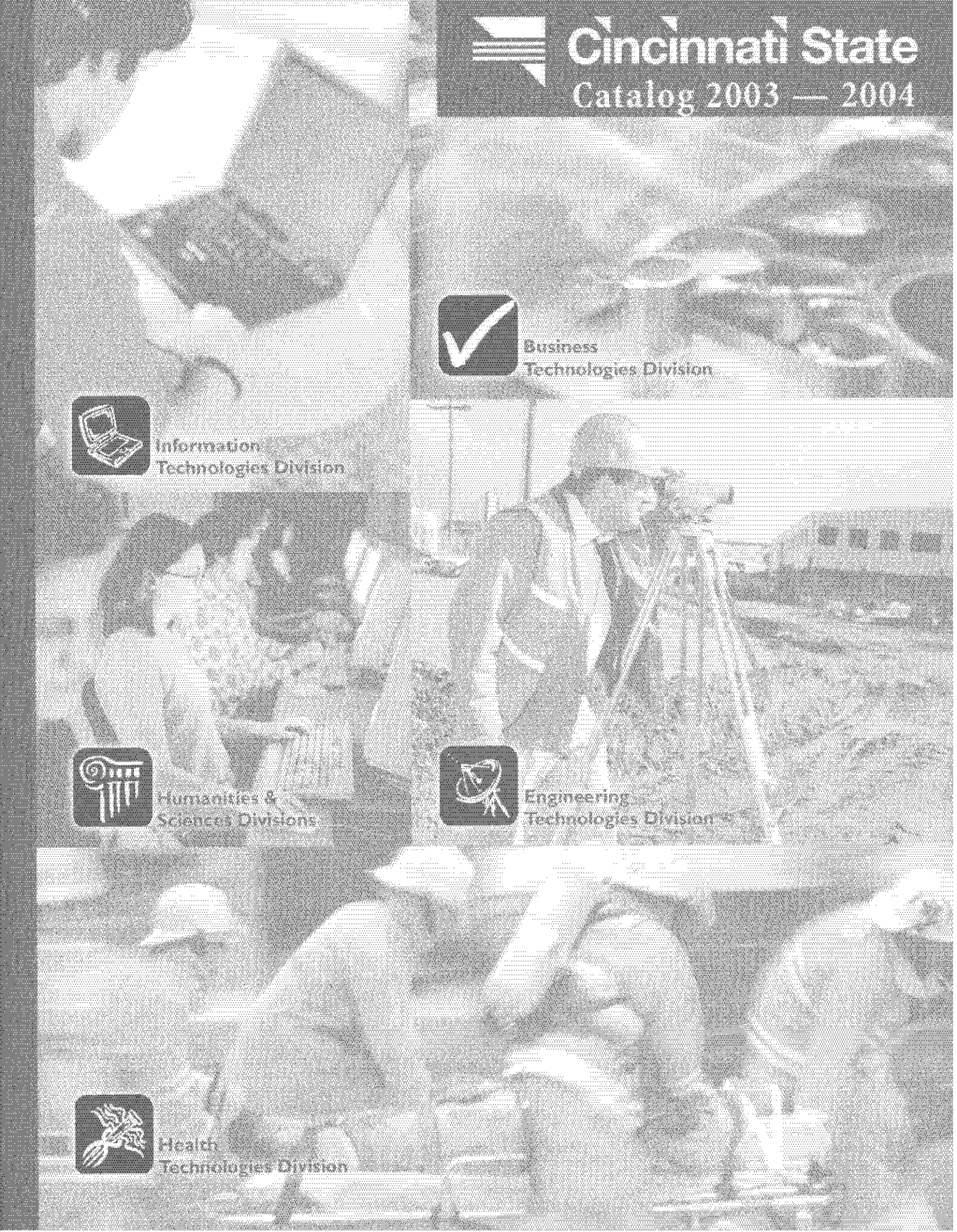

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2003 - 2004
Cincinnati State
Technical and Community College
Catalog

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3520 Central Parkway
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(513) 569-1500
Admission Office 861-7700
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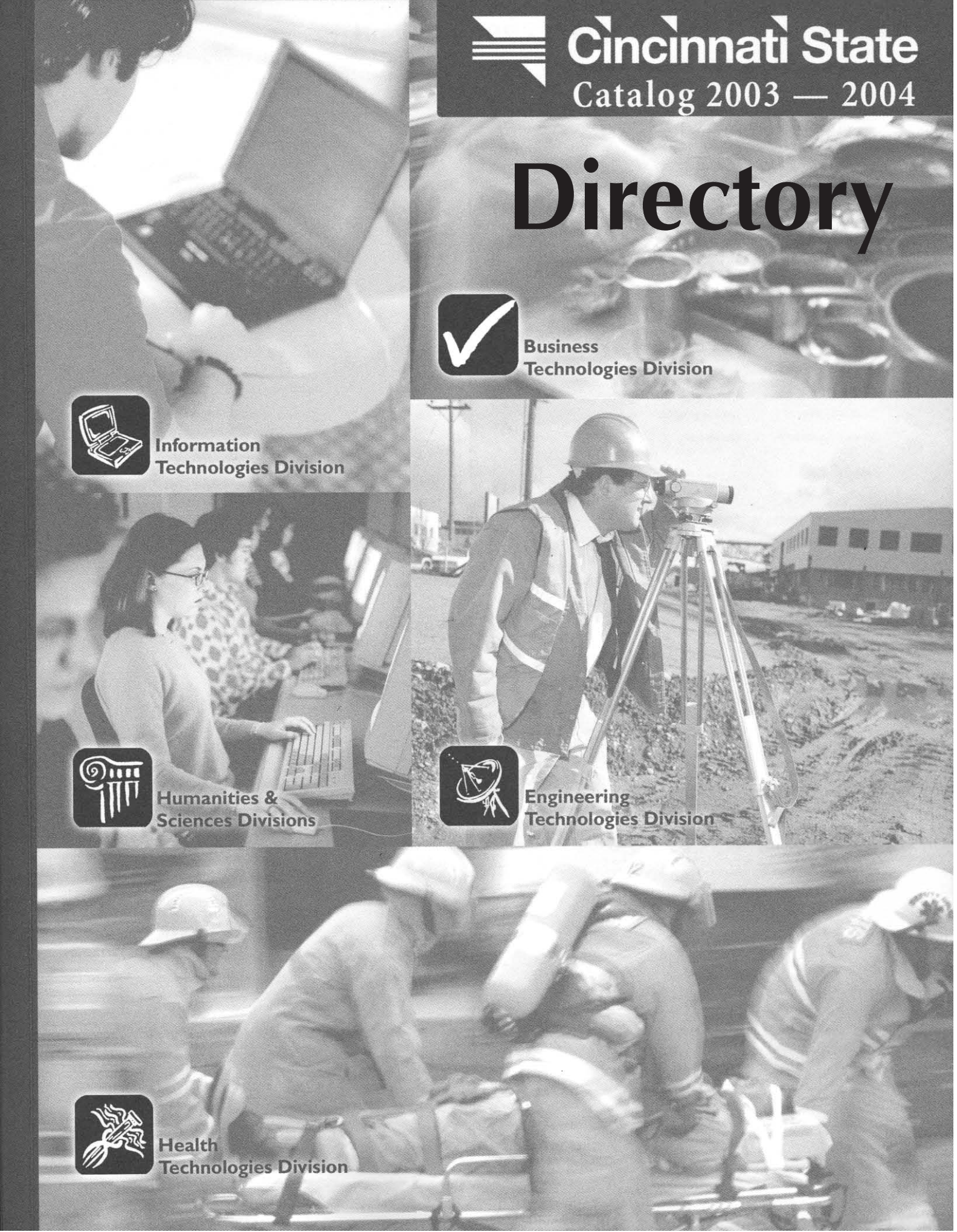
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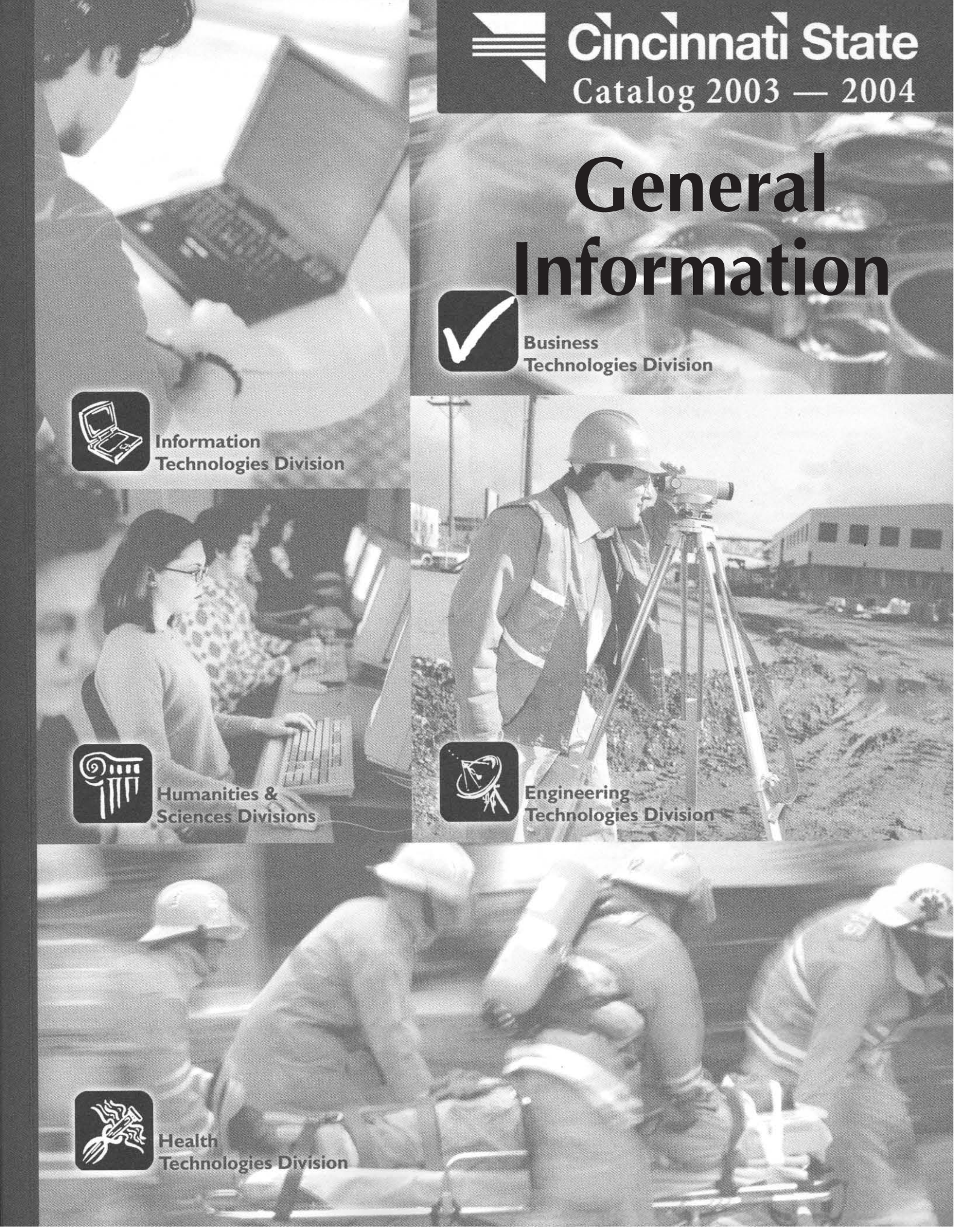

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Technologies Division

Cincinnati State Technical and Community College

Cincinnati State Technical and Community College is a public, two-year college under the authority of the Ohio Board of Regents. Governed by a nine-member Board of Trustees, the College offers 72 associate degree programs and majors and numerous certificate programs. Annually, over 15,000 students enroll in Cincinnati State courses that are offered in the day, evening, and on weekends. In addition to its academic and technical programs, the College offers many continuing education opportunities through short courses, seminars, and on-site training for area businesses and industries. The College is fully accredited by the North Central Association of Colleges and Schools and holds numerous programmatic accreditations as well.

Mission

Cincinnati State Technical and Community College is an affordable, open-access, public institution that responds to the educational needs of the community by offering quality technical, general education, training and academic transfer courses.

Cincinnati State provides a learning environment that values cultural diversity and a curriculum that blends both theory and practice through interactive instruction combined with cooperative education and/or clinical experiences.

Cincinnati State contributes to the economic development of the tri-state region and fosters lifelong learning opportunities for its citizens.

For a more comprehensive discussion of the mission, as approved by the Board of Trustees and the Ohio Board of Regents, readers should refer to the Academics, Policies & Procedures section of the catalog.

Institutional Values

As an institution committed to the success of learners, we at Cincinnati State:

- Pledge ourselves to a quality education experience for our students centered on teaching and learning
- Value the diversity of our college community
- Honor the tradition of our technical and cooperative education mission
- Embrace knowledge gained through experiential learning
- Encourage vision that meets the changing needs of our community
- Focus on providing service that exceeds the expectations of our students, employers and the community
- Support the personal and professional growth of all who are committed to our purpose
- Promote the use and the teaching of cutting-edge technology

Vision

Cincinnati State Technical and Community College will be a Premier Two-Year College in the State of Ohio and a National Leader in the Community College Movement for its:

Commitment to a student-centered education delivery system

Quality of comprehensive academic offerings and student services

Uniqueness in experiential learning

Dedication of faculty and staff to both academic excellence and the betterment of the community it serves.

Cooperative Education

Since its beginning, Cincinnati State has emphasized the value of integrating cooperative work experience with academic coursework. The College's graduate employment rate of 98% speaks directly to Cincinnati State's commitment to provide quality education enriched by on-the-job training. Students encounter "real life" job demands, helping to clarify their career choices as well as promoting independence and responsibility in the workplace. Most co-op experiences are paid placements that permit students to earn while learning and also to defray the total cost of their education. The College has been recognized nationally for its extensive cooperative education program. Over 600 area employers provide placements for Cincinnati State students who devote at least one term of their program of study to applying the knowledge they have acquired in the lab and in the classroom.

Student-Centered Quality Education

Cincinnati State is also known for its dedication to teaching and its student-centered philosophy and practices. Small class sizes, an extensive developmental education program, a free tutoring program, counseling, and library services provide the kinds of academic support needed for success for both the returning adult student and the recent high school student. Both theory and practice are stressed through appropriate classroom, laboratory, and cooperative/clinical education experiences. Each student at Cincinnati State is an individual, not a number.

Cincinnati State teachers take pride in the personal attention afforded to each student, and every Cincinnati State graduate is a reflection of the College's commitment to developing human potential, one student at a time.

Collaborative Relationships

Cincinnati State serves the community by hosting numerous community events throughout the year and by its many partnerships with area high schools and universities. In addition to the College's extensive cooperative education program described above, the College is a member of the Greater Cincinnati Consortium of Colleges and Universities which allows students, under certain conditions, to take courses not offered at their home institution at any of the thirteen member institutions. Students who wish more information about this

program should contact Cincinnati State's registrar.

Cincinnati State also has a cross-registration agreement with the Army and Air Force ROTC at the University of Cincinnati. Army and Air Force personnel teach the General Military Training (GMT) course classes. Enrollment in these classes entails no service obligation. Books for these courses and uniforms are provided free to students. The student attends ROTC classes and drill periods on the University of Cincinnati campus while attending academic classes at Cincinnati State. Details may be obtained from the Veterans Affairs Office, Room 157 at Cincinnati State.

Accreditation & Memberships

Ohio Board of Regents
Division of Vocational Education, State Department of Education
North Central Association of Colleges and Schools
Landscape Contractors of America
FAA-Approved Aircraft Maintenance Technician School
American Culinary Federation Educational Institute
National League for Nursing
Technology Accreditation Commission of the
Accreditation Board for Engineering and Technology
Member of the American Society of Allied Health Professionals
Member of Cooperative Education Association
Member of C/QIN (Continuous Quality Improvement Network)
Member of American Technical Education Association
Member of American Association of Community Colleges
Member of Ohio Association of Community Colleges
Member of National Junior College Athletic Association
Member of World Affairs Council
Member of AQIP (Academic Quality Improvement Project)
Member of American Productivity & Quality Center
Member of American Society for Quality Management
Member of Association for Quality & Participation
Member of International Society for Performance Improvement

Cincinnati State
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Admission, Fees and Financial Aid

Business Technologies Division

Information Technologies Division

Humanities & Sciences Divisions

Engineering Technologies Division

Health Technologies Division

Admission Information

Cincinnati State Technical and Community College is an open-access, public institution that is dedicated to the principles of providing each student the maximum opportunity to develop and learn.

Students who are high school graduates or have a high school equivalence (GED) are eligible for admission to Cincinnati State Technical and Community College.

Upon completion of the admission process, students will be admitted to a degree program. Some admitted students may be recommended to participate in prerequisite or developmental education courses. All placements are based on a review of placement test scores and high school (or GED) and college transcripts. All admission placements may lead to an associate degree or certificate.

Prerequisite or developmental education courses enable the student to develop or strengthen important academic skills by taking prescribed classes. A class schedule is designed by an academic advisor to enhance the student's academic success and is based on the student's goal, a review of placement test scores, high school and/or college transcripts, and the academic advising session. Students must complete all prerequisite or developmental education courses in five terms or one calendar year.

Students admitted to degree programs are regular students enrolled in eligible programs for the purpose of receiving a degree or certificate.

Graduation Rate Information: Graduation rate information is available in the Office of Admission and Counseling, room 168.

Apply Early! Students are advised to begin the process of admission six to eight weeks in advance of the term in which they plan to attend Cincinnati State, in order to facilitate transcript requests from other schools, financial aid processing, and advising. Some programs reach their capacity early requiring possible placement on a wait list.

Degree and Certificate Applicants

High school graduates and recipients of the GED certificate should submit the following:

- A completed and signed Application for Admission.
- Request that the high school send the Office of Admission an official transcript copy covering all work completed at time of application. (A final high school transcript will be required upon graduation.)
- Applicants who are not high school graduates must also submit a copy of their General Educational Development Test (GED) scores.
- Complete the ACT™ Compass Placement test (see Placement Testing on page 18).

Applicants who have attended another college should submit the following:

- A completed and signed Application for Admission.
- A $10 non-refundable admission fee will be charged to the student's first registration bill.
- Request that the high school send the Office of Admission a final official transcript copy. High school transcripts will be waived if you are a college graduate and you send those transcripts.
- Request an official transcript be sent to the Office of Admission from each college or university attended if you want to transfer credits or waive the COMPASS test.
- Complete the ACT™ Compass Placement test (see Placement Testing on page 18).
  A request to waive this requirement can be initiated through the Office of Admission if the student has either earned a degree at a regionally accredited institution, or the student has previous college-level coursework in English and math.

Readmission

- Admitted students who have not enrolled for five (5) consecutive terms must reapply for admission and pay a $10 non-refundable admission fee (charged to the student's first registration bill).
- Students reapplying for admission five (5) years after their prior admission date will need to resubmit an Application for Admission and retest.
- Admission documents are maintained for five (5) years after the initial admission date.

Applicants who are non-degree and non-certificate seeking should submit a completed Non-Degree Personal Data Form and the course registration form at the time of registration.

NOTE:

- An Application for Admission for non-admitted students is valid for one (1) year.
- Admission documents for admitted students are maintained for five (5) years after the initial admission date.
- **All documents submitted to the Office of Admission become the property of Cincinnati State Technical and Community College and will not be returned or forwarded.**

Change of Majors

Should you decide to change your major once you are admitted and enrolled at Cincinnati State, you need to process a Change of Major form in the Admission Records Office. If you are uncertain about your options, contact the Counseling Center at (513) 569-1544 to schedule a career counseling appointment.

International Applications

Non-US citizens who have been granted the status of immigrant, permanent resident, or refugee by the Bureau of Citizenship and Immigration Services may be admitted on the same basis as US citizens.

All other international applicants will be required to complete the following no later than two months before the student intends to begin:

1. Meet the admission requirements of US citizens including completion of an Application for Admission.
2. Provide proof of proficiency with the English language with a minimum score of 500 (paper) or 173 (computer based) on the TOEFL, sent directly from the educational testing service. Our school code is 1984.
3. English translation of high school transcripts. If you wish to transfer college/university coursework from abroad, you must have your transcript(s) translated and evaluated by an official Credential Evaluation Service. (Listing available upon request from the International Student Office.)

4. Provide proof of adequate financial support - It is estimated that the international student will need a minimum of $15,870 per year for tuition, books, living, and miscellaneous expenses. Immigration regulations prevent the student from earning any substantial portion of this amount. There are no scholarships or educational loans available for international students. Submission of a signed and officiated Certification of Finances Form to the attention of the International Student Advisor is required to verify the availability of sufficient funds to cover the cost of the education while attending Cincinnati State College.

5. Upon receipt of the above-mentioned documents, and consequent offer of admission, all international students must submit a $3,500 deposit to the Cashier's Office. This deposit will be credited to the individual's account and used for payment of tuition and fees only. The Advance Deposit Fee covers approximately two (2) terms of tuition. The student must provide for all other expenses, room, board, books, transportation and incidental expenses.

6. I-20 Form is issued to student only after the above-mentioned steps are completed.

For additional information regarding international admission, contact the International Student Advisor at (513) 569-1543, or visit our website at www.cinstate.cc.oh.us.

Home-Schooled Students

Home-schooled applicants must submit the following:
1) Application for Admission, 2) a notarized letter from their parents detailing the content of the student's home-school experience and duration, and 3) a diploma and transcript from a recognized home-schooling association or a state diploma based on the GED. All home-schooled applicants must take the ACT CompassTM Placement test.

Placement Testing

All new students who are seeking a degree or certificate must participate in placement testing for mathematics, writing, and reading. This placement testing will assist your advisors in helping you to succeed. Testing will be conducted in room 196 of the main building. Reservations are not necessary as new students are individually tested on a drop-in basis.

There is no charge for testing. Testing hours are:

Monday - Thursday Arrive no later than 6:00 p.m.	8:00 a.m. - 8:00 p.m.
Friday Arrive no later than 2:00 p.m.	8:00 a.m. - 4:00 p.m.
First Saturday of Each Month Arrive no later than 9:15 a.m. (Every Saturday in July and August.)	8:30 a.m. - noon

No Appointment is necessary!
Photo ID required.

Please allow approximately 2 1/2 hours for testing within the scheduling hours. Any questions regarding the Compass™ Placement Test can be directed to the Office of Admission & Counseling, room 168, or telephone 861-7700.

Post-Secondary Enrollment Options Program (PSEO)
9th, 10th, 11th and 12th grades

As provided for in Senate Bill 140

*High school students who are enrolled in Tech-Prep classes and/or other special college-sponsored classes should contact the Director of Admission at 569-1550 for application and enrollment requirements prior to completing this application.

Guidelines

I. The post secondary enrollment options program provides qualified 9th through 12th grade high school students who attend public and chartered non-public Ohio high schools, the opportunity to enrich their educational experience by enrolling in college-level coursework. The program is intended to complement rather than replace high school preparatory curriculum.

Important dates: By March 1, the school district notifies students and parents about the PSEO program. By March 30, the student informs school district of intent to participate in the PSEO program.

II. A. All 9th, 10th, 11th and 12th grade students who wish to enter Cincinnati State for college and/or high school credit should submit the following items:

1. For each academic year, apply and have all credentials on file **no later** than:
June 20 for Early Fall & Late Fall term, **November 21** for the Winter & Spring term. (PSEO does not qualify for the Summer term.)
2. A letter of recommendation from the high school counselor attesting to the students academic and social readiness to enter college courses.
3. An official copy of the high school transcript. (All 9th grade proficiency tests must have been passed.)

B. All PSEO applicants need to complete the ACT™ Compass Placement Test administered on the Cincinnati State campus. Hours of testing are:
Monday to Thursday - 8:00 a.m. to 8:00 p.m.
Friday - 8:00 a.m. to 4:00 p.m.
First Saturday each month – 8:30 a.m. to 12 noon
Please allow approximately 2 1/2 hours for testing within the scheduled hours. ***No reservations required.***

C. Admission to the PSEO program is based upon the completed Application for PSEO and qualification for college-level courses as indicated by the Compass test scores. Students should demonstrate college-level mastery in **all** areas. Students cannot enroll in Developmental Education courses under the program. Continued enrollment in the program is based on the successful completion of coursework.

D. All students who are accepted in the post-secondary enrollment options program at Cincinnati State are advised to include a parent/guardian at the initial registration meeting. This meeting will include a review of the College's academic procedures, practices, and policies.

E. High school counselors are responsible for explaining the equivalency, or lack of equivalency, of a given course at Cincinnati State in meeting high school graduation requirements.

F. Students must see the PSEO advisor prior to registration each term to prepare a schedule for the term. These reg-

istrations will not be processed until one week before classes begin.

III. Students enrolling in the program will be subject to the same policies and procedures, academic practices, and grading standards as all other Cincinnati State students.

Cincinnati State reserves the right to review the final selection of college classes approved by the high school, and to limit participation in any class based on such circumstances as extraordinary lab fees, age, safety issues, excessive course load, or academic probation. High school students are not eligible to receive state or federal financial aid.

For additional information and/or application contact the Office of Admission, (513) 861-7700.

Financial Information

Student Expenses

The Ohio Board of Regents provides a student subsidy to Cincinnati State Technical and Community College for each Ohio resident enrolled. The amount received from the Regents is less than one-half of the College's operating costs. The balance must come from tuition payments and other sources. Out-of-state residents pay the highest tuition since the College receives no Regents' subsidy for their instruction. (See the end of this section for complete explanation of residency determination.)

Schedule of Fees*

Cincinnati State Technical and Community College continues to maintain affordable tuition rates in the Greater Cincinnati area.

Tuition Fees (per term)

	Ohio Resident	Non-resident
Tuition fee per credit hour	$65.00	$130.00

Tuition fee includes instructional fee, general fee, and other non-instructional services to the students. Non-resident fee includes a non-resident surcharge.

Miscellaneous Fees

Admission Fee (payable at first registration)	$10.00
Advanced Standing Credit Fee	$65.00
Non-Resident Surcharge (per credit hour)	$65.00
Late Registration Fees:	
(first day of the term)	$10.00
(second day of the term)	$20.00
(third day of the term and thereafter)	$30.00
Extended Payment Fee	$40.00
Course/Lab Fee	varies per course
Student I.D. Card	$ 1.00
Registration Fee (per term)	$ 6.00
Technology/Activity Fee (per term)	$25.00
Returned Check Fee	$20.00

Parking Fees

Parking Garage Permit (per term, daytime)	$50.00
Lots C & G Vehicle Parking Permit	$50.00
Lower Lot Vehicle Parking Daily (daytime)	$ 1.50
Evening Parking Permit Lots C & G Parking Garage (per term)	$20.00
Parking Permit - Harrison Airport Facility (per term)	$50.00
Replacement Permit	$ 5.00

* Subject to change at the discretion of the College.

Fees are non-refundable other than the Instructional Fee.

PLEASE NOTE: All fees for each term must be paid by the end of that term. Certificates, degrees, transcripts, and further registration activity will be withheld until all financial obligations are fully paid.

Cooperative Education Employment

Please refer to the specific curriculum to determine exact co-op credits required. Charges for co-op credit must be paid in advance on the established registration date.

Books and Supplies

The cost of books and supplies can vary greatly from term to term. Also, different programs have different requirements. Students in the engineering technologies, for example, generally will spend more on supplies and equipment than the business oriented programs.

The first school term usually is the most expensive one as students purchase books and supplies at that time that they also use in later terms. The average expense for books and supplies is $250 per term.

Senior Citizens

Senior citizens may register tuition free to audit courses as space is available after the pre-enrollment bill period. Senior citizens must pay the application, registration, lab and out-of-state fees, if applicable. Regular tuition will be charged to those senior citizens who wish to receive credit for the courses. They must pay tuition as well as fees for all non-credit courses. (An eligible senior citizen is one who is sixty years of age or older.)

Refund of Tuition Charges

Students are responsible for paying all charges incurred as a result of registering for classes. The College will not drop a student's classes nor reduce tuition charges/fees due to a student's non-payment of those charges. Students may receive a fee reduction for classes by formally withdrawing (dropping) from those classes for any reason. The amount of the fee reduction is based upon the date of withdrawal (drop) and calculated according to the College's published refund schedule. Refunds are disbursed to the student or/and a third party payor. Refund checks are mailed to students during the third week of the term.

1. Requests for refunds will be considered only if the student completes and signs the official College drop/add class form. The student shall deliver the completed form to the Registrar Office. The official date of withdrawal (drop) is the date of entry of the form by the Registrar Office.
2. The Admissions fee is not refundable.
3. The following fees are not refundable unless the College cancels all classes the student registers for:
   - Registration fee
   - Technology/Activity Fee
   - Extended Payment fee
   - Late registration/payment fees
4. The College's refund schedule is as follows:

   Refunds for dropped classes processed in the Registrar Office before the first day of the term are calculated at a rate of 100% refund of the in or out-of-state tuition fee and course/lab fee for the dropped class.

   Refunds for dropped classes processed in the Registrar Office from the first day of the term through the

seventh calendar day of the term will be calculated at a rate of 100% refund of the in or out-of-state tuition fee and course/lab fee only for the dropped class.

Refunds for dropped classes processed in the Registrar Office from the eighth to fourteenth calendar day of the term are calculated at a rate of 50% refund of the in or out-of-state tuition fee and course/lab fee for the dropped class. There is no reduction of charges for courses dropped after the fourteenth calendar day of the term.

5. Flexibly scheduled courses: Courses which have a beginning or/and ending date different than the first and last weeks of the normal term schedule are considered flexibly scheduled and will have a prorated refund period applied to them. A 100 percent refund is applicable to a flexibly scheduled course dropped in the first 11 percent period of that course's term. A 50 percent refund is applicable to a flexibly scheduled course dropped in the 12 to 22 percent period of that course's term. No refund is applicable after the 22 percent period of the term.
6. Course cancellation: A refund of 100% will be made to a student who has registered for courses that have been cancelled by the College (if the student does not change to another course).
7. Refunds for students whose registration bill was paid by third-party funding (financial aid, agency) are applied toward reimbursing the third-party before any disbursement to the student.
8. If a student owes a financial obligation to the College, the refund will be applied toward payment of the balance due before any disbursement to the student.
9. Students who do not follow the established dropped-class procedures of the College will not be eligible for a refund.
10. Students who have questions concerning refunds may direct those questions to the College Cashier Office.
11. Appeals to this refund policy may be filed through the College Cashier Office.

Non-Attendance of Classes

1. Instructors are required to document student attendance in each course meeting throughout the term.
2. From the first day of the term until the First Day to Withdraw for the term, students who drop or withdraw from a course must identify whether or not they attended the course section.
3. A student who enrolls in a course but does not attend the course within the first two weeks will be designated a No Show (NS) by the instructor.
4. If there is a discrepancy between a student's self-reported attendance status and the attendance status reported by an instructor, the attendance status reported by the instructor will be the status of record.
5. Students are not permitted to begin attending a course section after a No Show (NS) has been issued by the instructor or self-reported by the student for that course section.
6. The designation of No Show (NS) will not appear on the student's transcript.
7. A student who receives a No Show (NS) designation for a course is still financially responsible for payment for the course. Federal Financial Aid is not applicable to a course for which a student has received a No Show (NS) designation.

A student is not permitted to withdraw from a course he or she did not attend or to which a No Show (NS) has been assigned.

CINCINNATI STATE TECHNICAL AND COMMUNITY COLLEGE RESERVES THE RIGHT TO REVISE THIS STATEMENT OF TUITION REFUNDS AT ANY TIME.

Ohio Residence for Tuition Surcharge Purposes

Tuition is charged on the basis of residence in the State of Ohio and residence outside of the State of Ohio. A student with a question of their right to claim legal residence in the State of Ohio for educational purposes may request the College review their residency status. The student initiates the review process by submitting a completed Review of Residency Form to the Office of the Registrar. The Review of Residency Form should be submitted to the Office of the Registrar at least five (5) working days prior to the beginning of the term in which the student plans to enroll.

Proofs of residency will be required when requesting a review of residency. An Ohio Driver's license or Ohio State Identification Card is required. A lease, deed, notarized letter to validate living in the state is required. Proof of paying Ohio income tax; bank statements; voter registration card; employment letters all can be considered as support documents to validate residency status. Other documents as needed may be requested.

GENERAL RESIDENCY GUIDELINES

1. The following persons shall be classified residents of the state of Ohio for tuition surcharge purposes. (Documentation supporting the student's request for being classified as an Ohio resident will be required).

a. A dependent student, at least one of whose parents or legal guardian has been a resident of the state of Ohio for all other legal purposes for twelve (12) consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.

b. A person who has been a resident of Ohio for the purpose of this rule for at least twelve (12) consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and had not directly or indirectly received in the preceding twelve (12) consecutive months, financial support from other persons or entities who are not residents of Ohio for all other legal purposes.

c. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of the term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the State of Ohio for reasons other than gaining the benefit of favorable tuition rates. Documentation will be required. Residency status will be lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside of Ohio less than twelve (12) months after accepting employment and establishing domicile in Ohio.

d. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for tuition surcharge purposes.

e. A person who enters and currently remains on active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio as long as Ohio remains the state of such person's domicile.

f. A person on active duty status in the United State military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio.

2. A dependent person classified as a resident of Ohio for these purposes as a result of (1) (a) listed above and who is enrolled in an institution of higher education when his/her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic program.

3. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve (12) months following such removal, constitute relinquishment of Ohio residency status otherwise established under items (1)(a) or (1)(b) listed above.

4. A person transferred by his or her employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes, and his or her dependents, shall be considered residents for these purposes as long as Ohio remains the state of such person's domicile and as long as such person has fulfilled his or her tax liability to the State of Ohio for at least the tax year preceding enrollment.

5. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio for at least four months during each of the three years preceding the proposed enrollment.

6. Any person once classified as a non-resident, upon the completion of twelve (12) consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for theses purposes if such a person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve (12) months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident.

7. Any reclassification of a person who was once classified as a non-resident for these purposes shall have prospective application only from the date of such reclassification.

8. Evidentiary determinations under this rule shall be made by the institution which will require, the submission of documentation regarding the sources of a student actual financial support and other documentation. Criteria which may be considered in determining residency for tuition surcharge purposes may include, but are not limited to:

a. Criteria evidencing residency:
   1) if a person is subject to tax liability under section 5747.02 of the Revised Code;
   2) if a person qualifies to vote in Ohio;
   3) if a person is eligible to receive state welfare benefits;
   4) if a person has an Ohio's driver's license and/or motor vehicle registration
   5) if a person has a signed and binding lease/deed to a domicile in the state of Ohio;

b. Criteria evidencing lack of residency:
   1) if a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of welfare benefits, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation);
   2) if a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of welfare benefits i.e. driver's license, etc…

IMPORTANT: An individual's immigration status will affect his or her ability to obtain resident status for tuition purposes. Contact the Office of the Registrar at (513) 569-1522 for more information.

Additional information and guidelines concerning Residency are available in the Office of the Registrar.

Tuition Reciprocity for Northern Kentucky Residents

Cincinnati State Technical and Community College does not charge out-of-state tuition add-ons to residents of Boone, Bracken, Campbell, Carroll, Gallatin, Grant, Kenton, and Pendleton Counties in Kentucky. To qualify for reciprocity, students must be admitted to Cincinnati State as a degree-seeking student and enroll in an eligible associate degree program. To be admitted a student must submit an admission application, have high school and college (if applicable) transcripts mailed to Cincinnati State, and complete the placement test. Certificate programs are excluded from this tuition reciprocity agreement.

This same reciprocity agreement enables graduates of Cincinnati State who are residents of Butler, Clermont, Hamilton, and Warren Counties in Ohio to enroll in certain baccalaureate degree programs at Northern Kentucky University and pay Kentucky resident tuition rates. Graduates must satisfy all NKU regular transfer admission requirements, including any requirements of the specific baccalaureate program.

Financial Aid

At Cincinnati State, the purpose of financial aid is to provide financial assistance to students who, without such assistance, would be unable to attend the college. Cincinnati State awards over twenty million dollars annually to some 10,000 students from federal and state financial aid programs, private donors and the College's own funds. Complete information about all of the financial aid programs administered at Cincinnati State is available from the Financial Aid Office and at the Cincinnati State financial aid web site: http://cincinnatistate.edu/finaid.htm

Financial aid is money in the form of scholarships, grants, loans and employment (work-study). Most scholarships do not have to be repaid. Some scholarships, however, are awarded to students who promise to teach or perform some other serv-

ice when they finish school. Grants are typically awarded on the basis of financial need and do not have to be repaid. Loans are borrowed money that has to be PAID BACK over a period of time, usually after the student leaves school. Work-study is money that students earn by working at a part-time job.

One of the principles behind awarding need-based financial aid is that students and their families should pay for educational expenses to the extent they are able. A family's ability to pay for educational costs must be evaluated in an equitable and consistent manner. To be fair to everyone a standard, federal formula is used to calculate a student's Expected Family Contribution (EFC). The information is derived from the student's completed Free Application for Federal Student Aid (FAFSA). Financial need is the difference between a student's total annual educational expenses and the amount the student and his or her family is expected to contribute toward those expenses. A student's need for financial assistance will differ from school to school because the cost of attendance will differ. Students and their families who have special circumstances that might affect the amount they are expected to contribute, such as the recent unemployment of a parent or spouse, unusual medical or dental expenses not paid by insurance, may request a Special Condition Application from the Financial Aid Office.

Office Hours

The office of Financial Aid is open

8:00 am – 5:00 pm	Monday thru Wednesday; and Friday
8:00 am – 7:00 pm	Thursday
8:00 am – 7:00 pm	Monday thru Thursday (week prior to start of each term and first week of classes)

How To Apply

Each year, students need to complete the Free Application for Federal Student Aid (FAFSA). The FAFSA includes all the information necessary to determine the student's Expected Family Contribution. The FAFSA must be completed for consideration of most federal student aid programs. Many states, including Ohio, Indiana and Kentucky, use the FAFSA to award state aid. Students automatically receive a RENEWAL FAFSA in subsequent years that contains a summary of the information reported on the prior year FAFSA.

The FAFSA is available in two formats, paper and electronic. The paper FAFSA is mailed directly to the application processor listed on the FAFSA. For those who apply by mail, the processing time frame is approximately four (4) weeks. For FAFSAs submitted electronically, the processing time frame is about two (2) weeks. Electronic filers can submit their FAFSA application through the Internet by using the Cincinnati State financial aid web address at http://cincinncinnatistate.edu/finaid.htm or at the Department of Education's web address at www.fafsa.ed.gov Students must provide the federal school code number for each school where they want their FAFSA results sent. **The federal school code number for Cincinnati State is 010345.** To receive maximum consideration for certain programs, including the Federal Supplemental Educational Opportunity Grant (SEOG), Federal Work-Study (FWS) and Federal Perkins Loan programs, students should submit their FAFSA forms by February 15 of each calendar year. Once a paper or electronic FAFSA is submitted, students receive a document called a Student Aid Report (SAR). Students should keep all parts of their SAR in a safe place. The College will receive the results of each student's FAFSA electronically. Any changes to a SAR should go directly to FAFSA. Students will receive an award letter from the Financial Aid Office that tells them the types and amounts of aid that have been awarded for their attendance at Cincinnati State once they are verified and meeting all eligibility requirements for financial aid.

Cincinnati State Scholarship Program

The purpose of the scholarship program at Cincinnati State is to acknowledge and reward high academic achievement by helping deserving students finance their college educational cost. The Cincinnati State scholarship application deadline date is March 1 of each calendar year. RECIPIENTS OF A SCHOLARSHIP FROM CINCINNATI STATE MUST REAPPLY EACH YEAR. Eligibility requirements include:

- U. S. citizenship
- enrolled or accepted for enrollment into a degree or certificate program
- minimum grade point average of 3.0
- for new students, have ranked in upper 20% of their high school graduating class
- for continuing students, have completed a minimum of 12 credit hours at Cincinnati State
- for need-based applicants, have applicable FAFSA results on file
- two letters of recommendation

Students who apply for a scholarship by the due date will be considered for all scholarships for which they are eligible. The number and type of scholarships vary from year to year depending on donations received for the scholarship program.

Private ("Outside") Scholarship Opportunities

The public library is an excellent source of information on private sources of financial aid. The Office of Financial Aid also has books for students to research scholarship opportunities. Many companies have programs to help students pay for post-secondary educational cost for employees and their family members. In addition, financial assistance is available from many foundations, religious organizations, fraternities, sororities, town and city clubs, local school boards, and civic groups. This information is FREE. There are FREE on-line scholarship search programs accessible via the Internet. Students are invited to visit the Cincinnati State Financial Aid Office web site at http://cincinnatistate.edu/finaid.htm for access to one of the largest FREE on-line scholarship search programs called FASTWeb! Students are also encouraged to review the Scholarship Bulletin Board located outside the Financial Aid Office for up-to-date scholarship opportunities.

Federal Student Aid Programs

To receive financial aid from the federal student aid programs, students must:

- have financial need
- have a high school diploma or General Education Development Certificate (GED)
- be enrolled or accepted for enrollment as a regular student working toward a degree or certificate in an eligible program
- be a U.S. citizen or eligible non-citizen
- have a valid Social Security Number
- sign a statement on the FAFSA certifying that all federal

student aid will be used only for educational purposes
- not be in default on a federal student loan or owe money back on a federal student grant
- register with the Selective Service, if required,
- make satisfactory academic progress, and
- not have been convicted for any illegal drug offense.

A copy of the financial aid Standards of Satisfactory Academic Progress Policy is available later in this course catalog and by contacting the Financial Aid Office.

Other general financial aid information you should know:
- financial aid awards are adjusted appropriately for changes in a student's enrollment status between terms;
- to be eligible for federal student aid, students must enroll and attend classes in which they are registered. The Financial Aid Office is required to recalculate a student's financial aid award(s) to reflect only those classes for which the student actually begins attendance.

Detailed information on these and other financial aid eligibility criteria may be obtained from the Financial Aid Office.

Federal Pell Grant

Pell Grants are awarded to undergraduate students who have not earned a bachelor's or professional degree and demonstrate financial need. The annual maximum Pell Grant is determined, each year, by the federal government. Pell Grants may be awarded to both full and part-time students.

Supplemental Educational Opportunity Grant – SEOG

SEOG is for undergraduate students with exceptional financial need who are eligible to receive a Pell Grant. To be considered for a SEOG at Cincinnati State, students must file the annual FAFSA by February 15 of each year. Funding is limited and is awarded based on the availability of funds.

Federal Work-Study

Federal Work-Study provides jobs for students with financial need allowing them to earn money to help pay education expenses. The amount a student can earn cannot exceed the Work-Study award. When assigning work hours, supervisors will consider a student's class schedule, Work-Study award amount, and employer needs. Work-Study awards are offered first to students with exceptional financial need and who have filed the annual FAFSA by the February 15 priority deadline.

Federal Stafford Loan Program

Federal Stafford loans (subsidized and unsubsidized), are low-interest loans made to students attending school on at least a half-time basis. At Cincinnati State, half-time means enrolled for at least six (6) credit hours per term. Loans under the Federal Stafford Loan program are made by banks, credit unions, savings and loan associations and private agencies. Students are not required to make payments while in school of a subsidized loan; students are required to make payments on the interest that accrues, while in school, on an unsubsidized loan. An option to have the interest capitalized on an unsubsidized loan is available.

At Cincinnati State, ALL STUDENTS, are required to complete an on-line loan entrance counseling session in order to receive the first disbursement of their loan proceeds for the academic year. Students access the loan counseling session at http://cincinnatistate.edu/finaid.htm For first-time borrowers, loan proceeds are delayed for the first 30 days of the loan period. Students must maintain their eligibility during this period. The purpose of these mandatory loan counseling sessions is to ensure that all student borrowers:
- review and understand their loan repayment obligation
- anticipate their average monthly repayment amount
- remember to update their lender/guaranty agency with any address or other pertinent change
- review the deferment, forbearance and cancellation conditions of their loan, and
- review the consequences of delinquency and default of a student loan.

Federal Plus Loans – Loans for Parents

PLUS loans enable parents of dependent students with good credit histories to borrow to help pay their educational cost. The student, for whom a PLUS loan is borrowed, must be attending school on at least a half-time basis. PLUS loans are made by banks, credit unions, savings and loan associations and private agencies.

Ohio Student Aid Programs

The Ohio Board of Regents (OBR) administers several financial aid programs providing assistance to college students based on a variety of criteria ranging from need to academic achievement. For more information on these programs, visit the OBR web site at www.ode.ohio.gov

Ohio Instructional Grant - The Ohio Instructional Grant (OIG) program provides financial assistance to needy Ohio students attending Ohio and Pennsylvania schools as full-time undergraduate students. Students from families with incomes below a certain threshold, as established each year by the OBR, are eligible. To receive an OIG, eligible students must be enrolled in an eligible degree granting program. Students enrolled in a certificate program are not eligible for an OIG. Students may receive an OIG for a maximum of fifteen (15) terms, limited to four (4) terms per academic year at Cincinnati State. Students apply for the OIG by completing the annual FAFSA by October 1 of each year.

Part-Time Student Instructional Grant - The part-time Ohio instructional grant program provides financial assistance to needy Ohio undergraduate students attending Ohio school's on a part-time basis. Part-time Ohio grant dollars are limited. Students must request Part-time OIG funds directly from the Financial Aid Office for each term in the award year.

Ohio Academic Scholarship - The Ohio Academic Scholarship program provides scholarships for up to four (4) years for academically outstanding Ohio high school graduates on a competitive basis. The program's objective is to encourage Ohio students to attend an Ohio college or university. Ohio's academically top-ranked students are eligible and should contact their high school guidance counselor for more information.

Ohio War Orphan's Scholarship - The Ohio War Orphan's Scholarship program provides reimbursement for undergraduate instructional fees waived by state-assisted institutions on behalf of eligible students. The children of disabled or deceased veterans who served in the military during a period when the U.S. was at war, are eligible to apply.

Nurse Education Assistance Loan Program-NEALP - The purpose of the NEALP is to provide financial assistance to students enrolled in approved nurse education programs in Ohio schools and to encourage students to remain in Ohio as they enter the nursing profession. NEALP loans are limited to

$3,000 per year for a maximum of three years or $12,000 total loan balance. After graduation from an approved nurse education program, a borrower may be eligible for debt cancellation at a rate of 20 percent per year for a maximum of four years (80 percent) if the borrower is employed in the clinical practice of nursing in the State of Ohio. To be eligible for a Nurse Education Assistance Loan, an applicant must: be enrolled in an approved Ohio prelicensure or post licensure LPN or RN nurse education program, not owe a refund or be in default on any education loan, and maintain good academic standing. Students preparing for the following nursing professions are also eligible to receive Nurse Education Assistance Loans: Certified Nurse Practitioner, Certified Registered Nurse Anesthetist and Certified Nurse Midwife.

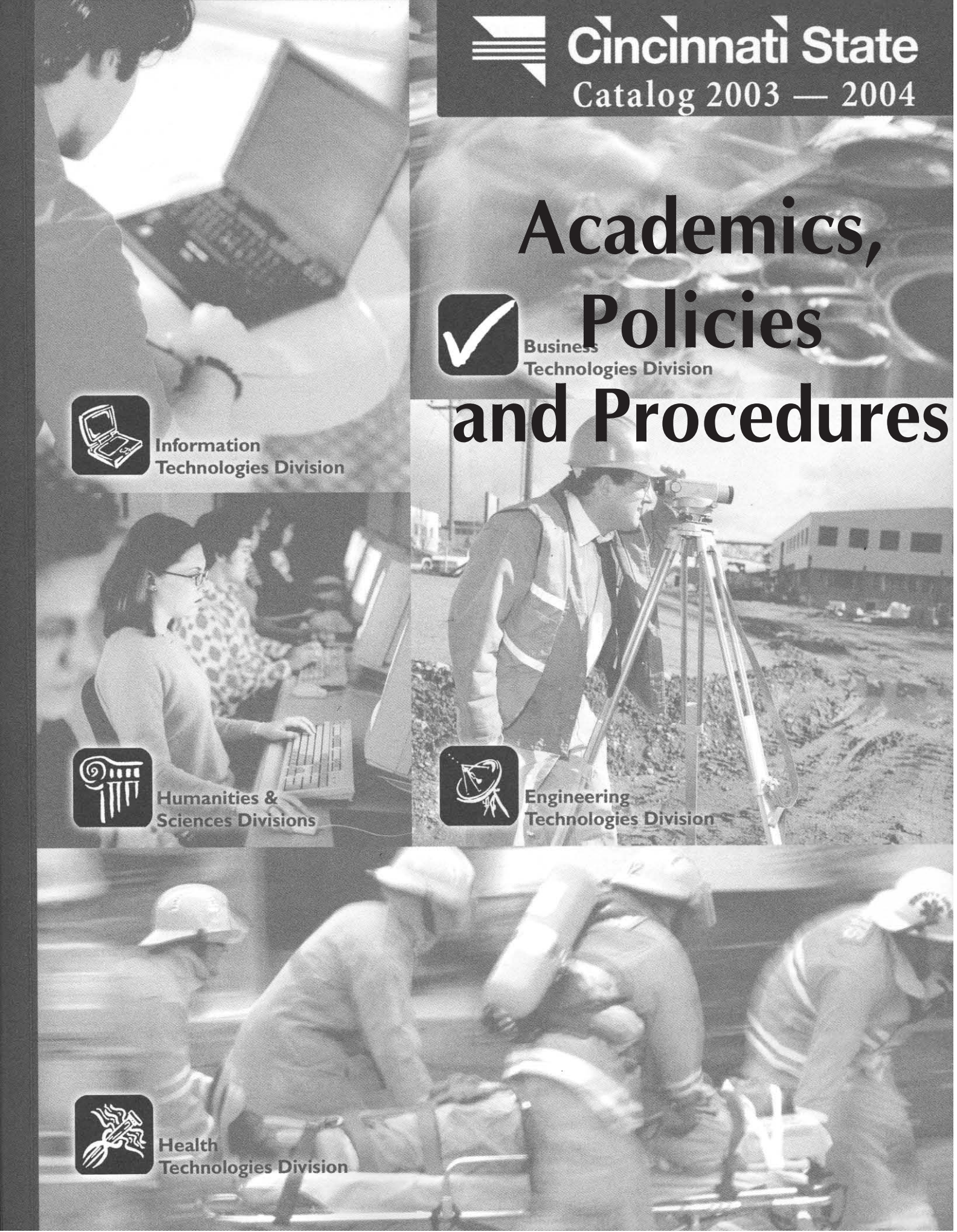
Tuition Waiver for the Children of Fire Fighters and Peace Officers Killed in the Line of Duty - The tuition waiver for the children of fire fighters and/or peace officers killed in the line of duty provides a waiver of undergraduate instructional fees at state-assisted colleges.

Ohio 12th Grade Proficiency Scholarship - The Ohio Board of Regents (OBR) awards a one-time $500 scholarship to college freshmen who have successfully completed all sections of the Ohio 12th Grade Proficiency Examination. Students should contact their high school guidance counselor for additional information.

Indiana Student Aid Programs

Indiana State Grant Program - Residents of Indiana are eligible to use their Indiana state grant award for attendance at Cincinnati State. Students apply for the Indiana State Grant by completing the FAFSA by March 1 of each year. Applications received after March 1st are generally not considered.

Indiana Contract for Space Grant Program - To be eligible for tuition assistance from the Indiana Contract for Space Program, a student must reside in one of the following six (6) Indiana counties: Dearborn, Franklin, Jefferson, Ohio, Ripley or Switzerland. Students must also be accepted for admission and enrolled in a program leading to an Associate Degree. A separate Indiana Contract for Space Grant Application must be completed and is available from the Financial Aid Office. Funds are limited. Students are encouraged to apply as soon after January 1 of each year, as possible.


Cincinnati State
Catalog 2003 — 2004
Academics, Policies and Procedures
Business Technologies Division
Information Technologies Division
Humanities & Sciences Divisions
Engineering Technologies Division
Health Technologies Division

Equal Opportunity

Cincinnati State Technical and Community College is committed to a policy of equal educational opportunities for all persons regardless of race, age, handicap, sexual orientation, national origin or gender. This policy is adopted as a matter of law and as a matter of educational policy consistent with the goals and purposes of the College.

The College also adheres to a policy of equal employment opportunity and affirmative action to end any illegal pattern of discrimination and to overcome the effects of past discrimination.

Assessment of Student Academic Achievement

In 1994, the North Central Association of Colleges and Schools began requiring a plan for the assessment of student academic achievement from each of its member institutions. The purposes for assessment at Cincinnati State are to:

1) demonstrate that the institution is fulfilling its academic mission and
2) provide information to academic decision-makers for the continuous improvement of the teaching-learning process.

All students participate in assessment throughout their academic life at Cincinnati State. Beginning with placement testing, advisors and faculty work with students to assure that learning objectives are met and that knowledge gained in the classroom, labs, and through their cooperative work experience is applied and integrated into their working and personal lives. At the same time, Cincinnati State's assessment model collects information from employers, advisory committees, graduates, and other external constituencies that guides the development and implementation of its academic and technical programs. General education, cooperative education, and technical education each have an assessment component.

Because one of the primary purposes of assessment is to provide assurance that the College is meeting its academic mission, the foundation of Cincinnati State's assessment plan is built directly upon the mission of the College. The following section is the full text of Cincinnati State's mission, approved by the Ohio Board of Regents and the College's Board of Trustees.

Mission

We believe that Cincinnati State Technical and Community College makes an important contribution to the technical and educational status, economic growth, and social well-being of the Tri-State Area. We believe that to continue to serve the community the College must be willing to modify, adapt, and create technical and transfer programs that meet the ever-changing needs of students, business, industry and the professional community. We believe that it is the College's role to help students to learn to think independently, to value logical and tested conclusions, to develop problem solving abilities, to communicate well, and to function effectively with other people. We believe in the dignity and worth of the individual and therefore provide educational opportunities for students regardless of age, economic or social background, or enrollment status. We believe that for continued growth we must display the ability to be creative, to look to the future as well as the past, to strive for excellence, and to exhibit leadership in the expansion of knowledge and skills through the achievements of the faculty and the students. We hope to develop in our students the desire to continue their education throughout their lives.

The College's principal concern is its students. This concern is reflected primarily through offering programs of substantial quality with the expectation that students will achieve a high level of competence and understanding in an atmosphere of positive engagement and mutual respect. In order to maintain this atmosphere, the College offers opportunities for students to achieve understanding and appreciation of their own culture and those of others in an environment that recognizes and values the cultural diversity of the College population and the community.

The College has a vital and distinctive mission to perform in addressing the educational and economic needs of the Tri-State Area. The College seeks to implement its philosophy by providing:

A. Education featuring a combination of theory and practice primarily through appropriate classroom, laboratory, and cooperative/clinical education experiences.
B. Technical, Arts, and Science Associate degree programs that lead to entry or advanced level employment and/or transfer to a Bachelor's degree program.
C. Certificate programs, specialized training, and adult continuing education opportunities of less than one-year duration.
D. Services and educational experiences to assist students in determining and reaching their educational objectives.
E. Opportunities for students to develop the skills needed to enter and succeed in the College's education programs.
F. Technical, science, arts, and general education courses that can be applied toward four-year degree programs.

The College endeavors to provide leadership and services in the promotion of technical, arts, science, and cooperative education.

Cooperative Education Program Policies

The cooperative education program is an integral part of Cincinnati State's past growth, current strength, and continued success. The College's commitment to cooperative education is reflected in the curricula of most of the associate degree programs.

Cooperative Education Requirements

Cincinnati State Technical and Community College values the cooperative education experience, but each division establishes its own policies regarding how the student may fulfill co-op requirements.

Students should refer to the academic division sections of this catalog for specific information on how the divisions expect students to meet cooperative education requirements.

Meeting Academic Eligibility Requirements

To be eligible for placement in cooperative education employment (or clinical experience/directed practice), a stu-

dent must maintain the required grade point average as stated in the College catalog (see "Academic Probation and Dismissal" in this section of the Catalog). The student must also demonstrate satisfactory proficiency in core or other required courses.

A student who does not maintain the required GPA will not be eligible for cooperative education or clinical experience/directed practice without the permission of the program coordinator.

Refer to the division sections of the catalog for additional requirements.

Obtaining Cooperative Education Assignments

The College has been quite successful in placing most students in cooperative education jobs; however, there is no absolute guarantee of initial or continuing employment. The employer is solely responsible for decisions about hiring, retention, dismissal, promotion or demotion of a cooperative education student. Initial and continuing employment depends on the skills, aptitudes, and behaviors the individual student offers to each potential employer.

Co-op Registration Policy

1. No student may report to his or her co-op job until he or she has registered and paid for co-op.
2. A student failing to register for co-op will not be eligible to receive co-op credit for that term.
3. Employers of co-op students who fail to register for co-op will be notified by the coordinator that the student no longer has co-op status. The employer has the option to allow the student to continue to work full-time without co-op status or terminate employment. This decision will be made by the employer.

Withdrawal From Co-op/Clinical Experience

If a student is removed from a cooperative education or clinical experience course due to unsatisfactory performance, and the student subsequently withdraws from that course, the faculty member responsible for the course, with the approval of the division dean, may remove the "W" and assign a grade of "U" or "F."

Other Academic Policies

Grades and Credit Earned

Grading System

The following system is used to record student achievement or status in courses:

Grade	Explanation	Per Credit Hour
A	Superior	4
B	Good	3
C	Average	2
D	Poor	1
F	Failure to complete course requirements	0
W	Withdrawal (Official)	Not Computed
AC	Advanced Placement Program Credit	Not Computed
CL	CLEP Credit	Not Computed
EC	Cincinnati State Proficiency Examination Credit	Not Computed
EL	External Certificate/Learning Exam	Not Computed
ET	External Formal Training Program	Not Computed
EX	Work Experience Credit	Not Computed
TP	Tech Prep Credit	Not Computed
I	Incomplete	Not Computed
K	Transfer Credit	Not Computed
N	No Grade Reported	Not Computed
S	Satisfactory	Not Computed
U	Unsatisfactory	Not Computed
VO	Vocational Teacher Referral Credit	Not Computed
X	Audit	Not Computed

Grade Reports

Grades are provided to students at the end of each term. Grades are also accessible through the College Web registration system and the touch-tone telephone registration system. It is the student's responsibility to check his or her grades for accuracy. Any errors, discrepancies, or omissions should be reported to the instructor and/or division dean responsible for the course. Student concerns about grades should be made known within 30 days of the end of the term for which the grade was issued. (See "Academic Appeals Procedures" elsewhere in this section.)

Grade Changes

Changes to grades must be approved by the instructor who issued the grade, and must be submitted to the Office of the Registrar no later than two terms after the term in which the grade was originally issued.

Calculation of Grade Point Average (GPA)

The College utilizes three grade point averages (GPA) for each student.

The cumulative GPA is calculated as the total quality points earned (Grade Point Value Per Credit Hour, listed above) divided by the total credit hours for courses bearing quality points attempted at the College.

The Term GPA is calculated as the total quality points earned (Grade Point Value Per Credit Hour, listed above) divided by the total credit hours for courses bearing quality points attempted for that term.

The Program GPA is calculated as the total quality points earned (Grade Point Value Per Credit Hour, listed above) divided by the total credit hours for all courses bearing quality points listed in the student's current audit curriculum.

The audit curriculum is the list of requirements the student must complete in order to earn a degree or certificate. Developmental Education courses beginning with "00" are not calculated in the GPA.

Incomplete (I)

A grade of "I" (Incomplete) is awarded at the discretion of the instructor. When unusual circumstances prevent a student from completing course requirements during the term in which the student is enrolled, the instructor may agree to record a

grade of "I" until the final grade is established. Timetables and requirements for the completion of the course are the instructor's prerogatives. If a final grade has not been submitted to the Office of the Registrar by the last instructional day of the following term, a grade of "F" will be automatically recorded.

Satisfactory/Unsatisfactory Grades (S/U)

"S" represents satisfactory performance, or "passing," in those courses graded satisfactory/unsatisfactory. Only the grades of A, B or C are considered passing on the satisfactory/unsatisfactory system.

No Grade Reported (N)

An "N" grade is administratively assigned by the Office of the Registrar if no grades are reported for an entire section of a course. A grade of "N" is not issued to individual students by the instructor.

Official Course Withdrawal (W)

A student who withdraws from a regularly-scheduled course after the Last Day to Drop a Course for the term through the 35th instructional day of the term will receive a grade of "W" for the course. Students who withdraw from a flexibly-scheduled course after the day designated as the Last Day to Drop a Course for that course section through the day designated as the Last Day to Withdraw from that course section will receive a grade of "W" for the course. The student must complete a withdrawal form in the Office of the Registrar. The date of withdrawal will be the time/date stamped in the Office of the Registrar. A "W" grade is not computed in the student's grade point average.

Audit (X)

Students who are interested in taking a course solely for the value of the instruction may register to audit the course. No college credit may be earned or later claimed for an audited course. Regular tuition is charged for courses being audited. Requirements for attendance, completion of assignments, and examinations are the prerogatives of the instructor of the course.

A student may not request a transfer from "credit" to "audit" or vice versa after the Last Day to Drop a Course for the term.

Advanced Standing Credit (AC, CL, EC, EL, ET, EX, VO, TP)

Advanced standing credit means that a student receives credit for completing a Cincinnati State course or cooperative education requirement by using one of the methods listed below to demonstrate successful completion of appropriate prior academic and/or work experience. Advanced standing credit is available to students who have been accepted into a degree or certificate program.

Students seeking advanced standing credit must follow the college and divisional procedures described in the *Cincinnati State Student Guide to Advanced Standing Credit*. This publication is available in the Office of the Registrar and in each academic division's main office.

The types of advanced standing credit are:

External Proficiency Examination. The amount of credit given for an external proficiency examination is determined by the appropriate academic department.

- Credit may be awarded for Advanced Placement (AP) scores of 3 or higher. Credit is shown on the student's record as "AC."
- Credit is awarded for College Level Examination Program (CLEP) scores of 480 or higher. Credit is shown on the student's record as "CL."
- Credit may be awarded for International Baccalaureate program scores of 5 or higher. Credit is shown on the student's record as "IB."

Internal Cincinnati State Proficiency Exam. Credit is shown on the student's record as "EC."

Credit for Applicable Work Experience. Credit is shown on the student's record as "EX."

Credit for an External Certificate/Licensing Exam. Credit is shown on the student's record as "EL."

Credit for an External Formal Training Program. Credit is shown on the student's record as "ET."

Credit through Senior Vocational Teacher Referral. Credit is shown on the student's record as "VO."

Credit for Tech Prep Coursework. Credit is shown on the student's record as "TP."

Some types of advanced standing credit are not available in some degree or certificate programs.

Students should be aware that advanced standing credit awarded by Cincinnati State may not be applicable to degrees at other colleges or universities. A student who intends to transfer to another college or university should consult with a transfer advisor at that institution concerning the transferability of Cincinnati State advanced standing credits.

Students should make arrangements to apply for advanced standing credit as soon as possible after admission to a program.

The steps for obtaining advanced standing credit are:

1. The student obtains a Petition for Advanced Standing Credit from the Office of the Registrar.
2. The student meets with his/her program chair or academic advisor to determine eligibility for advanced standing credit, and to determine which faculty member should receive the completed Petition and supporting documentation.
3. If necessary, the student pays the advanced standing credit fee at the College Cashier's Office, and the Petition is marked "paid." This step applies to students seeking advanced standing credit either through internal proficiency exams or through documented valid academic or work experience. There is a separate fee charged for each attempt to earn credit through an internal proficiency exam.
4. The student submits the completed Petition and supporting documentation to the appropriate faculty member, as determined in Step 2.
5. After the Petition and related materials have been reviewed by appropriate division personnel, and the request for advanced standing credit has been approved or disapproved, the Petition is forwarded to the Office of the Registrar and the student is notified of the results.

Students cannot earn credit through an exam for a course already completed at Cincinnati State. A course is defined as "completed" if a grade of A, B, C, D, F, S, U, or W has been issued. Students cannot earn credit through an exam during a term in which a No Show designation has been assigned for the course (see page 33).

Additional information is contained in the *Cincinnati State Student Guide to Advanced Standing Credit*, available in the Registrar's Office.

Transfer of Credit

Once a student is accepted in a degree or certificate program, official transcripts from previously attended colleges and universities submitted for admission will be forwarded to the Office of the Registrar for transfer of credit evaluation. Only coursework earned at a regionally-accredited institution with a grade of "C" or better will be acceptable in transfer. Once the evaluation of transfer work is completed, the student will receive, by mail, a Transfer Evaluation Report, which lists all credits awarded in transfer and what equivalent courses have been assigned at Cincinnati State. In the event that no equivalent course at Cincinnati State can be assigned, the transfer course will be accepted as elective credit. Whether or not courses accepted as elective credit are applicable to the student's degree or certificate program is at the discretion of the program chair or academic advisor.

In situations where coursework is five years old or older, or where requisite skills may have been lost, courses previously taken at other institutions will be subject to review by the faculty and dean of the division that offers the equivalent course(s). Those courses reviewed which do not meet current program requirements and standards will not count towards degree or certificate requirements.

Transfer credit accepted at Cincinnati State will appear on a student's transcript as a cumulative number of hours accepted.

Dean's List

Students who earn in one term 12 or more credit hours for academic courses for which quality points are awarded will qualify for Dean's List status if their GPA for the current term is 3.5 or greater and no grades of I, F, or U have been earned in the current term. Developmental Education courses beginning with "00" are not included in GPA calculations for the Dean's List.

Students who earn in one term between 6 and 11 credit hours of academic courses for which quality points are awarded will qualify for Academic Merit status if their GPA for the current term is 3.5 or greater and no grades of I, F, or U have been earned in the current term. Developmental Education courses beginning with "00" are not included in GPA calculations for Academic Merit.

Students who receive a grade of "N" will not initially be eligible for Dean's List or Academic Merit. To be eligible for Dean's List or Academic Merit, the grade change for the "N" grade must be submitted to the Office of the Registrar by the end of the 10th instructional day of the following term. Grade changes for "N" grades submitted after the 10th instructional day of the following term will not be recalculated for Dean's List or Academic Merit status. Recalculation for Dean's List and Academic Merit status will be done only for "N" grades issued for the immediately preceding term and only if the grade change is submitted by the deadline.

For all students, the GPA for the term will be calculated by taking the total quality points (grade point value per credit hour) awarded during the term, divided by the total credit hours for courses bearing quality points that are attempted during the term.

Academic Probation, Suspension and Dismissal

Cincinnati State students enrolled in a degree or certificate program must demonstrate satisfactory performance in order to remain in good standing at the College. Students who do not demonstrate satisfactory performance will be placed on Academic Probation. If the work of students on Probation does not improve, they may be subject to Academic Suspension and then Academic Dismissal from the College.

A student cannot graduate from a degree or certificate program while on Academic Probation or Academic Suspension.

Academic Probation

- A student who has earned at least 12 credits and has a Cumulative Grade Point Average (GPA) below 2.0 is immediately placed on Academic Probation.
- A student on Academic Probation must have his or her advisor's permission before registering for any classes. The number of credits for which the student may register will be determined based on consultation with the advisor.

Removal from Probation

A student who is placed on Academic Probation will be reevaluated at the end of each enrolled term.

To be removed from Probation status, both the student's Term GPA and Cumulative GPA must be 2.0 or higher. A student will continue to be on Probation as long as the student's Cumulative GPA is below 2.0.

Academic Suspension

If a student who is on Probation earns a Term GPA below 2.0 in the next enrolled term, the student will be placed on Academic Suspension.

A student placed on Academic Suspension may not register for any degree or certificate courses at Cincinnati State for two terms following the term after he or she was placed on Suspension.

A student may appeal the Academic Suspension through a written request to the Academic Vice President. The written request must include a rationale for the appeal and supporting documentation. The decision of the Academic Vice President is final.

Readmission after Suspension

A student who is readmitted to the College after Suspension is subject to the following conditions:

1. The student must meet with his or her program chair/advisor to determine a plan for academic success.
2. The student must have his or her advisor's permission before registering for any classes.
3. The student must maintain a Term GPA of 2.0 or greater for every enrolled term. The student will continue to be considered on Probation as long as the student's Cumulative GPA is less than 2.0.

Academic Dismissal

Cincinnati State expects students to be able to demonstrate continued academic success. A student who has been readmitted after Suspension and is still on Probation (because of a Cumulative GPA below 2.0) is expected to raise the Cumulative GPA to 2.0 or above within three terms. Failure to attain a Cumulative GPA of 2.0 or above within three terms will result in Academic Dismissal.

A student who has been Academically Dismissed may not register for any courses for a period of one year.

A student may appeal the Academic Dismissal through a writ-

ten request to the Academic Vice President. The written request must include the rationale for the appeal and supporting documentation. The decision of the Academic Vice President is final.

Registration

Students have the option of registering in person in the Office of the Registrar, through a touch-tone telephone, or over the Web. Please refer to the Term Bulletin for details for using a touch-tone telephone or the Web.

Registration for a term usually begins four weeks before the term begins.

For specific dates of registration and information regarding touch-tone and Web registration, please refer to the Term Bulletin or contact the Office of the Registrar at (513) 569-1522.

Enrollment Verification

Students may submit enrollment verification request(s) to the Office of the Registrar. Depending on the information requested, Enrollment Verifications may take up to five (5) days to process.

Enrollment status is determined by the official number of credit hours for which a student is registered each term. Enrollment status often is used to help determine eligibility for financial aid, veterans benefits, company and agency funding, and health benefits.

Students are responsible for knowing their enrollment status and understanding the impact of changing credit hours by the add/drop process.

Generally, Cincinnati State will define a student's enrollment as follows:

Full-Time Enrollment	12 or more credit hours or full-time cooperative education placement
3/4 Time Enrollment	9 - 10 - 11 credit hours
1/2 Time Enrollment	6 - 7 - 8 credit hours
Less than Half-Time Enrollment	5 or fewer credit hours

Students placed on a part-time cooperative education placement are not considered half-time students for the purpose of enrollment verification.

Completing More Than One Degree ("Double Major")

When a student is admitted to the College he or she is considered to be seeking only one academic degree or certificate. In some cases, students may seek to "double major" by pursuing more than one associate degree in an area that is closely related to their initial degree program.

To be considered for a "double major," a student must first be admitted to an associate degree program. (Students who are seeking a certificate rather than a degree are not eligible to apply for "double major" status.)

To be considered for a "double major," a student must apply for admission to the second program by completing a form available from the Office of Admission. The academic division in which the student seeks the second major will determine whether the student is eligible to pursue the second major.

Students who are granted "double major" status are expected to consult regularly with their program advisor (or advisors) to ensure that they are making appropriate progress in their degree programs.

Students with questions or concerns about their academic status or goals should consult with their program advisor, or with the Admission and Counseling Office.

Changing Degree Programs

Students who wish to transfer from one degree or certificate program to another must complete a Change of Degree Program form and submit it to the College Admission Office.

Calculation of Program GPA for a Student Who Transfers to a New Degree Program - When a student transfers from one degree or certificate program to another, all courses attempted that apply to the new audit curriculum, with the exception of cooperative education courses, will automatically transfer to the new program. The new program's audit curriculum will serve as the basis for calculating the program grade point average.

Additional transfer of courses to the new program, including cooperative education courses, will be evaluated by the divisional faculty and dean on an individual basis.

Repeated Course

If a course is repeated, only the highest grade is computed in the calculation of the GPA. If a student earns the same grade upon repeating a course, only one grade will be computed in the calculation of the GPA. The original course grade will continue to be shown on the transcript even though it is not calculated in the GPA.

A student who has received a grade of "F," "W," or an equivalent grade twice for the same course cannot register for the course a third time without written permission of the student's program chair/advisor. The program chair/advisor may require the student to meet with a Cincinnati State professional counselor to discuss potential for success in the student's current degree or certificate program.

Academic Reassessment Policies

Fresh Start and Forgiveness

Cincinnati State recognizes that in some circumstances students may seek an opportunity to have their grade point averages (cumulative and program) adjusted to reflect their academic success in their current program. Two methods are available for seeking reassessment:

- Fresh Start applies to a student who is returning to Cincinnati State after an absence of three years or more.
- Academic Forgiveness applies to a student who has been attending Cincinnati State continuously, or who is returning to Cincinnati State after an absence of less than three years.

Both of these methods of academic reassessment are one-time, non-reversible options. These options do not apply to courses previously applied to an Ohio Board of Regents-authorized degree or certificate earned at Cincinnati State.

Fresh Start

The Fresh Start policy allows a student who is returning to Cincinnati State after an absence of three or more years a one-time, non-reversible option to have his or her cumulative grade point average and program grade point average recalculated by removing courses in which the student received a grade of "D," "F" or "V" which are no longer applicable to the student's current degree or certificate program.

To be eligible for a Fresh Start, a student must first have completed all re-admission procedures and requirements, be admitted to an OBR-authorized degree or certificate program, have completed all developmental education and any other prerequisite courses that apply to the program, and be enrolled beyond the fifteenth calendar day of the term for which the Fresh Start is requested.

The steps for obtaining a Fresh Start are:

1. The student meets with his or her program chair or academic advisor and completes a Petition for Fresh Start, available in each division office. The Petition includes a list of the courses in which the student received a grade of "D," "F" or "V" that will no longer be calculated in the student's cumulative and program grade point averages, for one or more of these reasons:
   - The course taken previously is not part of the audit curriculum for the student's current program.
   - The course taken previously pertains to technical skill/knowledge that is not up-to-date.
2. The student submits the completed Petition to the Office of the Registrar. A student wishing to apply for Fresh Start must submit the petition within two terms of re-enrolling at Cincinnati State after an absence of three or more years.
   - A Petition will not be approved if submitted by a student who has 12 credits or fewer to complete in a degree program.
3. When the Petition is approved, this statement will be added to the student's transcript: "The Fresh Start policy has been applied to academic work at Cincinnati State prior to (term/year of Petition approval)." The student's cumulative grade point average and program grade point average will be recalculated based on the new set of applicable courses.

The Fresh Start policy can be applied only once, and it cannot be reversed.

Students planning to transfer to another college or university are cautioned that the receiving institution may use all grades earned in computing grade point averages for admission or other purposes.

Academic Forgiveness

The Academic Forgiveness policy allows any Cincinnati State student a one-time, non-reversible option to have his or her cumulative grade point average and program grade point average recalculated by forgiving up to 18 credit hours of coursework in which a grade of "D," "F" or "V" was earned.

To be eligible for Academic Forgiveness, a student must be currently admitted to an OBR-authorized degree or certificate program and must have completed all prerequisite courses that apply to the student's current degree or certificate program.

The steps for obtaining Academic Forgiveness are:

1. The student meets with his/her program chair or academic advisor and completes a Petition for Academic Forgiveness, available in each division office. The Petition includes a list of the courses that will be forgiven.
2. The student submits the completed Petition to the Office of the Registrar. The Petition must be submitted to the Office of the Registrar by the Last Day to Drop a Course for the term in which the initial evaluation is to be done.
3. Petitions are evaluated at the end of the term. For the Petition to be approved, the student must complete a minimum of 12 additional credits, while maintaining a term GPA of 2.0 or better. Only courses earning quality points (grade point value per credit hour) are applicable for the 12 additional credits. Developmental Education courses beginning in "00" and co-op courses are not applicable.
   - A Petition will not be approved if submitted by a student who has 12 credits or fewer to complete in a degree program.
   - If a student has not completed 12 credits at the end of the term in which the Petition is submitted, the Petition will be held in the Office of the Registrar, and will be reviewed again at the end of each term until the student completes the required 12 credits.
   - If a student submits a Petition after the Last Day to Drop a Course for the term, the courses being taken during that term will not be applied to the required 12 credits, and the Petition will not be evaluated until the end of the following term.
4. When the Petition is approved, this statement will be added to the student's transcript: "Academic Forgiveness has been applied to academic work at Cincinnati State prior to (term/year of Petition approval)." The student's cumulative grade point average and program grade point average will be recalculated based on the new set of applicable courses.

The Academic Forgiveness policy can be applied only once, and it cannot be reversed.

Students planning to transfer to another college or university are cautioned that the receiving institution may use all grades earned in computing grade point averages for admission or other purposes.

Academic Procedures

Academic Appeals Procedure

Cincinnati State Technical and Community College has adopted the following procedures to ensure that students with legitimate concerns about academic processes (hereafter called "academic appeals") can resolve these concerns equitably. A student is expected to first attempt to resolve concerns directly with the instructor, within two terms of when the grade was issued.

1. A student is expected to bring his or her academic appeal first to his or her faculty advisor (program chair or cooperative education coordinator).
2. If the concern cannot be settled at this level, the student is expected to bring his or her academic appeal to the division dean or the dean's designee.
3. It is expected that most academic appeals will be resolved at the division level. However, if the concern cannot be resolved by the division dean, the student may continue the academic appeals process by meeting with an academic appeals panel. To initiate this process, the student must submit a written request to appeal the decision of the division dean, including a statement of the concern that is to be addressed, and pertinent documentation, to the Academic Vice President. The Academic Vice President

will review all pertinent information in order to determine if the appeal merits the formation of a panel. If the Academic Vice President determines that an appeals panel should appropriately be formed, the process continues with step four. If the Academic Vice President does not feel the student's appeal merits the formation of a panel, he will meet with the student involved and relay his findings and recommendations.

4. If an academic appeals panel is convened, it will be composed of one dean (excluding the dean of the division involved in the appeal), appointed by the Academic Vice President; and two faculty members, appointed by the Faculty Senate. The designated dean will chair the panel, solicit appointment of the faculty representatives, convene meetings of the panel, and provide copies of necessary documentation to the other panel members. Documentation will include:
   a. The student's written statement and other material the student wishes to submit.
   b. A written summary of the disposition of the case at the division level, prepared by the division's dean.
   c. The student's transcript, or any other related materials the panel may wish to examine.
5. The chair will convene a meeting that includes the student, the members of the panel, and other participants the panel may choose to invite to the meeting. The student will have an opportunity to present his or her concern, and the panel members will have the opportunity to ask questions and seek clarification. If the panel determines there are issues involved which are not academic concerns, the panel will inform the student of appropriate measures to be taken.
6. The panel may, at its own discretion, refer the matter to the Academic Policies & Curriculum Committee (APCC) for advice and recommendations.
7. If the APCC is to be convened to review the appeal, the panel chair must ensure that all related documentation is submitted to the APCC chair one week prior to the APCC meeting. Any recommendations made by the APCC will be submitted to the academic appeals panel for consideration.
8. The chair of the academic appeals panel will forward a recommendation along with all related documentation to the Academic Vice President (chief academic officer) of the College. The chief academic officer will make the final determination regarding the appeal and will notify the dean of the division involved in the appeal. That dean will communicate this determination to the student who initiated the appeal.

Attendance

Each student is expected to attend all classes and cooperative education/clinical placements as scheduled. Each College faculty member is expected to take attendance at every class section, in accordance with a resolution of the College Board of Trustees. Attendance in cooperative education and clinical placements is reported by the Cooperative Education/Clinical Coordinator based on reports from the student's site coordinator.

Individual faculty members may establish course policies that consider attendance as a factor in determining course grades. Each student should check with his or her instructors to determine how attendance will be taken and in what ways, if any, attendance is a factor in grading.

A student who enrolls in a course but does not attend any classes during the first two weeks will be designated by the instructor as a No Show (NS).

Additional policies related to attendance appear in the next section under point 6, "Non Attendance."

Adding, Dropping or Withdrawing from a Course

The College Term Bulletin lists the dates when students may add, drop or withdraw from a course after completing their initial registration. Add, drop or withdrawal transactions are not official unless processed on the touch-tone or web registration system or the appropriate form has been processed by the Office of the Registrar. The appropriate forms for registration activity can be obtained in the Office of the Registrar. The following regulations apply to all courses offered during the term:

1. Adding a course:
   a. Prior to the first course meeting of the term, no approval is required to enter an opened course with no instructor consent requirement;
   b. Once a course has met, the approval of the instructor of the course must be obtained.
   c. From the seventh through the fourteenth calendar day of the term, the approval of the instructor and dean are required to register for a course. In an instance when the seventh calendar day falls on a weekend or holiday, the last day to enter a course will be the preceding day.
   d. The fourteenth calendar day of the term is the last day to enter a course.
2. Dropping a course:
   a. Courses dropped from the time of registration through the fourteenth calendar day of the term do not need additional approval to be processed.
   b. The fourteenth calendar day of the term is the last day to drop a course. In an instance when the fourteenth day falls on a weekend or holiday, the last day to drop a course will be the preceding day.
3. Withdrawing from a course:
   a. The Withdrawal period for regularly scheduled courses begins each term the day after the Last Day to Drop a Course and ends on the 35th instructional day. The Withdrawal period for flexibly scheduled courses begins after the day designated as the Last Day to Drop a Course for that course section through the day designated as the Last Day to Withdraw from that course section. No additional approval is required to withdraw from a course during this period.
   b. Only in circumstances beyond the student's control will a Withdrawal be permitted after the 35th instructional day. All official withdrawals must be approved by the instructor of the course and the division dean. In cases not approved, the student will receive the grade assigned by the instructor.
4. Course Drop/Withdrawal Grading Policy
   a. Through the fourteenth calendar day of each term, courses officially dropped in the Office of the Registrar will not appear on students' transcripts.
   b. During the Withdrawal Period, official withdrawals will be assigned a grade of "W." The "W" will appear on the student's transcript, however will not be calculated into the grade point average.

c. The instructor may not issue a "W" as the final grade. A "W" is assigned only if the student has completed the withdrawal process in the Office of the Registrar.

5. Flexibly Scheduled Courses-the following policies and procedures pertain to Flexibly Scheduled Course Sections only:

a. Course sections with a beginning and/or ending date different than the first and last days of the normal term schedule are considered flexibly scheduled. Flexibly Scheduled Course Sections are identified in the course schedule with an alphabetical section designation.

b. Students may register for a flexibly scheduled course section with no additional approvals up to the first course meeting.

c. A student may enter a flexibly scheduled course section by the date established as the Last Day to Enter a Course for that course section. Registrations beyond the date established as the Last Day to Enter a Course for that flexibly scheduled course section should not be permitted.

d. A student may drop a flexibly scheduled course section without a grade appearing on their record by the date established as the Last Day to Drop a Course for that course section.

e. A student may withdraw from a flexibly scheduled course section from the date established as the Last Day to Drop a Course for that section through the date established as the Last Day to Withdraw from a Course for that section.

6. Non-Attendance. The following policies apply to all courses.

a. Instructors are required to document student attendance in each course meeting throughout the term.

b. From the first day of the term until the First Day to Withdraw for the term, students who drop or withdraw from a course must identify whether or not they attended the course section.

c. A student who enrolls in a course but does not attend the course within the first two weeks will be designated a No Show (NS) by the instructor.

d. If there is a discrepancy between a student's self-reported attendance and the attendance status reported by an instructor, the attendance status reported by the instructor will be the status of record.

e. Students are not permitted to begin attending a course section after a No Show (NS) has been issued by the instructor or self-reported by the student for that course section.

f. The designation of No Show (NS) will not appear on the student's transcript.

g. A student who receives a No Show (NS) designation for a course is still financially responsible for payment for the course. Federal Financial Aid is not applicable to a course for which a student has received a No Show (NS) designation.

A student is not permitted to withdraw from a course he or she did not attend or to which a No Show (NS) has been assigned.

Procedures for Students Called to Active Duty

A student enlisted in the military reserves or National Guard who is called to active duty and who cannot complete his or her coursework for a given term may drop or withdraw from all courses by doing any of the following:

Please Note: All Drops/Withdrawals/Late Withdrawals will be processed in accordance with the College-wide attendance policy.

<u>During the Drop Period</u>

(First day of the term through the Last Day to Drop a Course):

• IN-PERSON

Presenting a copy of the military orders to the Office of the Registrar and completing an In-person Registration Activity Form dropping all of his/her courses. For the drops to be processed, the student must indicate whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course.

• BY FAX

Faxing a copy of the military orders and a request to be dropped from all courses to the Office of the Registrar at (513) 569-1883. In the request, the student must state whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course. Staff in the Office of the Registrar will complete the In-person Registration Activity Form on the student's behalf, attach the military orders and drop the student from all of his/her registered courses.

• BY MAIL

Mailing a copy of the military orders and a request to be dropped from all courses to the Office of the Registrar. In the request, the student must state whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course. Staff in the Office of the Registrar will complete the In-person Registration Activity Form on the student's behalf, attach the military orders and drop the student from all of his/her registered courses.

• DESIGNEE

A family member or friend may present the military orders to the Office of the Registrar and request the student be dropped from all of his/her courses. If possible, the student should inform his/her designee whether or not they attended each course. If the student attended the course the student should provide the date they last attended. In such an instance, staff in the Office of the Registrar will complete the Withdrawal form on behalf of the student, attach the military orders and (if needed) obtain the Last Date of Attendance from the instructor.

<u>During the Withdrawal Period:</u>

• IN-PERSON

Presenting a copy of the military orders to the Office of the Registrar and completing a Course Withdrawal Form withdrawing from all of his/her courses. For the Withdrawal to be processed, the student must indicate whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course.

• BY FAX:

Faxing a copy of the military orders and a request to be withdrawn from all courses to the Office of the Registrar at (513) 569-1883. In the request, the student must state whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course. Staff in the Office of the Registrar will complete the Course Withdrawal Form on the student's behalf, attach the military orders and drop the student from all of his/her registered courses.

• BY MAIL

Mailing a copy of the military orders and a request to be withdrawn from all courses to the Office of the Registrar. In the request, the student must state whether or not he/she attended each course. If the student attended the course, he/she must

provide the last date he/she attended the course. Staff in the Office of the Registrar will complete the Course Withdrawal Form on the student's behalf, attach the military orders and drop the student from all of his/her registered courses.

• DESIGNEE

A family member or friend may present the military orders to the Office of the Registrar and request the student be withdrawn from all of his/her courses. If possible, the student should inform his/her designee whether or not they attended each course. If the student attended the course the student should provide the date they last attended. In such an instance, staff in the Office of the Registrar will complete the Course Withdrawal Form on behalf of the student, attach the military orders and (if needed) obtain the Last Date of Attendance from the instructor.

After the Withdrawal Period:

• IN-PERSON

Present to the Office of the Registrar a copy of the military orders. The student will then be given a Request for Late Withdrawal Form to complete to withdraw from all of his/her courses. The student must state whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course. The student will be permitted to withdraw from all of his/her courses based on the military order without being required to obtain the instructor and dean's approval.

• BY FAX

Faxing a copy of the military orders and a request to be withdrawn from all courses to the Office of the Registrar at (513) 569-1883. In the request, the student must state whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course. Staff in the Office of the Registrar will complete a Request for Late Withdrawal on the student's behalf and the student will be withdrawn from all of his/her courses. The student will be permitted to withdraw from all of his/her courses based on the military order without being required to obtain the instructor and dean's approval.

• BY MAIL

Mailing a copy of the military orders and a request to be withdrawn from all courses to the Office of the Registrar. In the request, the student must state whether or not he/she attended each course. If the student attended the course, he/she must provide the last date he/she attended the course. Staff in the Office of the Registrar will complete a Request for Late Withdrawal on the student's behalf and the student will be withdrawn from all of his/her courses. The student will be permitted to withdraw from all of his/her courses based on the military order without being required to obtain the instructor and dean's approval.

• DESIGNEE

A family member or friend may present the military orders to the Office of the Registrar and request the student be withdrawn from all of his/her courses. If possible, the student should inform his/her designee whether or not they attended each course. If the student attended the course the student should provide the date they last attended. In such an instance, staff in the Office of the Registrar will complete the Request for Late Withdrawal Form on behalf of the student, attach the military orders and (if needed) obtain the Last Date of Attendance from the instructor. The student will be permitted to withdraw from all of his/her courses based on the military order without being required to obtain the instructor and dean's approval.

• In an instance where there is not time for the student to complete the Late Withdrawal process prior to departure, the student will have 30 business days from his/her return to present his/her orders and receive the automatic Late Withdrawal. If the orders are not presented with that time period, the Request for Late Withdrawal will not be accepted.

Scheduling of Classes

Weekday classes are scheduled to begin any time from 7:00 a.m. to 8:30 p.m. Some courses are regularly offered on Saturday and on Sunday.

In the event of adverse conditions, it may be necessary to cancel some classes. The College will rarely close completely.

Local radio and television stations may begin announcing Cincinnati State's operating status as early as 6:15 a.m. on the day involved.

The status of the evening classes will be handled by a separate announcement in the afternoon.

Make-Up

The privilege of making up missed assignments, quizzes, tests, exams, and other course activities is not automatic. An instructor does not have to permit or grant make-up privileges. It is the responsibility of the student to be aware of instructors' make-up policies, and to seek this information from the instructor if necessary.

Faculty Office Hours

All full-time College faculty maintain office hours to conduct in-person meetings with students. Some faculty members also maintain online office hours for communication with students by e-mail. Students should check with each instructor, or the receptionist in the instructor's division office area, to schedule appointments.

Children on Campus

Cincinnati State Technical and Community College strives to maintain an environment conducive to teaching and learning. Therefore, whenever children are brought to the campus they must remain with their parents, guardians, or caretakers in all areas of the College. Whether or not a child can be brought into a classroom will be at the discretion of each instructor.

If the College's campus security officers find any child left unattended, they will locate the parent/caretaker so that the child can be cared for properly. Above all else, the College wishes to insure the safety and well being of each child.

Requesting College Transcripts from Cincinnati State

To obtain a copy of the college transcript, the student's request must be submitted in writing. The request may be made in person, by mail, or by FAX. All requests must include name, student ID or social security number, dates attended and the address to which the transcript must be sent. Students wishing to pick up the processed request must provide that information. Requests must include the student's signature authorizing the College to release this information.

To request the transcript in person, the Office of the Registrar is open Monday through Thursday 8:00 a.m. until 7 p.m. and Friday, 8:00 a.m. until 5:00 p.m. Forms are available in the

office.

To request the transcript by mail, please mail the request to:

Office of the Registrar
Cincinnati State Technical and Community College
3520 Central Parkway
Cincinnati, OH 45223-2690

Requests may be faxed to: (513) 569-1883.

Please note:

- Students who have attended Cincinnati State 1986 or after may request an official or unofficial transcript be printed for them while they are in the Office of the Registrar.
- Students who need their official transcript sent directly from the Office of the Registrar may request a transcript be sent to an individual or other institution designated by the student. Please allow five working days for staff to process such requests.
- Students who have attended Cincinnati State prior to 1986 may request an official or unofficial transcript. If the student needs an official transcript sent directly from the Office of the Registrar he or she may request a transcript be sent to an individual or other institution designated by the student. Because all or part of records prior to 1986 may be on microfilm, please allow ten working days for staff to process such requests.

There is no charge for any transcript request (official or unofficial). For questions regarding ordering transcripts, please call the agent line of the Office of the Registrar, 513-569-1522 and choose the transcript help line.

College ID Cards

Every enrolled student is required to have a College ID with them at all times for security purposes. The card is required to use Library services, the Fitness Center and to attend College sports activities. In the future the card will also be used for parking lot access and other College services. These cards are available in the Student Activities Office.

State of Ohio Policy for Institutional Transfer

Note: The following information is a policy of the Ohio Board of Regents.

The Ohio Board of Regents, following the directive of the Ohio General Assembly, developed a statewide policy to facilitate students' ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. Since independent colleges and universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements.

The Ohio Board of Regents' Transfer and Articulation Policy established the Transfer Module, which is a subset or entire set of a college or university's general education program. Transfer Module contains 54 to 60 quarter hours (or 36-40 semester hours) of course credits in the following areas: English, Mathematics, Arts and Humanities, Social and Behavioral Sciences, Natural and Physical Sciences, and Interdisciplinary Study.

A Transfer Module completed at one college or university will automatically meet the requirements of the Transfer Module at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Transfer Module at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Transfer Module portion of Institution R's general education program. Institution R, however, may require additional general education courses beyond the Transfer Module.

Since many degree programs require specific courses that may be taken as a part of the general education or Transfer Module program at an institution, students are encouraged to meet with an academic advisor at the institution to which they plan to transfer early in their academic career. For example, students who will be majoring in any of the majors in the College of Business and Administration at the receiving institution should take Economics 201, 202, and 203 (or equivalent course at another institution) rather than the Economics 200 course listed as a part of the Transfer Module. Because of specific major requirements such as these, early identification of a student's intended major is encouraged. Advisors at the institution to which a student wishes to transfer should be consulted regarding Transfer Module and general education courses and any specific program requirements that can be completed before transfer.

Conditions for Transfer Admission

1. The policy encourages receiving institutions to give preferential consideration for admission to students who complete the Associate of Arts or Associate of Science degree with a cumulative grade point of 2.0 or better for all previous college level courses.
2. The policy also encourages receiving institutions to give preferential treatment to students who have not earned an Associate of Arts or Associate of Science degree but have earned 60 semester hours or 90 quarter hours with a cumulative grade point of 2.0 or better for all previous college level courses.
3. The policy further encourages that students who have not earned an Associate of Arts or Associate of Science degree or who have not earned 60 semester hours or 90 quarter hours with a cumulative grade point of 2.0 or better for all previous college level courses are eligible for admission as transfer students on a competitive basis.

Acceptance of Transfer Credit

1. Students who have completed the Associate of Arts or Associate of Science degree with a cumulative grade point of 2.0 or better will receive transfer credit for all college level courses in which a grade of "D" or better has been earned.
2. Students who have not earned an Associate of Arts or Associate of Science degree will receive transfer credit for all college level courses in which a grade of "C" or better has been earned.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at the institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as all other students. Furthermore, transfer students shall be

accorded the same class standing and other privileges as all other students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution prior to the granting of a degree.

Responsibilities of Students

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

State of Ohio Appeals Process

A student disagreeing with the application of transfer credit by the receiving institution shall be informed of the right to appeal the decision and of the process for filing the appeal. Each institution shall make available to students the appeal process for that specific college or university.

If a transfer student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the institution shall advise the student in writing of the availability and process of appeal to the state-level Articulation and Transfer Appeals Review Committee.

The Appeals Review Committee shall review and recommend to institutions the resolution of individual cases of appeal from transfer students who have exhausted all local appeal mechanisms concerning applicability of transfer credits at receiving institutions.

Cincinnati State Transfer Module Appeal Process

Should a student transferring into Cincinnati State be dissatisfied with the credit awarded as part of the transfer module program of the State of Ohio, an internal appeal process and an external appeal process are both available.

The internal appeal process must be utilized first. At Cincinnati State, the internal appeal process for a student dissatisfied with credit awarded as part of the transfer module program is the College Academic Appeals Procedure, described previously in this section of the Catalog.

The external appeal process may be utilized only after the internal appeal process has been completed and the student remains dissatisfied with the institution's judgement. The external appeal will be conducted by the Statewide Appeals Review Committee. More information on this process is available from the Ohio Board of Regents in Columbus, Ohio.

Graduation Requirements

To qualify for the associate degree, a student must be admitted to a degree program, complete the program requirements as identified in the audit curriculum, attain at least a 2.0 cumulative and program GPA, and petition to graduate.

Completion is defined as earning the grade A, B, C, D, or S for any course. An earned D may not count toward graduation, depending on program and/or division policies.

As part of the graduation requirements for the Associate of Applied Business (AAB), Associate of Applied Science (AAS), Associate of Individualized Study (AIS), and Associate of Technical Study (ATS) degrees, a student must complete at least 21 credit hours in general education areas, distributed as follows:

- Communication Skills – 12 credits
  9 credits written communication (department code ENG)
  3 credits oral communication (department code SPE)
- Social Sciences and Humanities –
  9 credits, selected from these areas:

Social/Behavioral Sciences, including:

economics	(department code ECO)
geography	(department code GEO)
history	(department code HST)
labor relations	(department code LBR)
political science	(department code POL)
psychology	(department code PSY)
sociology	(department code SOC

Arts/Humanities, including:

art	(department code ART)
culture studies	(department code CULT)
foreign languages	(department codes FRN, GRM, SPN, SPB)
literature	(department code LIT)
music	(department code MUS)
philosophy	(department code PHI)
theatre	(department code THE)

Students seeking an AAB, AAS, AIS, or ATS degree should consult the curriculum for their program, published elsewhere in this Catalog, to determine how the general education requirements should be met. Individual degree programs may require students to complete program-specified general education courses, or may permit students to choose some general education elective courses. Transfer credit for Social Sciences or Humanities courses completed at another institution, in disciplines not listed above, may be applied toward Cincinnati State graduation requirements, with the program chair's permission.

Students seeking the Associate of Arts or Associate of Science degree must meet the general education requirements described on pages 62-64.

College Orientation Requirement

All Cincinnati State students who are enrolled in a degree program are required to complete the college orientation course CAR 9002, College Success Strategies. This requirement applies to all degree-seeking students who enrolled in the College during or after Early Fall 2001.

Some certificate programs also require students to complete CAR 9002. Each certificate program that requires completion

of CAR 9002 is indicated in the Academic Divisions section of this Catalog. This requirement applies to certificate-seeking students who enrolled in the College during or after Early Fall 2001.

Students must complete the orientation course requirement within the first 18 credit hours taken at Cincinnati State.

A degree-seeking or certificate-seeking student who has already successfully completed 18 or more credits of college-level courses and has received Cincinnati State transfer credit for these courses is not required to complete CAR 9002.

The course CAR 9002 introduces students to the college experience and to Cincinnati State's expectations and resources for new students. This course earns college credit, but it does not fulfill general studies or core course requirements for degree or certificate programs.

Residency Requirement

Students seeking a degree at Cincinnati State Technical and Community College, except those seeking the Associate of Technical Studies degree or other special training programs, must complete at least 45 credit hours of college-level, non-co-op/non-clinical credit hours at Cincinnati State. Credit hours earned in courses which combine class and lab hours will be considered "non-clinical" credit hours for the purpose of the residency requirement.

Students seeking an Associate of Applied Business or Associate of Applied Science degree must earn a minimum of fifty-percent of college-level, non-co-op-/non-clinical technical coursework (as identified in the Associate Degree Program Summary) required for their program at Cincinnati State. The resident credit hours required for the degree program are applicable to the College Residency Requirement.

Students seeking a certificate at Cincinnati State Technical and Community College must complete a minimum of fifty-percent of their certificate program requirements at Cincinnati State.

Advanced Standing Credit is not applicable to the College Residency Requirement. Credit earned at Cincinnati State through the Greater Cincinnati Consortium of Colleges and Universities is applicable to the College Residency Requirement.

In Associate of Technical Study and Associate of Individualized Study programs, the residency requirement shall be no less than 30 credits at Cincinnati State.

Students who transfer to Cincinnati State from another accredited Ohio college or university with a completed Transfer Module are subject to the guidelines in the "State of Ohio Policy for Institutional Transfer" statement found elsewhere in this section of the Catalog.

Certificate Programs

To qualify for a certificate, a student must be admitted to a certificate program, fulfill the certificate program requirements as identified in the audit curriculum, attain at least a 2.0 cumulative and program GPA, and petition to graduate. The residency requirement for certificate-seeking students is the same as the requirement for degree-seeking students, as stated above.

Graduation Petition

A student must file a graduation petition in order to graduate. Any matriculated student may file a graduation petition when he or she has earned and/or transferred in a combined total of seventy (70) credit hours towards an associate degree and a combined total of forty (40) credit hours towards a one-year certificate. A less than one year certificate should be turned in according to the schedule below and corresponding with when the student will complete the certificate. The petition must be filed in the Office of the Registrar twenty (20) weeks prior to the date of completed coursework.

Term*	Dates Petitions Accepted	Graduation Date
Summer 2003 (6/23/03 - 8/25/03)	March 17 to April 18	August 25, 2003
Early Fall 2003 (9/2/03 - 11/4/03)	May 27 to June 30	November 4, 2003
Late Fall 2003 (11/11/03 - 1/27/04)	August 4 to September 8	January 27, 2004
Winter 2004 (2/2/04 - 4/5/04)	October 14 to November 21	April 5, 2004
Spring 2004 (4/12/04 - 6/14/04)	January 5 to February 6	June 14, 2004
Summer 2004 (6/28/04 - 8/30/04)	March 15 to April 19	August 30, 2004

*Term in which all coursework is completed.
** Petitions submitted during this period will have a preliminary review conducted by the program chair/advisor. Petitions submitted after this period will only have a final review conducted at the end of the term for which the student submitted.

Participation in Commencement

A student may participate in the annual commencement ceremony if he or she meets all of the following requirements:

1. The student will satisfactorily complete all requirements for a degree during or before the Spring Term immediately preceding commencement, or the student can complete all remaining degree requirements during the Summer Term immediately following commencement.

The ability to complete requirements in Summer Term is defined as needing no more than nine (9) credits or no more than three (3) course registrations, which may include the final cooperative education, clinical, or internship placement.

2. The student has not previously participated in a Cincinnati State commencement ceremony to receive the same degree.
3. The student has submitted a Petition to Graduate form to the Registrar's Office, by the published deadline applicable to the term when the student will complete all degree requirements.
4. The student has submitted an Intent to Participate in Graduation form to the Student Activities Office by the published deadline.

Graduation Honors

Associate degree candidates who earn at least 45 credit hours at Cincinnati State and achieve a cumulative grade point average of 3.50 or higher will graduate with honors. Honors are classified as follows:

Cum Laude 3.50 - 3.79
Magna Cum Laude 3.80 - 3.89
Summa Cum Laude 3.90 - 4.00

Students who complete their degree requirements in the term following commencement (Summer Term) are eligible for honors at commencement only if the remaining requirements are courses that do not affect GPA calculations, such as cooperative education and internship courses.

Academic Integrity Policy of Cincinnati State Technical and Community College

Ethical conduct is the obligation of every member of the Cincinnati State Technical and Community College community. Violations of academic integrity constitute serious breaches of ethical behavior. Academic integrity requires that all academic work be wholly the product of an identified individual.

Violations of Academic Integrity

The following acts of misconduct are subject to disciplinary actions as described in Article III, section (2)(a) of the Cincinnati State Technical and Community College Student Code of Conduct.

A. Cheating: Cheating includes, but is not limited to:

1. Use of any unauthorized assistance in taking quizzes, tests, or examinations, or completing assignments.
2. Dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing assignments.
3. The acquisition, without permission, of tests or other academic materials belonging to a member of the College faculty or staff.
4. Copying computer files, text, or images of other students or downloading information from the Internet and representing this work as one's own.

B. Fabrication: The falsification or invention of any information or citation in an academic exercise. "Invented" information may not be used in any laboratory experiment or other academic exercise without authorization from the instructor. For example, it is improper to analyze one sample in an experiment and covertly "invent" data based on that single experiment for several more required analyses.

C. Facilitating Academic Dishonesty: Knowingly or negligently allowing one's own work to be used by other students or otherwise aiding in academic dishonesty.

D. Plagiarism: The representation of the words or ideas of another as one's own in any academic exercise. To avoid plagiarism, every direct quotation must be identified by quotation marks or by appropriate indentation and must be properly cited in the text or in a footnote. Acknowledgement is required when material from another source is paraphrased or summarized in whole or in part in one's own work. The correct form for documenting direct quotations and for acknowledging paraphrased material may be found in numerous writing manuals or handbooks. The faculty in English at Cincinnati State Technical and Community College endorse the MLA style. However, some instructors may require other types of documentation. Students should refer to the instructor's syllabus for guidance on the proper style.

E. Denying Others Access to Information or Material: Denying others access to scholarly resources or deliberately impeding the progress of another student. Examples of offenses of this type include giving other students false or misleading information, making library material unavailable to others by stealing or defacing books or journals, or by deliberately misplacing or destroying reserved materials, stealing another's paper or project, or altering computer files that belong to another.

Academic Integrity Violations Procedure

A. If an instructor has reason to believe a violation of academic integrity has occurred, the procedure will start in the classroom as outlined by the instructor's syllabus. Penalties imposed by the instructor are limited to those actions whose ramifications fall within the confines of the class, i.e., failure of the assignment or failure of the course. Only the Academic Vice President can impose suspension or dismissal from the College. The instructor has the option of filing a report of the incident with the Academic Vice President for documentation purposes.

B. The instructor may proceed with a formal charge of Academic Dishonesty and recommended sanctions to the Academic Vice President (AVP). The AVP may administer the disciplinary action recommended by the faculty member or a penalty deemed more appropriate. If the student accepts the charge, the AVP will assign sanctions, and the case will be closed. If the student challenges the finding of the AVP and maintains his/her innocence, the case will move forward to an Academic Integrity Panel. The student must submit the challenge to the AVP within 5 working days of the AVP's notification of sanctions.

C. The Academic Integrity Panel consists of:

- 2 students appointed by the Student Senate
- 2 faculty members appointed by the Faculty Senate
- 1 Dean appointed by the Academic Vice President

The case will be heard within 10 working days of receipt of the student's written challenge.

D. The student accused of Academic Dishonesty may be accompanied at the Academic Integrity hearing by a person or persons of his/her choice, not to exceed 3 individuals. The role of the persons accompanying the student is limited to providing support to the student. Individuals accompanying the student may not present information or answer questions in place of the student.

1. Both the Academic Integrity Panel and the student may call witnesses for the hearing.
2. All hearings will be closed.

E. The decision of the Academic Integrity Panel regarding the guilt of the student is reached by majority vote in a session of Panel members only. The decision of the Panel is communicated in writing to the Academic Vice President, along with recommended sanctions, within 10 working days of the final day of panel hearings. The findings of the Academic Integrity Panel and penalty administered by the Academic Vice President are final.

Penalties

Possible sanctions are described in Article IV, section (D)(2) of the Cincinnati State Technical and Community College Student Code of Conduct. They include:

A. Warning
B. Probation
C. Loss of Privileges
D. Fines
E. Restitution
F. Discretionary Sanctions
G. College Suspension
H. College Expulsion

In each case of Academic Dishonesty that is brought forward to the office of Academic Affairs, the Academic Vice President or the Academic Integrity Panel determines the disciplinary action to be taken. The Academic Vice President administers the disciplinary action.

Code of Conduct

(This Student Code of Conduct is promulgated under the provisions of Ohio Revised Code section 111.15, amplifies Chapter 3346.21 and modifies Ohio Administrative Code Rules 3367:4-1-98 and 3357:4-52 as they apply to student behavior and conduct.)

(Adapted from the Journal of College and University Law Published by the National Association of College and University Attorneys and the Notre Dame Law School)

Questions about this code should be directed to:

Sharon Davis, Acting Dean
Enrollment and Student Development - Room 163
Cincinnati State Technical and Community College
3520 Central Parkway
Cincinnati, Ohio 45223-2690

513-569-1475
E-mail: sharon.davis@cincinnatistate.edu

3357:4-1-99 STUDENT CODE OF CONDUCT

A. ARTICLE I: DEFINITIONS

(1) The term "COLLEGE" means Cincinnati State Technical and Community College.

(2) The term "STUDENT" includes all persons taking courses at the college both full-time and part-time, pursuing undergraduate, or professional studies and those who attend post-secondary educational institutions other than Cincinnati State Technical and Community College. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the college are considered "students."

(3) The term "FACULTY MEMBER" means any person hired by the college to conduct classroom activities.

(4) The term "COLLEGE OFFICIAL" includes any person employed by the college performing assigned administrative or professional responsibilities.

(5) The term "MEMBER OF THE COLLEGE COMMUNITY" includes any person who is a student, faculty member, college official or any other person employed by the college. A person's status in a particular situation shall be determined by the chief student services officer.

(6) The term "COLLEGE PREMISES" includes all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by the college including adjacent streets and sidewalks.

(7) The term "ORGANIZATION" means any number of persons who have complied with the formal requirements for college recognition or registration.

(8) The term "JUDICIAL BODY" means any person or persons authorized by the chief student services officer to determine whether a student has violated the student code and to recommend imposition of sanctions.

(9) The term "JUDICIAL ADVISOR" means the chief student services officer or a college official authorized on a case-by-case basis by the chief student services officer to impose sanctions upon students found to have violated the student code. The chief student services officer may authorize a judicial advisor to serve simultaneously as a judicial advisor and the sole member or one of the members of a judicial body. Nothing shall prevent the chief student services officer from authorizing the same judicial advisor to impose sanctions in all cases.

(10) The term "APPELLATE BOARD" means any person or persons authorized by the chief student services officer to consider an appeal from a judicial body's determination that a student has violated the student code or from the sanctions imposed by the judicial advisor.

(11) The term "SHALL" is used in the imperative sense.

(12) The term "MAY" is used in the permissive sense.

(13) The chief student services officer is that person designated by the College President to be responsible for the administration of the student code.

(14) The term "POLICY" is defined as the written regulations of the college as found in, but not limited to, the student code handbook, and undergraduate catalogs.

(15) The term "CHEATING" includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the college faculty or staff.

(16) The term "PLAGIARISM" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

B. ARTICLE II: JUDICIAL AUTHORITY

(1) The judicial advisor shall determine the composition of judicial bodies and appellate boards and determine which judicial body, judicial advisor and appellate board shall be authorized to hear each case.

(2) The judicial advisor shall develop policies for the administration of the judicial program and procedural rules for the conduct of hearings which are not inconsistent with provisions of the student code.

(3) Decisions made by judicial body and/or judicial advisor shall be final, pending the normal appeal process.

(4) A judicial body may be designated as arbiter of disputes within the student community in cases which do not involve a violation of the student code. All parties must agree to arbitration, and to be bound by the decision with no right of appeal.

C. ARTICLE III: PROSCRIBED CONDUCT

(1) JURISDICTION OF THE COLLEGE.

Generally, college jurisdiction and discipline shall be limited to conduct which occurs on college premises or which adversely affects the college community and/or the pursuit of its objectives.

(2) CONDUCT - RULES AND REGULATIONS

Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IV:

(a) Acts of dishonesty, including but not limited to the following:

(i) cheating, plagiarism, or other forms of academic dishonesty,

(ii) furnishing false information to any college official, faculty member or office.

(iii) forgery, alteration, or misuse of any college document, record, or instrument of identification.

(iv) tampering with the election of any college-recognized student organization.

(b) Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other college activities, including its public-service functions on or off campus, or other authorized non-college activities, when the act occurs on college premises.

(c) Physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or other conduct which threatens or endangers the health or safety of any person.

(d) Attempted or actual theft of and/or damage to property of the college or property of a member of the college community or other personal or public property.

(e) Hazing, defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, a group or organization.

(f) Failure to comply with directions of college officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.

(g) Unauthorized possession, duplication or use of keys to any college premises or unauthorized entry to or use of college premises.

(h) Violation of published college policies, rules or regulations.

(i) Violation of federal, state, or local law on college premises or at college-sponsored or supervised activities.

(j) Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.

(k) Use, possession or distribution of alcoholic beverages except as expressly permitted by the law and college regulations, or public intoxication.

(l) Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on college premises.

(m) Participation in a campus demonstration which disrupts the normal operations of the college and infringes on the rights of other members of the college community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.

(n) Obstruction of the free flow of pedestrian or vehicular traffic on college premises or at college-sponsored or supervised functions.

(o) Conduct which is disorderly, lewd, or indecent; breach of peace; or aiding, abetting, or procuring another person to breach the peace on college premises or at functions sponsored by, or participated in by, the college.

(p) Theft or other abuse of computer time, including but not limited to:

(i) unauthorized entry into a file, to use, read, or change the contents, or for any other purpose.

(ii) unauthorized transfer of a file.

(iii) unauthorized use of another individual's identification and password.

(iv) use of computing facilities to interfere with the work of another student, faculty member or college official.

(v) use of computing facilities to send obscene or abusive messages.

(vi) use of computing facilities to interfere with normal operation of the college computing system. (See Appendix I for entire policy)

(q) Abuse of the judicial system, including but not limited to:

(i) failure to obey the summons of a judicial body or college official.

(ii) falsification, distortion, or misrepresentation of information before a judicial body.

(iii) disruption or interference with the orderly conduct of a judicial proceeding.

(iv) institution of a judicial proceeding knowingly without cause.

(v) attempting to discourage an individual's proper participation in, or use of, the judicial system.

(vi) attempting to influence the impartiality of a member of a judicial body prior to, and/or during, and/or after a judicial proceeding.

(vii) harassment (verbal or physical), and/or intimidation of a member of a judicial body prior to, during and/or after a judicial proceeding.

(viii) failure to comply with the sanction(s) imposed under the student code.

(ix) influencing or attempting to influence another person to commit an abuse of the judicial system.

(3) VIOLATION OF LAW AND COLLEGE DISCIPLINE

(a) If a student is charged only with an off-campus violation of federal, state, or local laws, but not with any other violation of this code, disciplinary action may be taken by the college and sanctions imposed for grave misconduct which demonstrates flagrant disregard for the college community. In such cases, no sanction may be imposed unless the student has been found guilty in a court of law or has declined to contest such charges, although not actually admitting guilt (e.g., "no contest" or "nolo contendere").

(b) Cincinnati State Technical and Community College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this student code, for example, if both violations result from the same factual situation, without regard to the pendency of civil litigation in court or criminal arrest and prosecution. Proceedings under this student code may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.

(c) When a student is charged by federal, state, or local authorities with a violation of law, the college will not request or agree to special consideration for that individual because of his or her status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the student code, however, the college may advise off-campus authorities of the existence of the student code and of how such matters will be handled internally within the college community. The college will cooperate fully with law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and faculty members, acting in their personal capacities, remain free to interact with government representatives as they deem appropriate.

D. ARTICLE IV: JUDICIAL POLICIES

(1) CHARGES AND HEARING

a. Any member of the college community may file charges against any student for misconduct. Charges shall be prepared

in writing and directed to the judicial advisor, or the administrative designee, responsible for the administration of the college judicial system. Any charge should be submitted as soon as possible after the event takes place, preferably within (twenty-four hours).

In the event of an incident that is life threatening or that poses serious injury, campus safety/security will operate as the judicial advisor designee. The judicial advisor or the administrative designee will be notified, as soon as possible, not later than twenty-four hours after the incident.

b. The judicial advisor, or the administrative designee, may conduct an investigation to determine if the charges have merit and/or if they can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to the judicial advisor. Such disposition shall be final and there shall be no subsequent proceedings. If the charges cannot be disposed of by mutual consent, the judicial advisor may later serve in the same matter as the judicial body or a member thereof.

c. All charges shall be presented to the accused student in written form. A time shall be set for a hearing, not less than five nor more than fifteen calendar days after the student has been notified. Maximum time limited for scheduling of hearings may be extended at the discretion of the judicial advisor.

d. Hearings shall be conducted by a judicial body according to the following guidelines:

(i) Hearings normally shall be conducted in private. At the request of the accused student, and subject to the discretion of the judicial advisor, a representative of the student press may be admitted, but shall not have the privilege of participating in the hearing.

(ii) Admission of any person to the hearing shall be at the discretion of the judicial body and/or its judicial advisor.

(iii) In hearings involving more than one accused student, the judicial advisor of the judicial body, in his/her discretion, may permit the hearings concerning each student to be conducted separately.

(iv) The complainant and the accused have the right to be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The complainant and/or the accused is responsible for presenting his or her case and, therefore, advisors are not permitted to speak or to participate directly in any hearing before a judicial body.

(v) The complainant, the accused and the judicial body shall have the privilege of presenting witnesses, subject to the right of cross examination by the judicial body.

(vi) Pertinent records, exhibits and written statements may be accepted as evidence for consideration by a judicial body at the discretion of the judicial advisor.

(vii) All procedural questions are subject to the final decision of the judicial advisor of the judicial body.

(viii) After the hearing, the judicial body shall determine (by majority vote if the judicial body consists of more than one person) whether the student has violated each section of the student code which the student is charged with violating.

(ix) The judicial body's determination shall be made on the basis of whether it is more likely than not that the accused student violated the student code.

e. There shall be a single verbatim record, such as a tape recording of all hearings before a judicial body. The record shall be the property of the college.

f. Except in the case of a student charged with failing to obey the summons of a judicial body or college official, no student may be found to have violated the student code solely because the student failed to appear before a judicial body. In all cases, the evidence in support of the charges shall be presented and considered.

(2) SANCTIONS

a. The following sanctions may be imposed upon any student found to have violated the student code.

(i) WARNING - a notice in writing to the student that the student is violating or has violated institutional regulations.

(ii) PROBATION - a written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.

(iii) LOSS OF PRIVILEGES - denial of specified privileges for a designated period of time.

(iv) FINES - previously established and published fines may be imposed.

(v) RESTITUTION - compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.

(vi) DISCRETIONARY SANCTIONS - work assignments, service to the college or other related discretionary assignments (such assignments must have the prior approval of the judicial advisor).

(vii) COLLEGE SUSPENSION - separation of the student from the college for a definite period of time, after which the student is eligible to return. Conditions for re-admission may be specified.

(viii) COLLEGE EXPULSION - permanent separation of the student from the college.

b. More than one of the sanctions listed above may be imposed for any single violation.

c. Other than college expulsion, disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential record. Upon graduation, the student's confidential record may be expunged of disciplinary actions other than, college suspension or college expulsion, upon application to the judicial advisor. Cases involving the imposition of sanctions other than college suspension or college expulsion shall be expunged from the student's confidential record three years after final disposition of the case.

d. The following sanctions may be imposed upon groups or organizations:

a. those sanctions listed above in paragraphs (c)(2)(a)(i) to (c)(2)(a)(viii).

b. deactivation-loss of all privileges, including college recognition, for a specified period of time.

e. In each case in which a judicial body determines that a student has violated the student code, the sanction(s) shall be determined and imposed by the judicial advisor. In cases in which persons other than or in addition to the judicial advisor have been authorized to serve as the judicial body, the recommendation of all members of the judicial body shall be considered by the judicial advisor in determining and imposing sanctions. The judicial advisor is not limited to sanctions recommended by members of the judicial body. Following the hearing, the judicial body and the judicial advisor shall advise the accused in writing of its determination and of the sanction(s) imposed, if any.

(3) INTERIM SUSPENSION

In certain circumstances, the chief student services officer or designee, may impose a college suspension prior to the hear-

ing before a judicial body:

(i) Interim suspension may be imposed only: a) to ensure the safety and well being of members of the college property; b) to ensure the student's own physical or emotional safety and well being; or c) if the student poses a definite threat of disruption of or interference with the normal operations of the college.

(ii) A standing appellate board will be formed at the direction of the chief student services officer who will ensure that it is fairly composed of representatives of the student body, staff, faculty and administration of Cincinnati State Technical and Community College.

(iii) During the interim suspension, students shall be denied access to the campus (including classes) and/or all other college activities or privileges for which the student might otherwise be eligible, as the chief student services officer or the judicial advisor may determine to be appropriate .

(4) APPEALS

a. A decision reached by the judicial body or a sanction imposed by the judicial advisor may be appealed by accused students or complainants to an appellate board within five school days of the decision. Such appeals shall be in writing and shall be delivered to the chief student services officer, judicial advisor or his/her designee. The appellate board shall be composed of seven members, four chosen by the chief student services officer, and three chosen by the accused student or complainant. All shall be members of the college community.

b. Except as required to explain the basis of new evidence, an appeal shall be limited to review of the verbatim records of the initial hearing and supporting documents for one or more of the following purposes:

(i) To determine whether the original hearing was conducted fairly in light of the charges and evidences presented, and in conformity with prescribed procedures, giving the complaining party a reasonable opportunity to prepare and present evidence that the student code was violated, and giving the accused student a reasonable opportunity to prepare and to present a rebuttal of those allegations.

(ii) To determine whether the decision reached regarding the accused student was based on substantial evidence, that is, whether the facts in the case were sufficient to establish that a violation of the student code occurred.

(iii) To determine whether the sanction(s) imposed were appropriate for the violation of the student code which the student was found to have committed.

(iv) To consider new evidence, sufficient to alter a decision, or other relevant facts not brought out in the original hearing, because such evidence and/or facts were not known to the person appealing at the time of the original hearing.

c. If an appeal is upheld by the appellate board, the matter shall be remanded to the original judicial body and judicial advisor for re-opening of the hearing to allow reconsideration of the original determination and/or sanction(s).

d. In cases involving appeals by students accused of violating the student code, review of the sanction by the appellate board may not result in more severe sanction(s) for the accused student. Instead, following an appeal, the chief student services officer may, upon review of the case, reduce, but not increase, the sanctions, imposed by the judicial advisor.

e. In cases involving appeals by persons other than students accused of violating the student code, the chief student services officer may, upon review of the case, reduce or increase the sanctions imposed by the judicial advisor or remand the case to the original judicial body and judicial advisor.

E. ARTICLE V: INTERPRETATION AND REVIEW

(1) Any question of interpretation regarding the student code shall be referred to the chief student services officer for final determination.

(2) The student code will be reviewed every three years under the direction of the chief student services officer and/or judicial advisor.

R: 4/15/00

Appendix I

Policy for Responsible Use of Information Technology and Resources at Cincinnati State Technical and Community College

Introduction

In support of its mission of teaching and community service, Cincinnati State Technical and Community College provides access to information technology and resources for students, faculty and staff. This includes but is not limited to computers, computer terminals, peripheral computer hardware, software, networks, and the information that can be accessed using these tools. This policy contains the College's philosophy and rules regulating the use of this technology and these resources. In addition, local, state, and federal laws relating to copyrights, security, and the electronic media govern the use of information technology and resources. It is the responsibility of students, faculty and staff to implement and comply with this policy and all other applicable regulations. This policy applies equally to College-owned or College-leased resources and technology.

Policy

All members of the College community who use the College's information technology and communication resources must act responsibly. Users are responsible for the resources under their control. All users of College-owned or College-leased information technology must respect the rights of other users, respect the integrity of the physical facilities, and comply with all applicable laws, licenses, and contracts. It is the policy of Cincinnati State Technical and Community College that all members of its community act in accordance with this policy and maintain the highest standard of ethics when dealing with information technology and resources.

Access to the College's information technology and resources is a privilege granted to College students, faculty, and staff. The College reserves the right to extend, limit, restrict, or deny this privilege. The College may also permit individuals other than College faculty access, so long as such access does not violate any license or contractual agreement, College policy, or federal, state, county, or local law.

College information technology and resources are to be used only for the activities or purposes for which they are assigned. They are not to be used for commercial purposes without written authorization from the College. In such cases, the College may require payment of appropriate fees. Users and system administrators must guard against abuses that disrupt or threaten the stability of information systems, including not only those at the College but also those on networks to which the

College's systems are connected. Use of the College's information technology and resources may be monitored by appropriate administrative personnel of the College.

Information technology provides important means of communication, both public and private. Users and system administrators must respect the privacy of person-to-person communication in all forms, including voice (telephone), text (electronic mail and file transfer), and image (graphics and television). The principle of freedom of speech will apply to public communications in all these forms.

Standards of Conduct

The College demands a high standard of conduct for all students, faculty and staff in the use of, and access to the College's information technology and resources. Anyone whose conduct misuses the College's information technology and resources is subject to College disciplinary action. This conduct includes, but is not limited to the following:

1. copying College-owned or licensed software or data personal or external use without prior written approval;
2. attempting to modify College-owned or licensed software or data without prior approval;
3. attempting to modify or destroy data belonging to someone else;
4. attempting to damage or disrupt the operation of computing equipment, communications equipment, or communications lines;
5. using College information technology or resources for purposes other than those intended by the College, including but not limited to using them for personal financial gain, transmitting or downloading pornographic information, or allowing access to them by unauthorized persons, even if they are members of the College community;
6. using any portion of College computing, network facilities and information resources to:
   a. copy privately-owned or licensed software or data without prior written approval;
   b. modify privately owned or licensed software or data without prior written approval;
   c. attempting to damage or to disrupt the operation of computing equipment, communications equipment, or communications lines,
7. invading the privacy of an individual by using electronic means to ascertain confidential information. even if an individual or department inadvertently allows access to information;
8. copying another user's software or data without the permission of the owner. even if it is readily accessible by electronic means;
9. knowingly accepting or using software or data which has been obtained by illegal means;
10. abusing or harassing another user through electronic means;
11. using the College's technology and information resources in the commission of a crime;
12. gaining access to non-public computing, network facilities and information resources without prior permission;
13. allowing another individual to use one's identity;
14. using another individual's identity, even if the individual has neglected or has chosen not to safeguard it.

Enforcement

Alleged violations of this policy shall be dealt with in accordance with the procedures in the Cincinnati State Technical and Community College personnel policies described in the Employee Handbook, Administrator's Manual, College collective bargaining agreements, and the Student Code of Conduct. The College treats violations of this policy seriously and will pursue criminal and civil prosecution where appropriate.

Effective March 1, 1996.

Information Technology Services (ITS) Policy on Responsible Use of Computing Resources

General Statement About Responsible Use of Computing Resources

Cincinnati State Technical and Community College acquires, develops, and maintains computers, computer systems, and networks. These computing resources are intended for college-related use, including direct and indirect support of the College's instruction, research, and service missions; of College administrative functions; of student and campus life activities; and of the free exchange of ideas.

The rights of free expression and academic freedom apply to the use of College computing resources. So, too, however, do the responsibilities and limits associated with those rights. All who use the College's computing resources must act responsibly, in accordance with the highest standard of ethical and legal behavior. Thus, legitimate use of computing resources does not extend to whatever is technically possible. Users must abide by all applicable restrictions, whether or not they are built into the operating system or network and whether or not they can be circumvented by technical means.

This policy applies to all users of College computing resources, whether affiliated with the College or not, and to all users of those resources, whether on campus or from remote locations. Additional policies may apply to specific computers, computer systems or networks provided or operated by specific units of the College or to uses within specific units.

Policy Regarding Responsible Use of Computing Resources

All College computing resource users must:

1. Comply with all federal, Ohio and other applicable law; all generally applicable College rules and policies; and all applicable contracts and licenses. Examples of such laws, rules, polices, contracts, and licenses include: the laws of libel, privacy, copyright, trademark, obscenity, and child pornography; the Electronic Communications Privacy Act and the Computer Fraud and Abuse Act, which prohibit "hacking", "cracking", and similar activities; the College's code of student conduct; the Cincinnati State Technical and Community College Administrators' Manual, Faculty Handbook, the College's sexual harassment policy; and all applicable software licenses. In particular, users must:

A. Respect the right of others to be free from harassment or intimidation to the same extent that this right is recognized in the use of other communication; and

B. Respect copyrights, intellectual-property rights, ownership of files and passwords. Unauthorized copying of files or passwords belonging to others or to the College may constitute plagiarism or theft. Accessing or modifying files without authorization (including altering information, introducing viruses or Trojan horses, or damaging files) is unethical, may be illegal, and may lead to sanctions.

Users who engage in electronic communications with persons in other states or countries or on other systems or networks should be aware that they may also be subject to the laws of those other states and countries and the rules and policies of those other systems and networks. Users are responsible for ascertaining, understanding, and complying with the laws, rules, policies, contracts, and licenses applicable to their particular uses.

Cincinnati State extends these policies and guidelines to systems outside the College that are accessed via the College's facilities (e.g., electronic mail or remote logins using the College's Internet connections).

2. Use only those computing resources that they are authorized to use and use them only in the manner and to the extent authorized. Ability to access computing resources does not, by itself, imply authorization to do so. Users are responsible for ascertaining what authorizations are necessary and for obtaining them before proceeding. Accounts, passwords, and other authentication mechanisms, may not, under any circumstances, be shared with, or used by, persons other than those to whom they have been assigned by the College.

3. Respect the finite capacity of those resources and limit use so as not to consume an unreasonable amount of those resources or to interfere unreasonably with the activity of other users. Although there is no set bandwidth, disk space, CPU time, or other limit applicable to all uses of College computing resources, the College may require users of those resources to limit or refrain from specific uses in accordance with this principle. The reasonableness of any particular use will be judged in the context of all of the relevant circumstances.

4. Limit the personal use of College computing resources and refrain from using those resources for personal commercial purposes or for personal financial or other gain. Personal use of College computing resources is permitted on a limited basis when it does not interfere with the performance of the user's job or other College responsibilities, and is otherwise in compliance with this and other College policy. This usage does not include links to personal web pages. This usage is subject to monitoring by the ITS staff. Further limits may be imposed upon personal use in accordance with normal supervisory procedures.

5. Refrain from stating or implying that they speak on behalf of the College and from using college trademarks and logos without authorization to do so. Affiliation with the College does not, by itself, imply authorization to speak on behalf of the College. Authorization to use College trademarks and logos may be granted only by Cincinnati State. The use of appropriate disclaimers is encouraged. Personal web pages linked to the College Web should disclaim association with Cincinnati State.

Enforcement of the Policy Regarding Responsible Use

Whenever it becomes necessary to enforce College rules or policies, an authorized administrator may: disallow network connections by certain computers (even departmental and personal ones); require adequate identification of computers and users on the network; undertake audits of software or information on shared systems where policy violations are possible; take steps to secure compromised computers that are connected to the network; or deny access to computers, the network, and institutional software and databases.

Sanctions Regarding Misuse of Computing Resources

Users who violate this policy may be denied access to College computing resources and may be subject to other penalties and disciplinary action, both within and outside of the College. Violations will normally be handled through the College disciplinary procedures applicable to the relevant user. Alleged violations by students will normally be investigated, and the Student Development Services Office will normally impose any penalties or other discipline.

However, the College, through its information managers, may suspend or block access to an account prior to the initiation or completion of such procedures; when it reasonably appears necessary to do so, and in order to protect the integrity, security, or functionality of College or other computing resources; or to protect the College from liability.

The College may also refer suspected violations of applicable law to appropriate law enforcement agencies.

Privacy and Security Issues Regarding Responsible Use of Computing Resources

The College employs various measures to protect the security of its computing resources and users accounts. However, users should be aware that the College does not and cannot guarantee such security.

Users should also be aware that their uses of College computing resources are not private. While the College does not routinely monitor individual usage of its computing resources, the normal operation and maintenance of College computing resources requires the backup and caching of data and communications, the logging of activity, the monitoring of general usage patterns, and other such activities that are necessary for the rendition of service. Systems or technical managers, as part of their technical responsibility, may occasionally need to diagnose or solve problems by examining the contents of particular files.

The College may also monitor the activity and accounts of individual users of College computing resources, including individual sessions and communications, without notice (a) when the user has voluntarily made them accessible to the public, as by posting to Usenet or a web site; (b) when it reasonably appears necessary to do so to protect the integrity, security, or functionality of College or other computing resources or to protect the College from liability; (c) when there is reasonable cause to believe that the user has violated, or is violating, this policy; (d) when an account or device appears to be engaged in unusual or unusually excessive activity, as indicated by the monitoring of general activity and usage patterns; or (e) when it is otherwise required or permitted by law.

Any such individual monitoring, other than that specified in "(a)", or required by law, or necessary to respond to perceived emergency situations, must be authorized in advance by the Chief Information Officer (CIO) or a designee of same.

The College, in its discretion, may disclose the results of any such general or individual monitoring, including the contents

and records of individual communications, to appropriate College personnel or law enforcement agencies and may use those results in appropriate College disciplinary proceedings. Communications made by means of College computing resources are also generally subject to Ohio's Public Records Statute to the same extent as they would be if made on paper.

The User's Responsibilities

1. Be aware of the limits of computer security. Although the College employs various measures to protect the security of its computing resources and user accounts, users should be aware that the College cannot guarantee such security. Users should therefore engage in "safe computing" practices by establishing appropriate access restrictions for their accounts, guarding their passwords, and changing them regularly.

2. Be responsible for backing up and protecting personal files. Although the College under certain circumstances may provide storage space and under certain circumstances that storage may be backed up, Cincinnati State assumes no responsibility for the loss or recovery of personal files.

The College's Responsibilities

The College owns various computers and all of the internal computer and wireless networks used on campus. The College also has various rights to the software and information residing on, developed on, or licensed for, these computers and networks. The College has the responsibility to administer, protect, and monitor this aggregation of computers, software, and networks. Specifically, purposes of the College's information technology management are to:

1. Manage computing resources so that members of the College community benefit equitably from their use.
2. Protect College computers, networks and information from destruction, tampering, and unauthorized inspection and use.
3. Communicate College policies and the responsibilities of individuals systematically and regularly in a variety of formats to all parts of the College community.
4. Establish and support reasonable standards of security for electronic information that community members produce, use, or distribute. Standards for security and access are elaborated in the document titled "Cincinnati State Technical and Community College Computing Security Policy," as well as in documents derived from it.
5. Establish and support reasonable standards of security for electronic information that community members produce, use, or distribute. Standards for security and access are elaborated in the document titled "Cincinnati State Technical and Community College Computing Security Policy," as well as in documents derived from it.
6. Monitor policies and propose changes in policy as events or technology warrant.

Sexual Harassment Policy

Cincinnati State Technical and Community College affirms its commitment to ensuring an environment for all employees and students which is fair, humane and respectful—an environment which supports and rewards employee and student performance on the basis of relevant considerations such as ability and effort. Behaviors which inappropriately assert sexuality as relevant to employee or student performance are damaging to this environment.

Title VII of the Civil Rights Act of 1969 and Title IX of the Educational Amendments of 1972 as interpreted by Federal Regulation prohibit sexual harassment.

Definition

Sexual favors may not be required explicitly or implicitly as a term or condition of an individual's employment or student status. The submission to or rejection of sexual favors may not be used as a basis for employment or educational decisions. Sexual conduct which has the purpose or effect of unnecessarily interfering with an individual's work or student performance or creating an intimidating, hostile or offensive working or educational environment is prohibited.

Such conduct may include:

- verbal harassment or abuse
- subtle pressure for sexual activity
- sexist remarks about a woman's or man's clothing, body, or sexual activities
- unnecessary touching, patting, or pinching
- leering or ogling of a woman's or man's body
- constant brushing against a woman's or man's body
- demanding sexual favors accompanied by implied or overt threats concerning one's job, grades, letters of recommendation, etc.
- physical assault

Substance Abuse Policy

Cincinnati State Technical and Community College prohibits the unlawful manufacture, possession, use or distribution of drugs on its property or as a part of its activities. Cincinnati State also prohibits the use or possession of alcoholic beverages on campus property except as authorized by campus policy. Students and staff may be accountable to both civil authorities and to the College administration for drug and alcohol related actions which are a violation of federal, state or local laws, or the College policy as stated below. In 1989, the College Board of Trustees approved a Drug Free Workplace policy found below.

Policy For Drug-Free Workplace: 89.49

The unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Cincinnati State workplace. Employees who violate this prohibition will be subject to disciplinary action up to and including immediate discharge.

All employees are obligated to the terms of this policy and must notify their immediate supervisor of conviction for any criminal drug statute violation occurring in the workplace no later than five days after such conviction.

Each employee of the College will receive a written copy of this POLICY STATEMENT regarding a Drug-Free Workplace and will be notified that, as a condition of employment, he or she must abide by this POLICY STATEMENT and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace not later than five days after such conviction.

Upon receiving notice that an employee who is engaged in the performance of a federal contract has had any criminal drug statute conviction for a violation occurring in the workplace, Cincinnati State will notify the federal contracting agency within ten days. The College will impose a sanction on, or require participation in a drug abuse assistance/rehabil-

itation program by the convicted employee.

Substance abuse is a serious problem in our society. In response to this problem, Cincinnati State offers the following educational activities and personal assistance to all members of the campus community.

- An annual distribution of this statement to all students and employees of the College.
- Health/Wellness Information is available in the hall outside the Admission Office.
- The Department of Athletics and Student Activities has an alcohol/drug education assistance program for athletes.
- Two College-wide workshops on issues dealing with substance abuse are held during each academic year.
- Information and literature on substance abuse is available in the Counseling Center, room 168.
- Students, as well as faculty and staff members who may have alcohol or other substance abuse problems, may receive confidential counseling and referral to appropriate community agencies from the counselors in the Counseling Center, room 168, or employees may contact the Office of Human Resources for assistance.

Early recognition, intervention and treatment for substance abuse is necessary to avoid detrimental effects to physical and mental health. Health risks associated with substance abuse include, but are not limited to:

- Physical dependence
- Psychological dependence
- Alterations in the body's immune system
- Digestive problems
- Liver complications
- Neuropsychological complications
- Nutritional deficiencies
- Certain cancers
- Cardiovascular complications
- Respiratory complications
- An increased risk of contracting AIDS
- Deterioration in learning ability, memory and judgment
- Placental transfer resulting in low birth weight, mental retardation, congenital malformation and neonatal addiction
- Moral deterioration
- Deterioration of personal relationships

Death may result from continued substance abuse.

Alcohol and the Law

You have a responsibility to follow the laws of your city, state and nation. If you fail to live up to that responsibility, you may face certain penalties. Some of the potential legal consequences of committing an alcohol related criminal offense are listed in this statement.

Underage Consumption, Purchasing or Possession of Alcohol

The legal drinking age in Ohio for consumption of an alcoholic beverage is 21 years old. Anyone purchasing, possessing or consuming alcohol prior to their 21st birthday is guilty of a first degree misdemeanor. The maximum penalties associated with this offense are 6 months imprisonment or a $1,000 fine or both. A 20-year-old student, therefore, risks being imprisoned and fined when he or she decides to drink alcohol.

Providing Alcohol to an Underage Person

A person who furnishes alcohol to an underage person is guilty of a first degree misdemeanor. The maximum penalties associated with this offense are 6 months imprisonment or $1,000 fine or both. A social host, therefore, risks being fined and imprisoned when he or she furnishes alcohol to a person he or she knows or should know is not 21 years of age.

Fake ID

Possession or display of a fictitious operators license is a first degree misdemeanor. The offense includes mere possession of a fictitious license or display of someone else's valid operators license. The maximum penalties for this offense are 6 months imprisonment or a $1000 fine or both. Moreover, if the fictitious operators license is utilized to purchase alcohol or enter an establishment that serves alcohol, the minimum fine must be at least $250 and the person displaying the fictitious operators license may have his or her valid operators license suspended for 3 years.

Driving Under the Influence of Alcohol or Drugs (DUI)

In Ohio, a person may not operate a motor vehicle if he or she is impaired by alcohol and/or drugs. The maximum penalties for operating a vehicle while under the influence are 6 months imprisonment (mandatory 3 days in jail) or a $1,000 fine or both. In addition, the operator must forfeit his or her driving privileges for 3 months.

Open Container

It is illegal to possess in public an open container of an alcoholic beverage. If convicted of this offense, the maximum penalty is a $100 fine. Consumption of alcohol in a motor vehicle is a fourth degree misdemeanor with maximum penalties of 30 days imprisonment or a $250 fine or both.

Disorderly Conduct

Disorderly conduct while intoxicated is a minor misdemeanor and carries a maximum penalty of a $100 fine. Disorderly conduct occurs when one recklessly causes inconvenience, annoyance or alarm to another due to offensive conduct.

Federal and State Penalties for Sale and Possession

The Federal Government decides if and how a drug should be controlled. Psychoactive (mind-altering) chemicals are categorized according to Schedule I-V. This schedule designates if the drug can be prescribed by a physician and under what conditions. Factors considered in this categorization include a drug's known and potential medical value, its potential for physical or psychological dependence, and risk, if any, to public health. Penalties for the illegal sale or distribution of a drug are established using the designation of Schedule I-V. If you have knowledge of a felony you must report it to a law enforcement official.

Schedule I drugs have a high potential for abuse with no medical use. Production of these drugs is controlled. Examples include heroin, methaqualone, all hallucinogens (except phencyclidine-PCP), marijuana and hashish. Tetrahydrocannabinol (THC), depending on its form, can also be a schedule II drug.

Schedule II drugs have a high potential for abuse, but have some medical uses. Production of these drugs is controlled. Examples include opium, morphine, codeine, some other narcotics, barbiturates, cocaine, amphetamines, and phencyclidine (PCP).

Federal and State of Ohio penalties for selling Schedule I and II drugs vary with the quantity of the drug. Additionally, if death or serious injury is associated with the sale and/or if it is a second offense, penalties are more severe. When establishing penalties for sale, marijuana and hashish are separated

from this designation according to the schedule. The penalties, however, are similar to those set for Schedule I and II drugs.

The Federal penalty for first offense sale of small amounts of Schedule I and II drugs is "not less that 4 years/not more than 40 years; if death or serious injury, not less than 20 years/not more than life; fine of not more than $2 million individual/$5 million other than individual."

In the State of Ohio the penalty for "delivery, possession with intent to deliver, and manufacture" of less than 25 grams is "mandatory 1 to 20 years; up to $25,000 or life probation." The penalty for possession of less than 25 grams is "up to 4 years, or fined up to $25,000 or both." Both are a felony. Use is a misdemeanor which has a penalty of "up to 2 years, $2,000 fine or both."

Schedule III, IV and V drugs include those that most citizens would categorize as "prescription drugs." Schedule III drugs have some potential for abuse, but less than I and II. The potential for abuse of Schedule IV drugs is less than Schedule III, and Schedule V is less than IV. All Schedule III-V drugs have medical uses and production is not controlled. Examples of these drugs include some narcotics, chloral hydrate (IV), barbiturates (III & IV), amphetamines (III), and other stimulants (III & IV).

The Federal penalty for first offense sale of a Schedule III drug is "Not more than 5 years; fine of not more than $250,000 individual/$1 million not individual." The Federal penalty for first offense sale of schedule IV drugs is "not more than 3 years." The fine is the same as for Schedule III drugs. The Federal penalty for first offense sale of Schedule V drugs is "not more than 1 year; fine of not more than $100,000 individual/$250,000 not individual."

Sale of some Schedule III drugs is a felony and has a State of Ohio penalty of "up to 7 years; or a fine up to $5,000; or both." State of Ohio penalty for sale of Schedule IV drugs is a felony and has a penalty of "up to 4 years; or a fine up to $2,000; or both." Sale of Schedule V drugs in the State of Ohio is also a felony and has a state penalty of "up to 2 years; or a fine up to $2,000; or both."

For further information on substance abuse and early intervention and treatment, contact the Counseling Center, room 161, (513) 569-1544, or the Office of Human Resource Services in room 177, (513) 569-1565.

Student Conduct Violations and Hearing Procedure

Ohio Administrative Code (O.A.C.) Rule 3357:4-1-100
Article IV, Judicial Policies

A. Any member of the College community may file charges against any student for misconduct. Charges shall be prepared in writing and directed to the judicial advisor responsible for the administration of the College judicial system. Any charge should be submitted as soon as possible after the event takes place, preferably within forty-eight hours.

B. The judicial advisor may conduct an investigation to determine if the charges have merit and/or if they can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to the judicial advisor. Such disposition shall be final and there shall be no subsequent proceedings. If the charges cannot be disposed of by mutual consent, the judicial advisor may later serve in the same matter as the judicial body or a member thereof.

C. All charges shall be presented to the accused student in written form. A time shall be set for a hearing, not less than five nor more than fifteen calendar days after the student has been notified. Maximum time limit for scheduling of hearings may be extended at the discretion of the judicial advisor.

D. Hearings shall be conducted by a judicial body according to the following guidelines:

(i) Hearings normally shall be conducted in private. At the request of the accused student, and subject to the discretion of the judicial advisor, a representative of the student press may be admitted, but shall not have the privilege of participating in the hearing.

(ii) Admission of any person to the hearing shall be at the discretion of the judicial body and/or its judicial advisor.

(iii) In hearings involving more than one accused student, the judicial advisor of the judicial body, in his/her discretion, may permit the hearings concerning each student to be conducted separately.

(iv) The complainant and the accused have the right to be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The complainant and/or the accused is responsible for presenting his or her case and, therefore, advisors are not permitted to speak or to participate directly in any hearing before a judicial body.

(v) The complainant, the accused and the judicial body shall have the privilege of presenting witnesses, subject to the right of cross examination by the judicial body.

(vi) Pertinent records, exhibits and written statements may be accepted as evidence for consideration by a judicial body at the discretion of the judicial body.

(vii) All procedural questions are subject to the final decision of the judicial advisor of the judicial body.

(viii) After the hearing, the judicial body shall determine (by majority vote if the judicial body consists of more than one person) whether the student has violated each section of the student code which the student is charged with violating.

(ix) The judicial body's determination shall be made on the basis of whether it is more likely than not that the accused student violated the student code.

E. There shall be a single verbatim record, such as a tape recording of all hearings before a judicial body. The record shall be the property of the College.

F. Except in the case of a student charged with failing to obey the summons of a judicial body or College official, no student may be found to have violated the student code solely because the student failed to appear before a judicial body. In all cases, the evidence in support of the charges shall be presented and considered.

Student Complaint Procedures

Cincinnati State Technical and Community College has established procedures to address the violation of the rights of students. A complete copy of the procedures can be obtained from the Dean of Enrollment and Student Services. (Matters related to an appeal of academic decisions must first be handled through the Academic Appeals Procedure which is referred to elsewhere in this section of the Catalog.)

If a student feels that his or her rights have been, or are being, violated by another student or Cincinnati State staff, the following procedure is available:

Step 1 — The student should discuss the problem with his or her instructor or faculty advisor.

Step 2 — If the problem is not resolved at Step 1, a student complaint/referral form should be submitted to the Dean of Enrollment and Student Services, room 168. A copy of the form shall be forwarded to the Dean or manager of the person against whom the complaint is made for resolution.

Step 3 — If the complaint is not resolved at Step 2, the complainant may request a fact-finding hearing under the provisions of 3357:4-52 through the office of the Dean of Enrollment and Student Services.

Release of Information

Cincinnati State Technical and Community College, in accordance with the Family Educational Right to Privacy Act of 1974 has designated the following information regarding its students as directory (public) information:

1. Name
2. Program
3. Participation in officially recognized activities and sports
4. Weight and height of members of intercollegiate athletic teams
5. Dates of Attendance
6. Degrees and awards received (this includes dates of graduation and major)
7. Most recent previous educational agency or institution attended.
8. Enrollment Status (part-time or full-time), including date(s) of change(s) in status if specifically requested.

This information may be released without the written consent of the student. All other information is confidential and will be released only with written consent from the student for legitimate College purposes or as otherwise required by law.

Students have the right to withhold directory information from the public if they desire. Each student who wants all directory information withheld is required to inform the Office of the Registrar in writing. At least 5 days should be allowed for processing such a request through the student information system. Upon receipt of a written request to withhold directory information, the Office of the Registrar will place a Hold on the student's record alerting staff in the Office of the Registrar the student has requested that no information be provided. No information will be released, regardless of any authorizations the student has completed either before or after notification has been submitted to the Office of the Registrar.

Cincinnati State receives many inquiries for "directory information" from various sources, including prospective employers, insurance companies, loan agencies, other institutions of higher education, government agencies and news media. All students are advised to carefully consider the consequences of a decision to withhold directory information. If a student requests to have directory information withheld, the student will be required to provide written consent to the Office of the Registrar for any and all information to be released. Students requesting that all directory information be withheld will not be able to register through the touch-tone registration service.

Photographs and/or films of students for promotional and recruitment purposes are taken throughout the school year. Students who do not wish to be included in these visuals must inform the Director of Public Information prior to photographing and/or filming.

Solomon Amendment

In compliance with the Solomon Amendment which became effective on April 1, 1997, Cincinnati State Technical and Community College must supply the following information (if captured) to representatives of any branch of Federal Armed Forces for the purpose of federal recruiting:

student name
address
telephone number
major
date and place of birth
level of education
degree(s) received
prior military experience
most recent previous education institution enrolled

Cincinnati State will only release this information without the student's written prior consent in compliance with the Solomon Amendment and upon written request of an official representative of the Federal Armed Forces. Please review the above section for information pertaining to the release of directory information.

Notification of Rights under the Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

1. The right to inspect and review the student's education records within 45 days of the day that Cincinnati State Technical and Community College receives a request for access.

   Students should submit to the registrar, dean, program chair or other appropriate official, a written request that identifies the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.

   Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

   If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosure of personally identifiable information contained in the student's education

records, except to the extent that FERPA authorizes disclosure without consent.

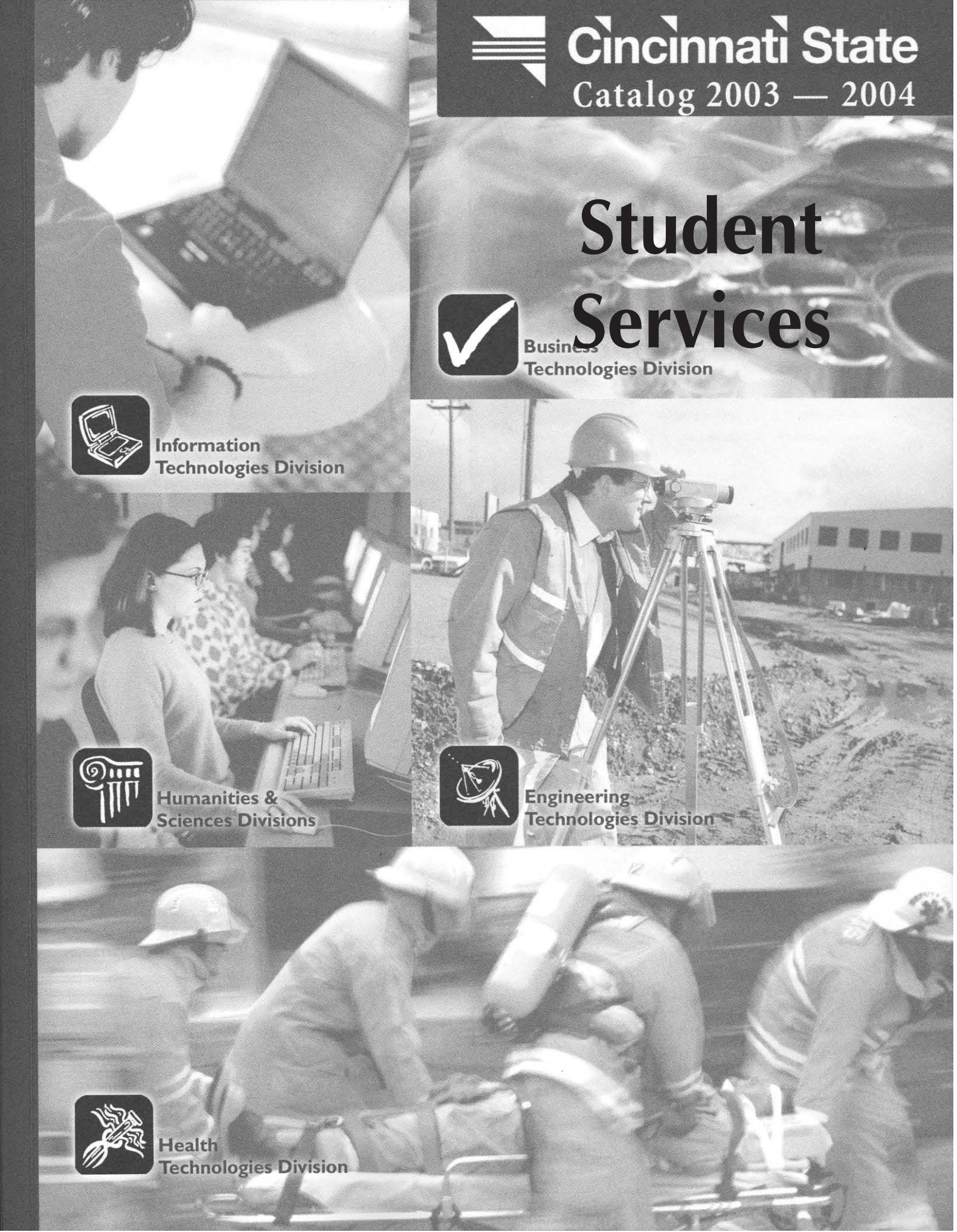
One exception which permits disclosure without consent is disclosure to schools officials with legitimate educational interests. A school official is:

- a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel);
- a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent);
- a person serving on the Board of Trustees; or a student serving on an official committee, such as disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A College official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Cincinnati State Technical and Community College to comply with the requirements of FERPA. The name and address of the office that administers FERPA are:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, DC 20202-4605


Cincinnati State
Catalog 2003 — 2004
Student Services
Business Technologies Division
Information Technologies Division
Humanities & Sciences Divisions
Engineering Technologies Division
Health Technologies Division

Services for Students

An important part of the mission of the College is the adherence to the principles of student rights and freedoms, as amplified by the "Joint Statement on Rights and Freedoms of Students," which was formulated by representatives of the American Association of University Professors, United States Student Association, Association of American Colleges, National Association of Student Personnel Administrators, National Association for Women Educators, as well as a number of other professional bodies. These principles speak to the standards and responsibilities of the academic community to ensure student access to education; free discussion in the classroom; maintenance of student records; the freedom to form organizations that promote the common interests of students, and the freedom of inquiry and expression; student participation in institutional government; as well as expectations of student conduct, and the exercise of rights of citizenship. Complete copies of the statement are available from the Dean of Enrollment and Student Services.

Consequently, as a service to students and to the academic community, Cincinnati State Technical and Community College maintains a cadre of professional and support staff to help students in making meaningful decisions regarding admission to college, registering for classes, applying for financial aid, career and educational decision making, personal and social counseling as well as the participation in a variety of student activities and sports.

Advising

Advisors are available to assist students to a future of success at Cincinnati State. Advisors help students with:

- Developing an educational plan
- Setting academic goals
- Selecting appropriate courses (registering)
- Referrals (campus support services)
- Clarifying career goals and answering questions about programs/majors
- Understanding College academic policies and procedures

Counseling

The Counseling Center maintains a professional staff to assist students. All sessions are confidential and free of charge to all Cincinnati State students.

The following services are provided by the counseling staff:

Counseling — counsel students regarding personal, social, or academic problems or concerns, and crisis intervention.

Career Counseling — help students and potential students with career decisions and concerns through assessment, individual conferences and/or career development coursework, workshops, and the computerized guidance information system.

Academic Advising — provide advising to all non-major and visiting students.

Admission Advising/Support — advise students regarding general admission; assist students in choosing programs, and refer students to program chairpersons.

Educational Transfer Counseling — assist students interested in continuing their education at other colleges or universities.

Ombudsman — act as advocate; help to resolve problems or complaints.

Referral Assistance — help students make connection with appropriate campus resources and external agencies.

Student Advocacy — help students understand their rights and responsibilities and how to work through appropriate campus procedures.

Workshops — sponsor personal growth and academic skill development workshops in a variety of methods that will enhance the college experience.

If a situation develops beyond Counseling Center services, the student will be referred to an appropriate professional.

The Counseling Center is located in room 168. Office hours are 8:00 a.m. to 7:00 p.m. Monday and Wednesday, and 8:00 a.m. to 5:00 p.m. Tuesday, Thursday, and Friday.

Disability Services

Disability Services will work with students to ensure they receive reasonable academic accommodations in courses of study. The major goal is to guarantee that all students with disabilities have an equal opportunity in the pursuit of their educational objectives. Services and programs are available for students according to their individual needs. Students who consistently use the resources and accommodation services earn higher grades and graduate at a higher rate than students who choose not to use them. For further information regarding these services, contact Disability Services in room 181, 569-1613.

International Students

This office provides admissions and immigration regulations assistance. The International Student Coordinator assists students with adapting to the campus environment as well as seeking internal (campus) and external referrals/resources.

Student Support Services

Staff members in the Student Support Services Office work with first-generation, low income and/or disabled students who demonstrate an academic need. The goal of the program is to assist students in completing an associate degree or transfer to a baccalaureate program. Tutoring, mentoring and other support services are provided.

Veterans

Cincinnati State Technical and Community College has a Veterans' Affairs Coordinator to aid persons attending school on V.A. benefits. The Veterans' Affairs coordinator will help students with official paperwork and information regarding benefits. All degree programs at Cincinnati State are approved by the State Approving Agency for Veterans Training. Upon being accepted by Cincinnati State, veterans should contact the Veterans Office for full information concerning application for Veterans' Educational Benefits.

Tutorial services can be arranged for veterans in need of academic assistance. The Department of Veteran's Affairs will reimburse the veteran for this cost. Fair and reasonable charges for this service will be determined by the Coordinator of Veterans' Affairs prior to approval of tutorial assistance.

Whenever possible, a student tutor will be utilized. However, when there is not a qualified student tutor available, the Veterans' Affairs Coordinator will attempt to find a qualified faculty tutor. Please contact the Veterans Office for further information.

The State Approving Agency for Veterans Training has approved Cincinnati State Technical and Community College

for the education and training of veterans and all their dependents under all existing public laws. Inquiries concerning eligibility should be directed to the Coordinator of Veterans' Affairs in room 168.

Student Activities

Student Government

All Cincinnati State students are encouraged to attend Student Government meetings. The Student Government is involved in all student activities and acts as a liaison between students and the administration.

Athletics

Cincinnati State currently competes in the National Junior College Athletic Association (NJCAA) in five sports: women's and men's basketball, women's and men's soccer, and co-ed golf. All five teams regularly compete under the rules and regulations of the National Junior College Athletic Association Region XII (Indiana, Michigan and Ohio) and play a very competitive junior college schedule.

Student Organizations

Students are encouraged to join the organizations that appeal to their academic and social interests.

Current student organizations on-campus are: Phi Theta Kappa, Business Professionals of America, Data Processing Management Association (Student Chapter), Junior Association of Les Chefs de Cuisine, Junior Craftsmen Club, Laser Institute of America, Occupational Therapy Association (Junior Chapter), Ohio Nurserymen's Association, Ornamental Horticulture Club, Professional Grounds Management Society, Professional Land Surveyors of Ohio, Society Manufacturing Engineers (Student Chapter 108), Cincinnati State Players Drama Club, Adult Learners on Campus, International Student Association, Rainbow Alliance, and United African American Association.

Facilities

Use of College Facilities

Students presenting a Cincinnati State I.D. card or other appropriate identification may use such facilities as the gymnasium, natatorium, weight room, library, student center, meeting rooms, etc. Such use is restricted to hours set aside for student use for free time recreation. These hours will not conflict with previously scheduled events, and may be subject to change because of short term scheduling of intramurals, athletics, community use, etc.

Students or student groups may lease on-campus facilities through the Office of the Director of Facilities. The use of facilities is outlined in the Facility Usage and Rental Guidelines.

Smoking Policy

Cincinnati State Technical and Community College is a smoke-free facility, effective August 31, 1993. No smoking is permitted in any College owned or operated building. Students, employees and guests should extinguish smoking materials in receptacles provided at entrances to the building. The courtyard outside the College's main entrance, the small dock area near the courtyard, visitors entrance and the plaza in front of the Health Professions Building are also designated smoke-free.

All employees and students share in the responsibility for adhering to and enforcing this policy. Employees and students are expected to assist in the enforcement of this policy through the following actions: refraining from smoking inside the building and politely reminding persons who smoke inside the building to observe the College's policy.

Johnnie Mae Berry Library

The Johnnie Mae Berry Library, named for the College's first librarian, includes Information Services and Media Services. The Library is open from 7:30 a.m. to 10:00 p.m. Monday through Thursday, 7:30 a.m. to 4:30 p.m. on Friday and 8:00 a.m. to 4:00 p.m. on Saturday. Professionals and associate staff members are available in both areas to provide assistance.

The Library's homepage is available on the World Wide Web at http://library.cincinnatistate.edu and at various workstations throughout the facility. It provides access to BLINK, the Library's on-line catalog, and numerous links to a wide variety of sites which support the College's curriculum. Information Services provides assistance with locating information and using the College's reference, circulating books and periodical collection.

Students may check out circulating books for a three-week period or audiobooks for a two-week period by presenting a Cincinnati State I.D. card. There is no charge for the return of overdue material. However, if items are not returned within three weeks of the receipt of an overdue notice, students will receive a bill of at least $100 per item to cover the replacement and processing costs.

Cincinnati State is a member of the Ohio Library Information Network also known as OhioLINK. This network provides access to the online catalogs of colleges and universities throughout Cincinnati and Ohio. Reference and citation databases and some full-text journal articles are also available as well as access to the Internet. A service known as PCIRC, which allows a student to request a book from any other OhioLINK institution which owns it, is also available. Items are usually delivered within three days.

Cincinnati State students also have access to a number of libraries in the area through the Greater Cincinnati Library Consortium. To use the member libraries, students must obtain a "GCLC Common Patron I.D." card from the Circulation Desk in the Berry Library. These I.D.s expire at the end of each term and must be renewed every term. GCLC's website http://www.gclc-lib.org/ provides access to a member directory and lending policies.

Media Services provides a variety of instructional support services to the College. Videotapes, DVDs, slides, laser discs, etc., are available for students to view in the Library during Library hours.

The Library has two group study rooms, and a variety of tables, desks and carrels for individual study. Typewriters are also available for student use during Library hours.

William L. Mallory Child Development Center

The William L. Mallory Child Development Center is located on the Fourth Floor of the College. It offers a comprehensive

program of child care for infants of six months and older through pre-kindergarten. The Center is operated by the Salvation Army and is available both day and evening. Students interested in placing children in the program should contact the director.

Student Bookstore

The bookstore is located on the first floor of Wing C. A complete supply of new texts and a limited supply of used books are available covering all the courses offered at the College. The store also carries a complete line of classroom supplies, calculators, and course related equipment and supplies.

Used books are purchased by the bookstore at any time during the year.

Books for which an exchange or refund is requested must be accompanied by the original receipt and presented to the College bookstore within one week after the beginning day of each term. If a student drops a course and wishes a refund within the established time frame, the student must show the bookstore personnel a copy of the drop/add form. Only books on approved technology book lists can be returned as used books and refunded accordingly

Regular hours of the Bookstore are Monday thru Thursday, 9:30 a.m. to 6:30 p.m.; Friday 9:30 a.m. to 4:00 p.m. During registration periods hours are extended.

Dining and Vending Services

The cafeteria offers a wide selection of wholesome foods and refreshments.

Hours of operation are 7:30 a.m. to 6:00 p.m. Monday through Thursday and 7:30 a.m. to 2:15 p.m. on Friday.

Vending facilities are open 6:30 a.m. to 10:00 p.m. daily in the first floor cafeteria area, the third floor student lounge, and on the second and third floor of the Health Professions Building. If necessary, refunds from vending facilities can be obtained from the cafeteria cashier.

Gymnasium

The gymnasium is open only at designated times. A Cincinnati State I.D. is required to check out equipment. No food or drink are allowed in the gym.

Pool

The pool is open to students and staff for free swimming Monday through Friday during designated hours.

Fitness Center Rules

1. Students using the center must have Cincinnati State I.D.
2. Students must sign-in before using the center.
3. Students using the fitness center for the first time must sign a liability waiver.
4. No children allowed in the fitness center.
5. No food or drink allowed in the fitness center.
6. It is suggested that you have a towel while using the equipment.
7. No loitering in the fitness center.

Pool and Gym Rules

1. Students using the center must have an I.D. card and drivers license and show them upon request
2. Food and drink will not be allowed in the gym, exercise room or pool.
3. No street clothes allowed in pool area.
4. No swimming suits allowed in other activities areas.
5. Students must present I.D. to lifeguard while using pool area.
6. Please place all cigarettes in ashtrays and all trash in trash containers.
7. I.D.s must be presented to use equipment.
8. Loud or disruptive behavior will not be tolerated.
9. All students are encouraged to shower after activity.
10. Gym shoes must be worn when using the gymnasium. (Street shoes with soft soles are not permissible.)
11. It is recommended that gym clothes be worn when using the gymnasium.

Facilities and Services for the Disabled

The Office of Disability Services is located in the Main Building, Room 181. It is the mission of the office to provide otherwise qualified students with disabilities equal access to all opportunities, programs, and services offered by the College. The College has renovated areas to make its facilities accessible to disabled students. Outdoor and indoor ramps, elevators, and specially designed restroom facilities are available to assist any physically disabled person.

Disabled students who need accommodations must first register with the Office of Disability Services and present appropriate documentation. Additionally, students must present their class schedules to the Counselor for Special Needs before the start of an academic term to determine appropriate accommodations. Services include counseling (personal, academic, transfer, career), test proctoring, note-taking, scribing, interpreting, assistive technology, conflict resolution, and providing audio texts and Braille access.

Lockers

The College has lockers available for use by students. Students must provide their own locks. Cincinnati State Technical and Community College assumes no responsibility for any loss, theft or damage to lockers, locks or contents due to fire, trespassers, etc. Each year, at the end of the Spring (April) Term, students must remove locks and contents from their lockers so that general cleaning and maintenance can be performed.

Parking & Traffic Regulations

The regulations set forth in this section were developed by the Public Safety Department, and approved by the College Administration in accordance with the Ohio Revised Code. Information on Parking Fees is provided on page 19.

The goal is to utilize the available parking resources for the benefit of students, faculty, and visitors to insure that the parking areas are maintained and safe.

Parking Facilities
Students:

The College offers student parking in Lot C (on the corner of Ludlow and Central Parkway), Lot G (on Central Parkway

across from the main entrance), as well as two parking garages. Lot G and the garages require a college-issued parking permit. Lot C is a pay-per-use-lot, however, those students with a parking permit may exit free-of-charge.

Faculty/Staff:

The College offers faculty and staff parking in Lot A (off of College Drive), Lot E (located at the end of "A" wing), and in spots along the front and rear of the school. Additionally, faculty and staff may park in the parking garages or in Lot C. A College-issued parking permit is required to park in these areas.

Visitors:

Visitors to the College should park in Lot A. A limited number of visitor spots are also available near the main entrance.

Motorcycle Parking:

There is motorcycle parking provided at the end of "A" wing near Lot E.

Note: Effective July 1, 2002 College Drive will become a two-way road. Drivers will not be able to access the backside of College Drive from the front of the building. Turn-arounds will be provided at the front and rear of the main building. Access to the College's various parking facilities will be as follows:

Access to Lot A, Lot E, and spaces located in the front and rear of the school are accessible only from College Drive via Central Parkway.

Obtaining A Parking Permit

Students must complete a Vehicle Registration form (forms are available at the Cashier Window or in Room 7). A current license plate registration must be shown. Only one permit will be issued to each student. Deliver the completed form to the proper College office, as designated below, to receive the parking permit.

Day Parking

Permits are limited in number and sold on a first-come, first-served basis. These permits are purchased in-person only at the College Cashier window. Mail-in requests will not be accepted. A new permit must be purchased for each academic term.

Evening Parking (after 4:30 p.m.)

After 4:30 p.m., all parking spaces are open except for spaces specifically designated "Handicapped," "Evening Faculty Parking Area" located in Lot D, "Day Care parking" located in the front of school, and any area with posted "No Parking" signs. These permits are sold by the Cashier's Office. A new permit must be purchased for each academic term.

Handicapped Parking

Parking permits are available allowing use of the Handicap parking spaces. Both a state-issued license plate/plaque and a Cincinnati State parking permit are required. Contact the Public Safety Office (Room 7) for details.

Parking Permit Regulations:

1. Falsifying any information on the registration form will result in revocation of the permit.
2. Issuance of a parking permit does not guarantee an available parking space.
3. If a parking permit is lost, stolen or destroyed, replacement permits are available at a $5 charge.
4. Permits must be displayed per instructions on the permit.
5. Permits are not transferable.
6. Permits cannot be shared.

Visitor Parking

Visitor parking is available in Lot A and in front of the school. These lots can be used by students registering or visiting campus. Parking is available in Lot C; however, a fee is charged for use of this lot. The fee is posted at the entrance to the lot.

Emergencies

If you see a crime being committed on campus or need assistance from Public Safety, call 861-8888, or for Police or Fire Department, call 911.

Emergency phones are located near the parking areas and in the garage. These phones are monitored by the Public Safety Office 24 hours a day.

If you accidentally lock your keys in your car or need a jump start, come to the Public Safety Office in room 7 and a safety officer will assist you.

Violations

Citation Procedure

College parking regulations are enforced by the Department of Public Safety. Any violations can result in a citation being issued. Citations must be paid or appealed within 10 business days from the date of issue. After that time, the ability to appeal will be lost.

Any citation not paid or appealed within 10 business days of issue will double in cost, and the vehicle is subject to impoundment. After 30 days from issue, any unpaid citations will be automatically added to the student's account. Repeated or serious violations could result in loss of campus parking privileges, towing of vehicle and/or impoundment at the owner's expense. Ignorance of College parking policy is not an excuse for operating or parking in violation. Citations are payable at the Cashier's Office or mail to:

Cincinnati State Technical and Community College
ATTN: Cashier's Office
3520 Central Parkway
Cincinnati, OH 45223

The purchase and display of a parking permit does not guarantee the availability of a parking space and does not justify parking against College policy.

Parking Violations

A list of violations is available in room 7.

Citation Appeal Procedure

Any ticket issued by the Public Safety Department can be appealed by filling out the appeal form available in the Campus Safety Office (Room 7). The form must be completed and submitted within ten business days after the ticket was issued. The findings of the Appeal Committee are final.

Liability

Cincinnati State Technical and Community College assumes no responsibility for theft or damage to vehicles parked on College property.

The Public Safety Department is here to help you. If you have any questions, please stop by our office or call us at (513) 569-1558.

Cincinnati State
Catalog 2003 — 2004

Academic Divisions, Degree & Certificate Programs

Business
Technologies Division

Information
Technologies Division

Humanities &
Sciences Divisions

Engineering
Technologies Division

Health
Technologies Division

Academic Divisions & Programs of Study

Cincinnati State Technical and Community College has six academic divisions which offer credit courses: Business Technologies, Engineering Technologies, Health Technologies, Information Technologies, Humanities, and Sciences.

The College offers a variety of educational programs that lead to associate degrees. Full-time students can complete these programs in two years or less; however, many students take longer to complete their degree requirements.

• Technical associate degree programs are intended to prepare students for employment immediately after graduation, although the credits earned in these programs also are transferable to four-year colleges and universities.

The technical associate degrees awarded are Associate of Applied Business (AAB), Associate of Applied Science (AAS), Associate of Technical Study (ATS), and Associate of Individualized Study (AIS). In this catalog, the AAB and AAS degree programs are listed according to the academic division that offers the program. The ATS and AIS programs are listed on page 138.

• University-parallel associate degree programs are intended to prepare students for immediate transfer to a four-year college or university, by providing the courses required for the first two years of a bachelor's degree. Students who complete these degrees are given preferential consideration for admission to a public university in Ohio.

The university-parallel degrees awarded are Associate of Arts (AA) and Associate of Science (AS). These associate degree programs are listed beginning on page 64.

In addition to associate degree programs, the College offers several certificate programs that prepare students for specific occupational situations. These certificate programs usually can be completed in less time than is required to complete an associate degree.

The College also offers courses and services to assist students who may need additional preparation or support in order to be successful in achieving their academic goals.

College-Wide Graduation Requirements

As part of the graduation requirements for the Associate of Applied Business (AAB), Associate of Applied Science (AAS), Associate of Individualized Study (AIS), and Associate of Technical Study (ATS) degrees, a student must complete at least 21 credit hours in general education areas, distributed as follows:

- Communication Skills – 12 credits
  9 credits written communication (department code ENG)
  3 credits oral communication (department code SPE)
- Social Sciences and Humanities – 9 credits, selected from these areas:

Social/Behavioral Sciences, including:

economics	(department code ECO)
geography	(department code GEO)
history	(department code HST)
labor relations	(department code LBR)
political science	(department code POL)
psychology	(department code PSY)
sociology	(department code SOC)

Arts/Humanities, including:

art	(department code ART)
culture studies	(department code CULT)
foreign languages	(department codes FRN, GRM, SPN, SPB)
literature	(department code LIT)
music	(department code MUS)
philosophy	(department code PHI)
theatre	(department code THE)

Students seeking an AAB, AAS, AIS, or ATS degree should consult the curriculum for their program, published elsewhere in this Catalog, to determine how the general education requirements should be met. Individual degree programs may require students to complete program-specified general education courses, or may permit students to choose some general education elective courses. Transfer credit for Social Sciences or Humanities courses completed at another institution, in disciplines not listed above, may be applied toward Cincinnati State graduation requirements, with the program chair's permission.

Students seeking the Associate of Arts or Associate of Science degree must meet the general education requirements described on pages 62-64.

College Orientation Requirement

All Cincinnati State students who are enrolled in degree or certificate programs are required to complete the college orientation course CAR 9002, College Success Strategies. This requirement does not apply to degree-seeking or certificate-seeking students who have already successfully completed 18 or more credits of college-level courses at Cincinnati State (not including Developmental Education courses), or have received transfer credit for equivalent courses.

The course CAR 9002 introduces students to the college experience and to Cincinnati State's expectations and resources for new students. This course earns college credit, but it does not fulfill general studies or core course requirements for degree or certificate programs. Students must complete the orientation course requirement within the first 18 credit hours taken at Cincinnati State.

The Honors Experience

The Cincinnati State Honors Experience supports the institutional goal of serving all aspects of the community by offering enhanced learning opportunities to academically talented, highly motivated students. The Honors Experience curriculum complements the existing degree programs. Students can take Honors sections of many of

the required courses. The Honors Experience strives to establish an intellectual community among students and faculty; to provide challenging coursework, academic enrichment activities, academic honors advising, and opportunities for student involvement. It is open to full and part time admitted degree-seeking students in all divisions of the College who meet the entry criteria listed below. Students are first admitted to a degree program and then to Honors. All Honors students must take HRN 1695 Orientation to Honors as a co/pre-requisite to taking other Honors classes.

Students accepted into the Honors Experience who enter Cincinnati State directly from an area high school are eligible to apply for an Honors Experience scholarship.

For more information, contact Marcha L. Hunley, Honors Chair, 569-1732 or visit the Honors web page at http://cincinnatistate.edu/Academics-Honors.htm

There are several entry criteria possibilities.

A. New student - meet at least one of the following:
   - High school GPA of 3.25 or higher
   - High school rank - top 20%
   - ACT 26 (after April 1996)
   - SAT scores 1140 (after April 1996)
   - And Compass scores of at least - Reading 81 and Writing 70 and Math 58

B. Current student - college GPA of 3.25 after 18 academic credits

C. Transfer student - college GPA of 3.25 after 18 academic credits

And for all students - 2 recommendations from persons familiar with the student's academic potential and performance in a teaching/learning environment.

Developmental Education

Developmental courses are available for students whose placement test scores indicate a need for additional preparation in the areas of reading, writing, and math skills prior to entering their program of study. Typically, students take these courses prior to admission to a degree program. However, in some cases, developmental courses can be taken in conjunction with program-level coursework. Students who need developmental courses are assigned a pre-technical or pre-major advisor. The advisor assists students in selecting appropriate coursework and monitors the progress of each student toward meeting program admission requirements.

Courses in study skills and math anxiety are also available. These courses provide students with important college success skills such as test-taking, time management, using the library, and taking notes. In addition, a developmental computer learning laboratory and tutoring services are provided free of charge when extra help is needed.

Courses with a DE or ESL department code are counted in the total number of attempted hours on student transcripts, but they are not used to calculate a student's Grade Point Average (GPA). Even though these grades do not affect the GPA, they can affect financial aid eligibility. Grades earned in courses with a CAR department code do count toward the student's GPA. Neither DE nor CAR courses can be counted toward graduation.

The following courses are offered every term:

		Credits
DE 0003	Basic Writing 1	4
DE 0004	Basic Writing 2	4
DE 0005	Basic Writing 3	4
DE 0010	College Reading 1	4
DE 0011	College Reading 2	4
DE 0018	Integrated College Prep Skills	8-12
DE 0020	Basic Mathematics 1	4
DE 0024	Basic Algebra 1	4
DE 0025	Basic Algebra 2	4
CAR 9014	College Study Skills	4
CAR 9015	Math Anxiety Study Skills	1
ESL 0060	Reading and Writing 1	4
ESL 0061	Reading and Writing 2	4
ESL 0063	Conversation	2
ESL 0064	Advanced Writing	4

Students may be advised to take other developmental courses not listed above that are offered on varying schedules to meet specific program preparation needs. Course descriptions for these courses are available from advisors.

ESL Courses

International students who successfully complete courses in English as a Second Language (ESL) are considered to have completed developmental writing and reading courses. Additional developmental writing and reading courses are not required.

Developmental Learning Lab

A developmental learning lab is located in Rooms 254 and 258 of the main building. This IBM-based computer laboratory provides students the opportunity to use supplemental instructional materials to sharpen their basic skills while reinforcing their ability to learn independently.

Tutoring

Individual or group tutoring is available to Cincinnati State students in a variety of subject areas and is free of charge. Instruction is provided by qualified faculty or by student tutors who are recommended by faculty. All tutors receive training regarding methods, policies, and practices aimed at promoting independent learning. Students may request a tutor through the Tutoring Center in Room 261. Weekly appointments are scheduled when an appropriate tutor has been located. Drop-in tutoring without an appointment is available for students who need assistance in math and physics.

Distance Education

Because of work schedules, parenting duties, and other responsibilities, some students are unable to attend traditional classes scheduled on campus. To provide a variety of options for these students, Cincinnati State offers a number of courses in a "distance education" format.

Course lectures and instructional materials are made available to students through Web-based instruction; broadcast via public television; CD, video, or audio media; and/or print-based methods. Instructors of distance education courses may require on-campus class meetings at announced times (such as course orientation, midterm

exam, and final exam). All distance education course instructors are available to answer student questions throughout the term.

Distance education courses provide the same quality and content as traditional classroom-based instruction. Students who are interested in the scheduling flexibility provided by these courses should contact the Office of the Dean of the division which offers the course(s).

Extension Sites

Cincinnati State provides college credit and non-credit courses through community learning centers located at Oak Hills High School, Colerain High School, Lower Price Hill School, the Cincinnati State West campus in Harrison, Ohio, and the Workforce Development Center in Evendale.

Whether students earn college credit or seek personal enrichment, courses offered at the extension sites bring Cincinnati State programs to local neighborhoods. Courses offered at the extension sites are listed in the Term Schedule and are identified with a site abbreviation code under the Building (BLDG) column.

Weekend College

The Cincinnati State Weekend College allows students to complete selected associate degree and certificate programs with all classes scheduled on the weekends. The classes take place on Friday evenings, Saturday mornings, Saturday afternoons and Sunday afternoons. The advantages include small class sizes, low tuition and convenient scheduling to assist those who work full-time. Students complete the standard Cincinnati State application, enrollment, and financial aid procedures. Students enrolled in Weekend College programs are identified in College records with "WC" attached to their major code (for example, "ACCT.WC" identifies a Weekend College student enrolled in the Accounting degree program).

In 2003-04 the following associate degree programs will be offered: Accounting, Business Management, Computer Programming, Early Childhood Care and Education, and Marketing Management. Some certificate programs may be offered also.

Programs that are available with a combination of weekend and distance education course work are the degrees Health Information Management, Associate of Arts and Associate of Science, and the Coding Specialist Certificate.

For more information concerning the Weekend College contact the Office of Admissions or the academic division for the programs and certificates.

Courses Available for Credit by Cincinnati State Exam *("Test Out")*

Course Number and Name		Faculty Test Monitor
Business Technologies Division		
Graphic Imaging Technology/ Packaging & Advertising Technology		
1403	Computer Graphics for Print 1	A. Leicht/ K. Freed
1415	Graphic Arts Processes	G. Walton
1419	Survey of Printing Inks	G. Walton
1421	Computer Graphics for Print 2	K. Freed
1422	Graphic Design for Desktop Publishing	K. Freed
1425	Film & Plates for Packaging	A. Leicht
1429	Screen Printing	A. Leicht/ K. Freed
1430	Label & Packaging Presswork 1	A. Leicht
1431	Label & Packaging Presswork 2	A. Leicht
1439	Intro to Offset Presswork	G. Walton
1440	Offset Presswork	G. Walton
1449	Estimating 1	A. Leicht
1450	Estimating 2	G. Walton
1480	Digital Photography & Printing	G. Walton
1481	Computer Graphics for Print 3	K. Freed
1483	Computer Graphics for Print 4	K. Freed
Information Management		
1850	Computerized Business Applications	C. Campbell
1863	Electronic Spreadsheets (Excel)	M. Baskind
3001	Typing 1	C. Campbell
3002	Document Formatting 1	C. Campbell
3007	Keyboarding	C. Campbell
3058	Microsoft Word	K. Mindhardt
Accounting Technologies		
2911	Principles of Accounting 1	L. Schaffeld
Engineering Technologies Division		
Aviation Maintenance Technology		
81xx	All Aviation Maintenance Tech courses	J. Schmid
Biomedical Electronic Engineering Technology, Computer Engineering Technology, Electronics Engineering Technology		
7710	DC Circuits Analysis	L. Morris
7711	DC Circuits Lab	L. Morris
7720	AC Circuits Analysis	L. Morris
7721	AC Circuit Lab	L. Morris
7728	Digital Combinational Logic	S. Yelton
7730	Electronics 1	L. Hollstegge
7738	Digital Sequential Logic	S. Yelton
7739	Intro to Biomedical Instrumentation	S. Yelton
7740	Electronics 2	L. Hollstegge
7742	AutoCAD (Electrical)	M. Carroll
7747	Computer Instrumentation	L. Hollstegge
7748	Microprocessors 1	G. Webster

7749	Biomedical Instrumentation 1	S. Yelton
7750	Electronics 3	L. Hollstegge
7757	Digital Communications	B. McLain
7759	Biomedical Instrumentation 2	S. Yelton
7767	Network Communications	G. Webster
7768	Microprocessors 2	G. Webster

Electro-Mechanical Engineering Technology

7036	Technical Computer Programming	P. Weingartner

Mechanical Engineering Technology

7008	Engineering Drawing 1	M. DeVore
7707	Electrical Applications	K. Stoll

Health Technologies Division

4805	Patient Care Skills	D. Lierl
4002	Informatics in Healthcare	G. Smith
4000	Intro. to Medical Terminology	D. Robinson
4392	Safety and Standard Precautions	J. Gohn
4393	Point of Care Laboratory Testing	J. Gohn
4321	Intro to Clinical Lab Science	J. Gohn
4302	Basic Hematology & Hemostasis	J. Gohn
4322	Physical and Chemical Urinalysis	J. Gohn
4323	Analysis of Urine Sediment & Body Fluids	J. Gohn
4340	Intro. to Phlebotomy Techniques	J. Gohn
4405	Orientation to Health Information	G. Smith
4406	Records Management	G. Smith

Information Technologies Division

5201	Information Technology Concepts	J. Vetter
5204	Program Design 1	S. White
5206	Programming Logic and Basic	S. White
5410	Cross-Platform Computer Systems and Applications	C. Meyer
5453	Web Development 1: HTML	C. Meyer

Humanities Division

English Composition

1001	English Composition 1	C. Rahmes
1002	English Composition 2	C. Rahmes
1009	Business English	C. Rahmes

Psychology

1505	Intro to Psychology 1	R. Craig
1506	Intro to Psychology 2	R. Craig
1508	Psychology: Child Development	R. Craig
1509	Psychology: Adult Development	R. Craig
1510	Psychology: Adolescent Development	R. Craig

Economics

1512	Microeconomics	R. Craig
1513	Macroeconomics	R. Craig

Sociology and History

1521	Introduction to Sociology	R. Craig
1523	Sociology: Major Institutions	R. Craig
1525	Changing Roles for Men & Women	R. Craig
1526	Sociology: Marriage and the Family	R. Craig
1527	Technology & Ethical Decisions	R. Craig
1535	Introduction to Labor/ Management Relations	R. Craig
1539	Introduction to Employment and Workplace Law 1	R. Craig

Transfer Module

The State of Ohio has developed a statewide policy to facilitate movement of students and transfer credits from one Ohio public college or university to another. (See policy statement on page 36-37.)

The Cincinnati State Transfer Module consists of 55 to 59 quarter credit hours that transfer to any public Ohio two- or four-year college. The courses listed below constitute the Transfer Module.

Categories contained in the Transfer Module are:

- English Composition
- Mathematics
- Arts/Humanities
- Social/Behavioral Sciences
- Biological/Physical Sciences

Students earning the Transfer Module select courses from these categories. The Transfer Module requirements are included in the degree requirements for students earning the Associate of Arts (AA) or Associate of Science (AS); however, students earning the AA or AS degree also are required to complete additional courses selected from the Transfer Module categories. The AA/AS requirements are described on pages 64-68.

Students completing the Transfer Module should consult with their academic advisor to assure that courses selected are appropriate for the institution and the degree program that the student plans to pursue after completing studies at Cincinnati State.

ENGLISH COMPOSITION		**9 Credits**
Select one 3-course sequence.		(credits)
ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1003	English Composition 3	3
ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1010	Technical Writing 1	3
or		
ENG 1011	Business Communications	3
ENG 1001	English Composition 1	3
ENG 1010	Technical Writing 1	3
ENG 1015	Technical Writing 2	3

MATHEMATICS		**4 Credits Minimum**
Note: Students must complete MAT 1124, MAT 1151, or MAT 1191 before enrolling in any of the classes listed.		
*MAT 1111	Elementary Statistics 1	3
*MAT 1112	Elementary Statistics 2	3
* Must take both classes.		
MAT 1113	Statistics 3	3
MAT 1128	Business Calculus	5
MAT 1152	Pre-Calculus	5
MAT 1154	Calculus 1	5
MAT 1155	Calculus 2	5

MAT 1156	Calculus 3	5
MAT 1173	Algebra and Trigonometry 2 with Statistics	4
MAT 1179	Introduction to Applied Statistics	4
MAT 1192	Algebra and Trigonometry 2	4
MAT 1193	Analytic Geometry and Calculus 1	4
MAT 1194	Analytic Geometry and Calculus 2	4
MAT 1195	Analytic Geometry and Calculus 3	4

SOCIAL/BEHAVIORAL SCIENCES **15 Credits**

Select 5 courses from at least two areas.

Economics

ECO 1512	Microeconomics	3
ECO 1513	Macroeconomics	3
ECO 1514	International Aspects of Economics	3

Geography

GEO 1551	World Regional Geography 1	3
GEO 1552	Cultural Geography	3
GEO 1553	World Regional Geography 2	3

History

HST 1561	History of World Civilization 1	3
HST 1562	History of World Civilization 2	3
HST 1563	History of World Civilization 3	3
HST 1568	American History 1	3
HST 1569	American History 2	3
HST 1570	American History 3	3
HST 1575	History of Africa	3
HST 1576	African-American History 1	3
HST 1577	African-American History 2	3
HST 1578	African-American History 3	3

Labor Relations

LBR 1535	Intro. to Labor/Mgmt. Relations	3

Political Science

POL 1531	Introduction to American Govt. 1	3
POL 1532	Introduction to American Govt. 2	3
POL 1533	Intro. to Comparative Governments	3

Psychology

PSY 1505	Introduction to Psychology 1	3
PSY 1506	Introduction to Psychology 2	3
PSY 1507	Abnormal Psychology	3
PSY 1508	Child Psychology	3
PSY 1509	Adult Psychology	3
PSY 1510	Adolescent Psychology	3
PSY 1511	Social Psychology	3

Sociology

SOC 1521	Introduction to Sociology 1	3
SOC 1523	Introduction to Sociology 2	3
SOC 1525	Changing Roles for Men & Women	3
SOC 1526	Sociology: Marriage & the Family	3

ARTS/HUMANITIES **15 Credits**

Select 5 courses from at least two areas.

Art

ART 1660	Introduction to Art	3
ART 1662	Art of the Ancient World	3
ART 1663	Art of Medieval & Ren. World	3
ART 1664	Art of Modern World	3

Culture Studies

CULT 1645	Technology and Culture	3
CULT 1646	Mass Media and Culture	3
CULT 1647	Work and Society	3
CULT 1680	Introduction to Film Studies 1	3
CULT 1681	Introduction to Film Studies 2	3

Literature and Composition

LIT 1040	Survey of American Literature 1	3
LIT 1041	Survey of American Literature 2	3
LIT 1042	Survey of American Literature 3	3
LIT 1045	Survey of British Literature 1	3
LIT 1046	Survey of British Literature 2	3
LIT 1047	Survey of British Literature 3	3
LIT 1048	Introduction to Shakespeare	3
LIT 1049	Introduction to World Literature	3
LIT 1050	The Short Story	3
LIT 1051	Drama	3
LIT 1052	Poetry	3
LIT 1053	The Novel	3
LIT 1054	Children's Literature	3
LIT 1055	Science Fiction	3
LIT 1056	Women Writers	3
LIT 1057	African-American Writers	3
LIT 1058	Introduction to Literature	3

Music

MUS 1665	Introduction to Music 1	3
MUS 1666	Introduction to Music 2	3
MUS 1667	Introduction to Music 3	3

Philosophy

PHI 1620	Critical Thinking	3
PHI 1621	Introduction to Philosophy	3
PHI 1625	Ethics	3
PHI 1630	Comparative World Religions: Asia	3
PHI 1631	Comparative World Religions: Middle East	3

Theatre

THE 1670	Theatre Appreciation	3
THE 1671	History of Theatre	3

BIOLOGICAL/PHYSICAL SCIENCES **12 Credits**

Biology

BIO 4071	Concepts of Biology 1	4
BIO 4072	Concepts of Biology 2	4
BIO 4073	Concepts of Biology 3	4
BIO 4081	Biology 1	5
BIO 4082	Biology 2	5
BIO 4083	Biology 3	5
BIO 4009	General Microbiology	4
BIO 4014	Anatomy and Physiology 1	4
BIO 4015	Anatomy and Physiology 2	4
BIO 4016	Anatomy and Physiology 3	4

Chemistry

CHE 2231	Fundamentals of General Chemistry	4
CHE 2232	Fundamentals of Organic Chemistry	4
CHE 2233	Fundamentals of Biochemistry	4
CHE 2251	Freshman Chemistry 1	5
CHE 2252	Freshman Chemistry 2	5
CHE 2253	Freshman Chemistry 3	5

CHE 2281	Organic Chemistry 1	3
CHE 2282	Organic Chemistry 2	3
CHE 2283	Organic Chemistry 3	3
CHE 2284	Organic Chemistry 1 Lab	2
CHE 2285	Organic Chemistry 2 Lab	2
CHE 2286	Organic Chemistry 3 Lab	2
CMT 6611	Chemistry 1/Quant. Analysis	6
CMT 6621	Chemistry 2/Quant. Analysis	6
CMT 6631	Chemistry 3/Quant. Analysis	6

Environmental Science

EVS 7621	Environmental Science 1	4
EVS 7622	Environmental Science 2	4
EVS 7623	Environmental Geology	4

Physical Science

PSC 2264	Astronomy 1 - Solar System	4
PSC 2265	Astronomy 2 - The Universe	4
PSC 2267	Energy	4
PSC 2269	Hydrology and Meteorology	4
PSC 2277	Geology	4

Physics

PHY 2291	Physics 1	4
PHY 2292	Physics 2	4
PHY 2293	Physics 3	4
PHY 2294	Modern Physics	4
PHY 2295	Physics 1 (Calculus Based)	5
PHY 2296	Physics 2 (Calculus Based)	5
PHY 2297	Physics 3 (Calculus Based)	5

Associate of Arts and Associate of Science Degrees

Program Chair - Joyce Rimlinger
Advisor – Nancy King, Julie McLaughlin
Co-op Coordinator - Linda Romero

Cincinnati State offers the Associate of Arts and Associate of Science degrees, which are often called "university parallel degrees" or "transfer degrees," because these degrees provide the first two years of a Bachelor's degree program. The primary purpose of the Associate of Arts and Associate of Science degrees is to prepare students for transfer to a four-year college or university. Students who earn these degrees and have an overall grade point average of 2.0 or better are given preferential consideration for admission to Ohio public universities.

To earn an Associate of Arts or Associate of Science degree at Cincinnati State students must complete at least 102 credit hours of courses from these areas:

- English Composition
- Mathematics
- Biological/Physical Sciences
- Social/Behavioral Sciences
- Arts/Humanities
- Computer Literacy
- Cooperative Education/Career Exploration

The Associate of Arts degree is for students who desire to pursue a Bachelor's degree by completing the first two years at Cincinnati State in program areas such as:

- Architecture
- Communications
- Criminal Justice
- Education
- English
- Fine Arts
- History
- International Affairs
- Philosophy
- Political Science
- Pre-Law
- Psychology
- Social Work
- Sociology
- Spanish
- Theatre
- Urban Planning
- Urban Studies

The Associate of Science degree is for students who desire to pursue a Bachelor's degree by completing the first two years at Cincinnati State in program areas such as:

- Biology
- Chemistry
- Mathematics
- Meteorology
- Physics
- Pre-Dentistry
- Pre-Medicine
- Pre-Mortuary Science
- Pre-Optometry
- Pre-Pharmacy
- Pre-Veterinary Medicine
- Zoology

Students who seek the Associate of Arts or Associate of Science degree need to be familiar with the requirements for the Bachelor's degree at the institution where they intend to complete their studies. Students work with a Cincinnati State faculty advisor to develop a planned curriculum of required and elective courses. This plan should allow a full-time student to transfer to the desired four-year institution at junior status after two years or less. Students who need additional preparation or attend part-time may take longer than two years to complete their degree requirements.

Associate of Arts Degree Requirements

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

English Composition:	9 Credits – select one sequence
Mathematics:	4 Credits – select one or two courses

Oral Communications:	3 Credits – select one course
Social/Behavioral Sciences:	15 Credits – select five Transfer Module courses from at least two areas
Arts/Humanities:	15 Credits – select five Transfer Module courses from at least two areas
Distributive Credits:	12 Credits – select four courses from Social/Behavioral Sciences or Arts/Humanities
Biological/ Physical Sciences:	12 Credits
Computer Literacy:	6 Credits
Cooperative Education:	7 Credits – complete HUM 9801 and consult the co-op coordinator to select additional courses from HUM 9802, HUM 9803, HUM 9804, HUM 9805, and HUM 9806.
Electives:	19 Credits – In consultation with their advisor, students select courses that meet general and programmatic requirements of the institution where they plan to complete a Bachelor's degree.

Total – 102 credit hours minimum

Associate of Science Degree Requirements

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

English Composition:	9 Credits – select one sequence
Mathematics:	8 Credits – select two or three courses
Oral Communications:	3 Credits – select one course
Social/Behavioral Sciences:	15 Credits – select five Transfer Module courses from at least two areas
Arts/Humanities:	15 Credits – select five Transfer Module courses from at least two areas
Biological/ Physical Sciences:	24 Credits
Computer Literacy:	6 Credits
Cooperative Education:	7 Credits – complete HUM 9801 and consult the co-op coordinator to select additional courses from HUM 9802, HUM 9803, HUM 9804, HUM 9805, and HUM 9806
Electives:	15 Credits – In consultation with their advisor, students select courses that meet general and programmatic requirements of the institution where they plan to complete a Bachelor's degree.

Total – 102 credit hours minimum

Courses that meet Associate of Arts and Associate of Science Requirements

Students in the Associate of Arts and Associate of Science programs should complete the transfer module as part of their degree.

ENGLISH COMPOSITION		**9 Credits**
Select one 3-course sequence.		(credits)
ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1003	English Composition 3	3
ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1010		
or	Technical Writing 1	3
ENG 1011	Business Communications	3
ENG 1001	English Composition 1	3
ENG 1010	Technical Writing 1	3
ENG 1015	Technical Writing 2	3

MATHEMATICS		**4 Credits-AA**	**8 Credits-AS**
Note: Students must complete MAT 1124, MAT 1151, or MAT 1191 before enrolling in any of the classes listed.			
*MAT 1111	Elementary Statistics 1		3
*MAT 1112	Elementary Statistics 2		3
* Must take both classes.			
MAT 1128	Business Calculus		5
MAT 1152	Pre-Calculus		5
MAT 1154	Calculus 1		5
MAT 1155	Calculus 2		5
MAT 1156	Calculus 3		5
MAT 1173	Algebra and Trigonometry 2 with Statistics		4
MAT 1179	Introduction to Applied Statistics		4
MAT 1192	Algebra and Trigonometry 2		4
MAT 1193	Analytic Geometry and Calculus 1		4
MAT 1194	Analytic Geometry and Calculus 2		4
MAT 1195	Analytic Geometry and Calculus 3		4

ORAL COMMUNICATIONS		**3 Credits**
SPE 1020	Public Speaking	3
SPE 1022	Professional Presentations	3

SPE 1024	Group Dynamics	3
SPE 1027	Team Building & Group Facilitation	3

SOCIAL/BEHAVIORAL SCIENCES **15 Credits**

Courses listed below are Transfer Module courses. Select 5 courses from at least two areas.

Economics

ECO 1512	Microeconomics	3
ECO 1513	Macroeconomics	3
ECO 1514	International Aspects of Economics	3

Geography

GEO 1551	World Regional Geography 1	3
GEO 1552	Cultural Geography	3
GEO 1553	World Regional Geography 2	3

History

HST 1561	History of World Civilization 1	3
HST 1562	History of World Civilization 2	3
HST 1563	History of World Civilization 3	3
HST 1568	American History 1	3
HST 1569	American History 2	3
HST 1570	American History 3	3
HST 1575	History of Africa	3
HST 1576	African-American History 1	3
HST 1577	African-American History 2	3
HST 1578	African-American History 3	3

Labor Relations

LBR 1535	Intro. to Labor/Mgmt Relations	3

Political Science

POL 1531	Intro. to American Govt. 1	3
POL 1532	Intro. to American Govt. 2	3
POL 1533	Intro. to Comparative Govts.	3

Psychology

PSY 1505	Introduction to Psychology 1	3
PSY 1506	Introduction to Psychology 2	3
PSY 1507	Abnormal Psychology	3
PSY 1508	Child Psychology	3
PSY 1509	Adult Psychology	3
PSY 1510	Adolescent Psychology	3
PSY 1511	Social Psychology	3

Sociology

SOC 1521	Introduction to Sociology 1	3
SOC 1523	Introduction to Sociology 2	3
SOC 1525	Changing Roles for Men & Women	3
SOC 1526	Sociology: Marriage & the Family	3

Courses listed below are not transfer module courses, but may be used to fulfill the Distributive Credit (AA) or Elective Credit (AA & AS) requirement.

Criminal Justice

CRJ 1250	Introduction to Criminal Justice	3
CRJ 1251	Intro. to Policing & Law Enforce.	3
CRJ 1252	Introduction to Corrections	3
CRJ 1253	Criminal Courts & Procedures 1	3
CRJ 1254	Criminal Courts & Procedures 2	3
CRJ 1255	Criminal Law	3
CRJ 1256	Criminal Investigation Skills	3
CRJ 1257	Juvenile Delinquency	3
CRJ 1258	Workshops in Criminal Justice	3
CRJ 1259	Special Studies in Criminal Justice	3

Labor Relations

LBR 1539	Intro. to Employment & Workplace Law 1	3
LBR 1540	Intro. to Employment & Workplace Law 2	3

Social Sciences

SSC 1598	Topics in Social Sciences	3

Sociology

SOC 1270	Introduction to Social Work	3
SOC 1271	Social Welfare and Policies	3
SOC 1272	Social Problems	3
SOC 1273	Drugs in Society	3

ARTS/HUMANITIES **15 Credits**

Courses listed below are Transfer Module courses. Select 5 courses from at least two areas.

Art

ART 1660	Introduction to Art	3
ART 1662	Art of the Ancient World	3
ART 1663	Art of Medieval & Ren. World	3
ART 1664	Art of Modern World	3

Culture Studies

CULT 1645	Technology and Culture	3
CULT 1646	Mass Media and Culture	3
CULT 1647	Work and Society	3
CULT 1680	Introduction to Film Studies 1	3
CULT 1681	Introduction to Film Studies 2	3

Literature and Composition

LIT 1040	Survey of American Literature 1	3
LIT 1041	Survey of American Literature 2	3
LIT 1042	Survey of American Literature 3	3
LIT 1045	Survey of British Literature 1	3
LIT 1046	Survey of British Literature 2	3
LIT 1047	Survey of British Literature 3	3
LIT 1048	Introduction to Shakespeare	3
LIT 1049	Introduction to World Literature	3
LIT 1050	The Short Story	3
LIT 1051	Drama	3
LIT 1052	Poetry	3
LIT 1053	The Novel	3
LIT 1054	Children's Literature	3
LIT 1055	Science Fiction	3
LIT 1056	Women Writers	3
LIT 1057	African-American Writers	3
LIT 1058	Introduction to Literature	3

Music

MUS 1665	Introduction to Music 1	3
MUS 1666	Introduction to Music 2	3
MUS 1667	Introduction to Music 3	3

Philosophy

PHI 1620	Critical Thinking	3
PHI 1621	Introduction to Philosophy	3
PHI 1625	Ethics	3

PHI 1630	Comparative World Religions: Asia	3
PHI 1631	Comparative World Religions: Middle East	3

Theatre

THE 1670	Theatre Appreciation	3
THE 1671	History of Theatre	3

Courses listed below are not transfer module courses, but may be used to fulfill the Distributive Credit (AA) or Elective Credit (AA & AS) requirement.

Culture Studies

CULT 1602	Issues in Human Diversity	3

Foreign Languages

FRN 1060	Elementary French 1	4
FRN 1061	Elementary French 2	4
FRN 1062	Elementary French 3	4
FRN 1063	Intermediate French 1	4
FRN 1064	Intermediate French 2	4
FRN 1065	Intermediate French 3	4
GRM 1070	Elementary German 1	4
GRM 1071	Elementary German 2	4
GRM 1072	Elementary German 3	4
GRM 1073	Intermediate German 1	4
GRM 1074	Intermediate German 2	4
GRM 1075	Intermediate German 3	4
SPN 1076	Spanish Conversation & Composition	2
SPN 1080	Elementary Spanish 1	4
SPN 1081	Elementary Spanish 2	4
SPN 1082	Elementary Spanish 3	4
SPN 1083	Intermediate Spanish 1	4
SPN 1084	Intermediate Spanish 2	4
SPN 1085	Intermediate Spanish 3	4
ITP 1086*	Beginning ASL 1	4
ITP 1087*	Beginning ASL 2	4
ITP 1088*	Beginning ASL 3	4
ITP 1091*	Intermediate ASL 1	4
ITP 1092*	Intermediate ASL 2	4
ITP 1093*	Intermediate ASL 3	4
ITP 1094*	Advanced ASL 1	4
ITP 1095*	Advanced ASL 2	4
ITP 1096*	Advanced ASL 3	4

*Some schools do not accept American Sign Language as a foreign language. Check with your advisor before starting the American Sign Language sequence.

Humanities

HUM 1698	Special Topics in Humanities	3
HUM 1699	Special Problems in Humanities	3

Literature and Composition

ENG 1036	Creative Writing: Poetry	3
ENG 1037	Creative Writing: Short Fiction	3
ENG 1038	Creative Writing: Non Fiction	3
ENG 1039	Creative Writing: Writing for Children	3
LIT 1059	Topics in Literature	3

Journalism

JOU 1031	News Writing 1	3
JOU 1032	News Writing 2	3
JOU 1033	Journalism Practicum	1

BIOLOGICAL/PHYSICAL SCIENCES

12 Credits—AA 24 Credits--AS

Biology

BIO 4071	Concepts of Biology 1	4
BIO 4072	Concepts of Biology 2	4
BIO 4073	Concepts of Biology 3	4
BIO 4081	Biology 1	5
BIO 4082	Biology 2	5
BIO 4083	Biology 3	5
BIO 4009	General Microbiology	4
BIO 4014	Anatomy and Physiology 1	4
BIO 4015	Anatomy and Physiology 2	4
BIO 4016	Anatomy and Physiology 3	4

Chemistry

CHE 2231	Fundamentals of General Chemistry	4
CHE 2232	Fundamentals of Organic Chemistry	4
CHE 2233	Fundamentals of Biochemistry	4
CHE 2251	Freshman Chemistry 1	5
CHE 2252	Freshman Chemistry 2	5
CHE 2253	Freshman Chemistry 3	5
CHE 2281	Organic Chemistry 1	3
CHE 2282	Organic Chemistry 2	3
CHE 2283	Organic Chemistry 3	3
CHE 2284	Organic Chemistry 1 Lab	2
CHE 2285	Organic Chemistry 2 Lab	2
CHE 2286	Organic Chemistry 3 Lab	2
CMT 6611	Chemistry 1 & Quant. Analysis	6
CMT 6621	Chemistry 2 & Quant. Analysis	6
CMT 6631	Chemistry 3 & Quant. Analysis	6

Environmental Science

EVS 7621	Environmental Science 1	4
EVS 7622	Environmental Science 2	4
EVS 7623	Environmental Geology	4

Physical Science

PSC 2264	Astronomy 1 - Solar System	4
PSC 2265	Astronomy 2 - The Universe	4
PSC 2267	Energy	4
PSC 2269	Hydrology and Meteorology	4
PSC 2277	Geology	4

Physics

PHY 2291	Physics 1	4
PHY 2292	Physics 2	4
PHY 2293	Physics 3	4
PHY 2294	Modern Physics	4
PHY 2295	Physics 1 (Calculus Based)	5
PHY 2296	Physics 2 (Calculus Based)	5
PHY 2297	Physics 3 (Calculus Based)	5

COMPUTER LITERACY **6 Credits**

OT 1850	Computerized Business Applications	4
OT 1863	Electronic Spreadsheets (Excel)	3
OT 3058	MS Word for Windows	3
OT 3059	WordPerfect for Windows	3
OT 3062	Database/Spreadsheet Applications	3
OT 3095	Intro: Computers, Windows, Internet	3
OT 3096	Internet/Office Communications	3

GC 1422	Desktop Publishing (PC PageMaker)	3
IT 5102	Introduction to Macintosh	3
IT 5103	Macintosh Applications - Excel/Filemaker	3
IT 5116	Macintosh Applications - Adobe PageMaker	3
IT 5410	Cross Platform Computing	3
IT 5456	Desktop Publishing: QuarkXPress	3
IT 5206	Programming Logic and BASIC	6
IT 5231	Operating Sys: DOS/Windows 1	3
IT 5281	Visual C++1	4
IT 5282	Visual C++2	4
IT 5291	Visual BASIC 1	4
IT 5453	Web Development 1: HTML	3

COOPERATIVE EDUCATION **7 Credits**

The Associate of Arts and Associate of Science programs share the College's commitment to cooperative education as an integral part of the curriculum. Cooperative education allows students to apply the concepts learned in the classroom with practical, hands-on experience in real work environments.

In order to complete the AA or AS degree at Cincinnati State, students must earn no fewer than seven credits in work exploration/experience, selected from the courses described below.

All students seeking the AA or AS degree must successfully complete HUM 9801 - Career Exploration Seminar. Students should enroll in this course in their second or third term.

All students seeking the AA or AS degree must successfully complete two additional work experience classes, selected from courses HUM 9802, HUM 9803, HUM 9804, HUM 9805, or HUM 9806. Other classes may not be substituted for the work experience courses without prior approval of the program chair and the cooperative education coordinator. However, students with prior work experience that is related to their post-baccalaureate career goals may be eligible to receive credit through the standard College procedures for granting Advanced Standing Credit.

HUM 9801	Career Exploration Seminar	3
HUM 9802	Internship - Humanities & Sciences	2
HUM 9803	Cooperative Employment - Humanities & Sciences	2
HUM 9804	Parallel Cooperative Employment - Humanities & Sciences	1
HUM 9805	Career Education Project - Humanities & Sciences	2
HUM 9806	Career Education Project - Humanities & Sciences	4

ELECTIVES **19 Credits--AA 15 Credits--AS**

Students should select electives based on knowledge of general and programmatic requirements of the institution where they plan to earn a Bachelor's degree. Any course in the list of requirements above (except courses in the Computer Literacy and Cooperative Education categories) may be used as an elective. Students may use other courses as electives with the prior permission of the advisor.

Business Technologies Division

Main Phone Number: (513) 569-1620

Cincinnati State meets the need for specialized business training with 20 Associate of Applied Business degree programs, 14 certificate programs, an Associate of Arts in Pre-Business Administration, and two Associate of Applied Science degree programs. Organized job experience through cooperative education work assignments with leading business firms is a key phase of the learning program. Business courses, combined with job-related activities during ten-week co-op terms, provide students with both business skills and business experience. Upon completion of the two-year degree program in business, students earn an Associate's degree.

Credits earned in the degree programs are transferable. Cincinnati State has established articulation agreements with the College of Mount St. Joseph, Thomas More College, Xavier University, Northern Kentucky University, the University of Cincinnati, Miami University, Rochester Institute of Technology, the Union Institute, and Wilmington College.

Entrance Competencies

In order to ensure a high degree of success in academic studies in business technologies, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education - Working for Success Experience

Cooperative education allows students to apply the concepts learned in the classroom to the business world and to gain practical experience that enhances employment after graduation. Therefore, in the Business Technologies Division all students must earn 8 to 10 credit hours in cooperative education.

The Business Technologies Division's Working for Success Experience, a series of practice-oriented courses, ensures students' success in preparing for and achieving their career goals. The foundation for the program is set with course CAR 9002 – College Success Strategies, the first course in the series. This course prepares students for their college experiences and provides a map for a successful transition to college life. College Success Strategies sets the stage for the classroom, lab, and cooperative education experiences students have at Cincinnati State.

The Working for Success Experience continues with BT 9200 – Professional Practices. This course prepares students for their cooperative education experience. Through Professional Practices, students learn fundamental skills required to gain employment such as goal setting, career research, resume writing, interviewing, and negotiating.

Additionally, students gain job success competencies ranging from business etiquette to business ethics. Upon completion of this course, students are ready for the practical experience provided by cooperative education.

The primary element in the practice-oriented education provided by the Working for Success Experience is cooperative education. Cincinnati State's cooperative education program reinforces the concept that learning occurs best with the integration of classroom studies and related work experience. Through mandatory co-op experiences, students complete several terms of meaningful employment that is structured, managed, and evaluated in a systematic way to help students realize their career goals. By completing learning modules, students acquire additional skill sets necessary to sustain employment. In exceptional situations students, in consultation with their program coordinators, may fulfill the co-op requirement through registration in Co-op Seminar course(s) BUS 9230, BUS 9231, and BUS 9232. Additional guidelines for meeting the co-op requirement are outlined below.

Once students complete co-op requirements, they enroll in the third course of the Working for Success Experience, BUS 9233 – Business Competencies. This capstone course ties the practice-oriented sequence together with the experiences of the preceding courses. Students gain practical experience as they complete educational units that build the competencies needed to advance in their chosen field of work. The Business Competencies course includes an element of mandatory community service. Part of the enrichment education provides is the realization that with education and career come a responsibility to the community. The capstone course helps students gain that perspective and form the foundation for good citizenship.

The Cooperative Education Requirement

1. Students can meet the Business Technologies Division cooperative education requirement in these three ways:
   - Complete the traditional cooperative education work experiences.
   - Fulfill the requirements by applying for advanced standing.
   - Complete the Co-op Seminar classes satisfactorily; this requires the coordinator's prior approval.

2. To be eligible to participate in the cooperative education program, students must meet the following requirements:
   - Matriculate as a student.
   - Maintain a G.P.A. of 2.0 or higher, and complete any required program technical courses. (See co-op coordinator for list.)
   - Attend a co-op orientation session, complete an application to co-op packet, and return it to the program co-op coordinator before consideration for placement.
   - Agree to follow the curriculum and meet all program requirements as specified.
   - Agree not to seek full-time employment with a co-op employer until graduation.
   - Understand that co-op students are not eligible for unemployment benefits for co-op positions, and as such, agree not to apply for them.
   - Gain prior coordinator approval if it is necessary to drop out of co-op employment and complete the remainder of the co-op requirements by taking Co-op Seminar courses. If students leave co-op employment, they are eligible to re-enter only with approval of the co-op coordinator.

3. Students may complete the required co-op experience on either an alternating or parallel track depending on the availability of positions. Students must meet with their co-op coordinator as soon as possible after admission to their academic program to complete their co-op plan.

4. The Business Technologies Division assists students in completing their cooperative education work experiences. Although the Division's co-op coordinators are generally successful in finding interview opportunities for co-op students, there is no employment guarantee. If employment is unavailable, the co-op coordinator works with students on alternatives to fulfill the cooperative education requirement.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

Associate's degree programs in the Business Technologies Division contain in their curriculums most of the required courses for the Cincinnati State Transfer Module. Students who wish to complete the transfer module should schedule the additional courses at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that the Cincinnati State Associate of Applied Business degree combined with a transfer module showing grades of "C" or higher receives preferential consideration at the receiving institution.

Pre-Business Administration Transfer Degree

Program Chair - Linda Schaffeld
Co-op Coordinator - Kendra Vonderhaar

The primary objective of the Pre-Business Administration degree program is to provide for transfer to a four-year institution rather than preparation for a job. The program provides students with basic coursework that enables them to transfer to baccalaureate programs in business administration, accounting, finance, management, or marketing. Students complete general education requirements and selected business core courses to prepare for work in their major at the senior institution. The Pre-Business Administration Transfer curriculum leads to the Associate of Arts degree, and meets the transfer module requirements for transfer to Ohio public colleges and universities.

Students who plan to transfer to a baccalaureate program in business must be aware of significant differences in course requirements and the application of transfer credits at the various institutions in the region. They should work closely with their academic advisors from Cincinnati State and with the transfer coordinator of the receiving institution to tailor their academic program for transfer to another institution.

Accounting Technology (ACCT)

Program Chair - Michele Geers
Co-op Coordinator - Kendra Vonderhaar
Advisor - Yvonne Baker, Eric Roth

The Accounting Technology program provides students with an understanding of accounting skills and knowledge of business fundamentals. Students enhance their skills through cooperative education with small and large CPA firms; manufacturing, merchandising, and service companies; financial institutions; not-for-profit organizations; and government agencies. Students learn the fundamentals of financial, managerial, and tax accounting and gain a background in communication skills and management philosophy. Students earn an Associate of Applied Business degree upon completing the program. Graduates are prepared to perform accounting duties related to the preparation of financial statements; analyze data from a corporation's annual report; prepare income tax returns for individuals, corporations, and partnerships; and assist in management decisions regarding product costing, cost-volume-profit analysis, and cash flows. Graduates may work as staff accountants with various types of organizations.

ACCOUNTING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective	3	0	3
OT	185X	Computer Elective	3	2	4
ACC	2911	Principles of Accounting 1	3	2	4
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
			16	4	18
SECOND TERM					
LAW	1823	Business Law 1	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Math Elective	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2912	Principles of Accounting 2	4	0	4
ACC	2917	Federal Taxation 1	3	0	3
			15	2	16
FOURTH TERM					
ACC	9220	Cooperative Education Accounting	1	40	2
	XXXX	Business Elective	3	0	3
			4	40	5
FIFTH TERM					
MAT	11XX	Math Elective	3	0	3
OT	1864	Advanced Electronic Spreadsheets (Excel)	2	2	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2913	Principles of Accounting 3	4	0	4
ACC	2914	Cost Accounting 1	3	0	3
ACC	2918	Federal Taxation 2	3	0	3
			18	2	19
SIXTH TERM					
MGT	29XX	Management Elective	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
ACC	2919	Intermediate Accounting 1	3	0	3
ACC	2921	Managerial Accounting 1	3	0	3
ACC	2922	Computerized Accounting Applications	2	2	3
FIN	2960	Principles of Finance 1	3	0	3
			14	2	15
EIGHTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
NINTH TERM					
SPE	1020	Public Speaking	3	0	3
ECO	1512	Microeconomics	3	0	3
ACC	2920	Intermediate Accounting 2	3	0	3
BUS	9233	Business Competencies	2	0	2
ACC	XXXX	Accounting Elective	3	0	3
ACC	XXXX	Accounting Elective	3	0	3
			17	0	17
TENTH TERM					
ECO	1513	Macroeconomics	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
					110

Math Elective: Minimum of 9 hours from the following:
Business Math: MAT 1121, MAT 1122, MAT 1123
Algebra: MAT 1151 (preferred) or MAT 1124
Statistics: MAT 1111 and MAT 1112, MAT 1113 or MAT 1179
Calculus: MAT 1152 and MAT 1128
Computer Elective: OT 1850 or OT 1852
English Elective: ENG 1003, ENG 1010
Business Elective: LAW 1824, FIN 2961, BUS 2973, FIN 2976, MGT 1804, MGT 1832, OT 3007, or MGT 2977 and 2978 and 2979 (Must take all three 1 credit hour courses.)
Management Elective: MGT 2967 (preferred) or MGT 2965 and MGT 2966
Accounting Elective: ACC 1851, ACC 2915, ACC 2941, ACC 2942, ACC 2943, ACC 2945, ACC 2946, ACC 2947 (Must take all three 1 credit hour courses.)

Accounting Certificate (ACCTC)

Advisor – Michele Geers

The Accounting Certificate program is for students who have already earned a degree in a different discipline and who want to sit for the CPA exam or who may need accounting courses for job promotion. The curriculum concentrates on accounting courses and has no cooperative education requirement. This program is best suited for students currently employed in the accounting field.

ACCOUNTING CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
ACC	2911	Principles of Accounting 1	3	2	4
ACC	2912	Principles of Accounting 2	4	0	4
ACC	2913	Principles of Accounting 3	4	0	4
ACC	2914	Cost Accounting 1	3	0	3
ACC	2917	Federal Taxation 1	3	0	3
ACC	2918	Federal Taxation 2	3	0	3
ACC	2919	Intermediate Accounting 1	3	0	3

ACC	2920	Intermediate Accounting 2	3	0	3
ACC	2921	Managerial Accounting 1	3	0	3
ACC	2922	Computerized Accounting Applications	2	2	3
ACC	XXXX	Accounting Elective	3	0	3
ACC	XXXX	Accounting Elective	3	0	3
			37	4	39
					39

Accounting Elective: ACC 1851, ACC 2915, ACC 2941, ACC 2942, ACC 2943

Automotive Service Management Technology (ASM)

Program Chair - Keith Mains
Co-op Coordinator -
Advisor - John Hatton

The Automotive Service Management Technology program prepares students for entry-level jobs in the technical and/or management areas of the automotive service field. Course materials encompass all Automotive Service Excellence (ASE) certification areas. Hands-on diagnosis and repair of "live" vehicles enhances students' diagnostic skills and builds a solid foundation for a successful and rewarding career. The program includes six terms of classroom/lab study and four terms of cooperative education. Graduates earn an Associate of Applied Business degree and may seek employment as Automotive Technicians, Technician Helpers, Assistant Managers, or Specialized Technicians.

AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1161	Applied Algebra	3	2	4
ASM	2520	Introduction to Automotive Technology	2	3	3
ASM	2525	Engine Fundamentals 1	2	3	3
ASM	2540	Automotive Electrical Diagnosis 1	2	3	3
BT	9200	Professional Practices	1	0	1
			13	11	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1162	Applied Geometry & Trigonometry	3	2	4
OT	185X	Computer Elective	3	2	4
ASM	2530	Engine Performance 1	2	3	3
ASM	2535	Automatic Transmission 1	2	3	3
			13	10	17
THIRD TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
FOURTH TERM					
SPE	102X	Speech Elective	3	0	3
PHY	2220	Automotive Physics	2	3	3
ASM	2526	Engine Fundamentals 2	2	3	3
ASM	2541	Automotive Electrical Diagnosis 2	2	3	3
BUS	2925	Business Principles	3	0	3
			12	9	15
FIFTH TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
SIXTH TERM					
ENG	1010	Technical Writing 1	3	0	3
LBR	1535	Introduction to Labor/Management Relations	3	0	3
ASM	2531	Engine Performance 2	2	3	3
ASM	2550	Manual Transmission and Drive Line 1	2	3	3
ASM	25XX	Technical Elective	2	3	3
	XXXX	Social Science Elective	3	0	3
			15	9	18
SEVENTH TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
EIGHTH TERM					
ECO	1512	Microeconomics	3	0	3
ASM	2555	Braking Systems	2	3	3
ASM	2560	Suspension and Steering	2	3	3
ASM	25XX	Technical Elective	2	3	3
ACC	2924	Accounting for Non-Financial Managers	3	0	3
MGT	2967	Introduction to Management	3	0	3
			15	9	18
NINTH TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
TENTH TERM					
LAW	1823	Business Law 1	3	0	3
ASM	2532	Engine Performance 3	2	3	3
ASM	2570	Air Conditioning & Heating	2	3	3
ASM	25XX	Technical Elective	2	3	3
MKT	2901	Principles of Marketing 1	3	0	3
BUS	9233	Business Competencies	2	0	2
			14	9	17
					110

Technical Electives: ASM 2542, ASM 2545, ASM 2565, ASM 2527, ASM 2536, ASM 2551
Computer Elective: OT 1850, OT 1852
Social Science Elective: Any PSY, SOC, ECO, GEO, HST, LBR
Speech Elective: SPE 1020, SPE 1022, SPE 1024

AUTOMOTIVE SERVICE TECHNICIAN CERTIFICATE

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

ASM	2520	Introduction to Automotive Technology	2	3	3
ASM	2525	Engine Fundamentals 1	2	3	3
ASM	2526	Engine Fundamentals 2	2	3	3
ASM	2530	Engine Performance 1	2	3	3
ASM	2531	Engine Performance 2	2	3	3
ASM	2532	Engine Performance 3	2	3	3
ASM	2535	Automatic Transmission 1	2	3	3
ASM	2540	Automotive Electrical Diagnosis 1	2	3	3
ASM	2541	Automotive Electrical Diagnosis 2	2	3	3
ASM	2550	Manual Transmission and Drive Line 1	2	3	3
ASM	2555	Braking Systems	2	3	3
ASM	2560	Suspension and Steering	2	3	3
ASM	2570	Air Conditioning & Heating	2	3	3
ASM	25XX	Automotive Electives	6	9	9
			32	48	48
					48

ASM electives: (choose three courses for 9 credit hours): ASM 2527, ASM 2536, ASM 2545, ASM 2551, ASM 2565, ASM 2542, ASM 2599

Management/Marketing Technologies

Program Co-Chairs - Carolyn Waits, Jim Wood

Business Management Technology (BM)

Co-op Coordinator - Jim Macke

Advisors - Paul Callahan, Al Eilers, Sait Tarhan, C. Jack Wilson

The Business Management program is a two-year Associate of Applied Business degree program that includes five paid cooperative education terms where students gain valuable insight and real world experience in assessing and solving business management challenges. The Business Management curriculum includes contemporary practices in management, marketing, human resources, accounting, and organizational development. Students learn the effective utilization of time, money, materials, and people to improve business.

Graduates of the Business Management program are prepared to manage business at the entry level in the four functional areas of management (planning, leading, organizing, and controlling), to enter management training, or to assume a team leadership role.

BUSINESS MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
ECO	151X	Economics Elective	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
	XXXX	Computer Elective	3	2	4
			19	4	21
SECOND TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
SPE	102X	Speech Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
MGT	2965	Principles of Management 1	3	0	3
			19	0	19
FOURTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MKT	2902	Principles of Marketing 2	3	0	3
ACC	2913	Principles of Accounting 3	4	0	4
MGT	2966	Principles of Management 2	3	0	3
	XXXX	Business Elective	3	0	3
			18	2	19
SIXTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MKT	1810	Principles of Sales	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	1832	Human Resource Management	3	0	3
ACC	2921	Managerial Accounting 1	3	0	3
FIN	2960	Principles of Finance 1	3	0	3
			18	0	18
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
NINTH TERM					
LAW	1824	Business Law 2	3	0	3
MGT	2975	Business Management Seminar	2	3	3
MGT	2989	Customer Service Systems	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
	XXXX	Social Science Elective	3	0	3
	XXXX	Business Elective	3	0	3
			19	3	20
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
					107

Computer Elective: OT 1850, OT 1852 or one of the following: OT 3036, OT 3050, OT 3064, OT 3068, OT 1864
Business Elective: FIN 1804, FIN 2961, MKT 1873, MGT 2905, MGT 2906, MGT 2907, MGT 2908, MGT 2909, MGT, 2910, BUS 2973, MGT 2970, MGT 2971, MGT 2972, MGT 2988, MGT 2990, MGT 2996, SCM 1817, SCM 1818, ITM 2980
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, SOC 1524, LBR 1535
Economics Elective: ECO 1512, ECO 1513, ECO 1514

Business Financial Management Technology (BFM)

Co-op Coordinator - Jim Macke

Advisor – Meg Clark

Finance is the study of how individuals, institutions, and businesses acquire, spend, and manage money and other financial resources. Almost every firm, government agency, and organization has one or more financial managers who oversee the preparation of financial reports, direct investment activities, and implement cash management strategies.

The Business Financial Management program is a two-year program in which students may earn an Associate of Applied Business degree. The program provides a combination of sound financial business training and on-the-job experience. The program offers courses that cover basic corporate financial concepts, investment concepts, personal financial planning, and insurance planning. This program prepares students for jobs in service and industrial companies as well as financial institutions. These jobs might include: financial analyst, pricing analyst, cash manager, credit analyst, loan officer, security trader, or financial customer service representative.

BUSINESS FINANCIAL MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3

ECO	1512	Microeconomics	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
	XXXX	Computer Elective	3	2	4
			19	4	21
SECOND TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
LAW	1823	Business Law 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
MGT	2965	Principles of Management 1	3	0	3
			19	0	19
FOURTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2913	Principles of Accounting 3	4	0	4
FIN	2961	Financial Planning	3	0	3
MGT	2966	Principles of Management 2	3	0	3
	XXXX	Business Elective	3	0	3
			18	2	19
SIXTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
FIN	1804	Risk & Insurance	3	0	3
LAW	1824	Business Law 2	3	0	3
MGT	1832	Human Resource Management	3	0	3
OT	1864	Advanced Electronic Spreadsheets (Excel)	2	2	3
FIN	2960	Principles of Finance 1	3	0	3
			17	2	18
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
NINTH TERM					
SPE	102X	Speech Elective	3	0	3
ECO	1513	Macroeconomics	3	0	3
FIN	2969	Principles of Finance 2	3	0	3
MGT	2975	Business Management Seminar	2	3	3
FIN	2976	Financial Institutions	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			19	3	20
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
					107

Computer Elective: OT 1850, OT 1852 or one of the following: OT 3036, OT 3058, OT 3064, OT 3068
Business Elective: SCM 1817, SCM 1818, MGT 2970, MGT 2971, MGT 2988, MGT 2989, BUS 2973, ITM 2982, ACC 2921
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, SOC 1524, LBR 1535

International Trade Management Technology (ITM)

Co-op Coordinator - Paul Callahan
Advisor - Paul Callahan

The International Trade Management curriculum provides a strong general business foundation and coursework in international concerns. Throughout the program students participate in a variety of applied instructional activities. Students work on individual and group country profile projects dealing with market entry, product, pricing, promotion, distribution, and export and import documentation along with international case studies and extensive use of the Internet for research.

Students who complete this program are prepared to work in international freight forwarding and logistics, customer service, and sales. Graduates earn an Associate of Applied Business degree. To enhance employability, advisors encourage students to take the courses required to complete an additional Associate of Business degree program in Management, Marketing, or Finance.

INTERNATIONAL TRADE MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
BUS	2925	Business Principles	3	0	3
ITM	2980	Introduction to International Business	3	0	3
BT	9200	Professional Practices	1	0	1
	XXXX	Foreign Language Elective 1	4	0	4
	XXXX	Computer Elective	3	2	4
			20	2	21
SECOND TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
ECO	151X	Economics Elective	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ITM	2983	International Orders Processing & Finance	3	0	3
	XXXX	Foreign Language Elective 2	4	0	4
			19	0	19
FOURTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
MKT	1810	Principles of Sales	3	0	3
MKT	2902	Principles of Marketing 2	3	0	3
MGT	2965	Principles of Management 1	3	0	3
ITM	2981	International Marketing	3	0	3
	XXXX	Foreign Language Elective 3	4	0	4
			19	0	19
SIXTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
LAW	1823	Business Law 1	3	0	3
SCM	1880	Transportation Logistics	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
MGT	2966	Principles of Management 2	3	0	3
	XXXX	Social Science Elective	3	0	3
			18	2	19
EIGHTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2

NINTH TERM					
SPE	102X	Speech Elective	3	0	3
GEO	155X	Geography Elective	3	0	3
LAW	1824	Business Law 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2912	Principles of Accounting 2	4	0	4
BUS	9233	Business Competencies	2	0	2
			17	2	18
TENTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
					106

Computer Elective: OT 1850, OT 1852 or one of the following: OT 3036, OT 3058, OT 3064, OT 3068, OT 1864
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, SOC 1524, LBR 1535
Economics Elective: ECO 1512, ECO 1513, ECO 1514
Geography Elective: GEO 1551, GEO 1552, GEO 1553
Foreign Language Elective: FRN 1060, FRN 1061, FRN 1062, FRN 1063, FRN 1064, FRN 1065, GRM 1070, GRM 1071, GRM 1072, GRM 1073, GRM 1074, GRM 1075, SPB 1077, SPB 1078, SPB 1079, SPN 1083, SPN 1084, SPN 1085

Internet Marketing Technology (ECM)

Co-op Coordinator - Viola Johnson
Advisor - Jim Wood

Internet marketing involves identifying products and services for Web sales, building Web sites that sell the product, and attracting targeted traffic. The Internet Marketing Technology program prepares students to work in the areas of e-commerce: business-to-business, business-to-consumers, consumer-to-consumer, and e-services. Technical skills and knowledge include Internet site design and analysis, marketing management, Customer Relationship Management (CRM), market research, Internet advertising and promotion, branding, data mining, Internet direct marketing, e-commerce logistics and fulfillment, Web site selling, traffic generation and analysis, pricing, and privacy, security, and legal issues in e-commerce.

Students who complete their academic program and co-op employment in Internet Marketing earn an Associate of Applied Business degree and have the skills necessary to work on e-commerce teams in large corporations and as e-commerce specialists for small businesses. Job titles might include: Director of Internet Marketing, Customer Relationship Management Designer, Internet Marketing Analyst, E-commerce Project Manager, Web Marketing Specialist, E-commerce Specialist, Search Engine Optimizer, and E-commerce Entrepreneur.

Upon graduation students may take World Organization of Webmasters (WOW) certification examinations to gain certifications such as WOW Certified Apprentice Webmaster, WOW E-commerce Professional, or WOW Certified Web Consultant.

INTERNET MARKETING

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1124	Business Algebra	4	0	4
OT	1852	Advanced Computer Applications	3	2	4
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MKT	2901	Principles of Marketing 1	3	0	3
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
			19	4	21
SECOND TERM					
ENG	1017	Research and Composition	2	2	3
MAT	1111	Statistics 1	3	0	3
MKT	1873	E-Commerce Business Strategy	2	2	3
MGT	2967	Introduction to Management	3	0	3
IT	5420	Digital Media Concepts	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
			14	10	18
THIRD TERM					
ECM	9254	Cooperative Education E-Commerce Marketing	1	40	2
FOURTH TERM					
MKT	1878	Internet Advertising	2	2	3
MKT	2902	Principles of Marketing 2	3	0	3
MGT	2996	Project Management	2	2	3
OT	3068	Database Management: Access 1	2	3	3
TC	5020	Usability Assessment	2	2	3
IT	5431	Multimedia Tools: Dreamweaver 1	2	3	3
			13	12	18
FIFTH TERM					
ECM	9254	Cooperative Education E-Commerce Marketing	1	40	2
SIXTH TERM					
ENG	1019	Professional Writing Styles 2	2	2	3
ECO	151X	Economics Elective	3	0	3
MKT	1874	Web Site Selling	2	2	3
LAW	1875	E-Commerce Law and Regulation	3	0	3
MKT	1883	Search Engine Strategies	2	2	3
ACC	2924	Accounting for Non-Financial Managers	3	0	3
			15	6	18
SEVENTH TERM					
ECM	9254	Cooperative Education E-Commerce Marketing	1	40	2
EIGHTH TERM					
ECM	9254	Cooperative Education E-Commerce Marketing	1	40	2
NINTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
SCM	1877	Supply Chain Management	3	0	3
MKT	1879	E-Commerce Project	2	4	4
MGT	2989	Customer Service Systems	3	0	3
	XXXX	Social Science Elective	3	0	3
	XXXX	Social Science Elective	3	0	3
			17	4	19
TENTH TERM					
BUS	9233	Business Competencies	2	0	2
ECM	9254	Cooperative Education E-Commerce Marketing	1	40	2
			3	40	4
					106

Social Science Elective: PSY 1502, SOC 1521, SOC 1524, LBR 1535, PHI 1625
Economics Elective: ECO 1512, ECO 1513, ECO 1514

Marketing Management Technology (MMT)

Co-op Coordinator - Jim Macke
Advisors - Paul Davis, Jim Wood

Marketing encompasses the activities through which businesses satisfy customer needs to earn profits for the organization. The Marketing Management Technology program is a two-year degree program in which students may earn an Associate of Applied Business degree. The program teaches students to deal with the four fundamentals

of marketing: product (conception, development, modification); promotion (advertising, personal selling, sales promotion, public relations); price (strategy, calculation); and distribution (transportation, warehousing). This program prepares students for jobs providing sales leadership, managing retail operations, developing promotional activities or overseeing distribution.

MARKETING MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
ECO	151X	Economics Elective	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
	XXXX	Computer Elective	3	2	4
			19	2	20
SECOND TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
SPE	102X	Speech Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MKT	2902	Principles of Marketing 2	3	0	3
MGT	2965	Principles of Management 1	3	0	3
			17	2	18
FOURTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
MKT	1810	Principles of Sales	3	0	3
MKT	1844	Principles of Advertising	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
MGT	2966	Principles of Management 2	3	0	3
ITM	2981	International Marketing	3	0	3
			18	2	19
SIXTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
MKT	2923	Marketing Concepts & Applications	3	0	3
FIN	2960	Principles of Finance 1	3	0	3
	XXXX	Social Science Elective	3	0	3
			19	0	19
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
NINTH TERM					
MKT	1845	Principles of Retail Management	3	0	3
ACC	2913	Principles of Accounting 3	4	0	4
MGT	2975	Business Management Seminar	2	3	3
MGT	2989	Customer Service Systems	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Business Elective	3	0	3
	XXXX	Social Science Elective	3	0	3
			20	3	21
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
					107

Computer Elective: OT 1850, OT 1852 or one of the following: OT 3036, OT 3058, OT 3064, OT 3068, OT 1864
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Economics Elective: ECO 1512, ECO 1513, ECO 1514
Business Elective: MGT 2970, MGT 2971, MGT 2988, MGT 2989, MGT 2990, LAW 1824, FIN 2961, BUS 2973, SCM 1817, ITM 2980
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, SOC 1524, LBR 1535

Supply Chain Management Technology (SCM)

Co-op Coordinator - Jim Macke
Advisor - Al Eilers

Businesses are linked in a supply chain from obtaining source materials to customer delivery. The Supply Chain Management program incorporates the traditional disciplines of purchasing, production, inventory control, and logistics.

Graduates earn an Associate of Applied Business degree and are eligible for certification through the Institute of Supply Management (formerly National Association of Purchasing Managers). Upon graduation, students are prepared to assume positions in both manufacturing and service industries in sourcing, purchasing, manufacturing scheduling and control, materials management, and logistics.

SUPPLY CHAIN MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
SPE	1024	Group Dynamics & Problem Solving	3	0	3
MAT	1124	Business Algebra	4	0	4
SCM	1877	Supply Chain Management	3	0	3
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
			17	0	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1179	Applied Statistics	4	0	4
SCM	1817	Purchasing 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
SCM	2938	Inventory and Production Control	4	0	4
MGT	2965	Principles of Management 1	3	0	3
			19	2	20
THIRD TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
FOURTH TERM					
ENG	1010	Technical Writing 1	3	0	3
SCM	1818	Purchasing 2	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
SCM	2939	Fundamentals of Manufacturing Control	4	0	4
MGT	2966	Principles of Management 2	3	0	3
			19	2	20
FIFTH TERM					
BUS	9222	Cooperative Education Business Management/			

		Marketing Management	1	40	2
SIXTH TERM					
ECO	1512	Microeconomics	3	0	3
LAW	1823	Business Law 1	3	0	3
SCM	1880	Transportation Logistics	3	0	3
MKT	2902	Principles of Marketing 2	3	0	3
ACC	2914	Cost Accounting 1	3	0	3
SCM	2937	Fundamentals of Resource Planning	4	0	4
			19	0	19
SEVENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
NINTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
ECO	1513	Macroeconomics	3	0	3
ACC	2915	Cost Accounting 2	3	0	3
SCM	2940	Operations Management	4	0	4
MGT	2975	Business Management Seminar	2	3	3
MGT	2988	Total Quality for Managers	3	0	3
			18	3	19
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					107

Entrepreneurship Certificate (ETRPC)

Advisor - Jim Wood

This program serves people who are interested in learning the essentials of starting a successful home-based business or small company. Students in the Entrepreneurship Certificate program learn to select the right business, set up a profitable enterprise, get business coming quickly and steadily, operate a business productively using technology, and create a customer-focused company.

ENTREPRENEURSHIP CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
MKT	1810	Principles of Sales	3	0	3
OT	1850	Computerized Business Applications	3	2	4
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2911	Principles of Accounting 1	3	2	4
MGT	2971	Small Business Start-Up 1	3	0	3
MGT	2972	Small Business Start-Up 2	3	0	3
MGT	2989	Customer Service Systems	3	0	3
MKT	2990	Entrepreneurial Marketing	3	0	3
			23	6	26
					26

Human Resource Management Certificate (HRC)

Advisor - Carolyn Waits

The Human Resource Management Certificate is for students interested in the increasingly specialized field of human resource management and for professionals who have moved into human resource management from other functional areas of their organizations. The certificate provides students with specific knowledge and skills in employment law, employee compensation plans, employee benefits plans, and continuous quality improvement.

Students earning an Associate's degree in a Management area may want to add the Human Resource Management Certificate to enhance their studies. These students may also want to consider adding the Employee and Labor Relations Certificate described on page 125.

HUMAN RESOURCE MANAGEMENT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
SPE	10XX	Speech Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
LBR	1535	Introduction to Labor/Management Relations	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
			15	0	15
SECOND TERM					
LBR	1539	Introduction to Employment and Workplace Law 1	3	0	3
MGT	1832	Human Resource Management	3	0	3
MGT	2966	Principles of Management 2	3	0	3
BUS	2973	Business Ethics	3	0	3
OT	XXXX	Computer Elective	3	2	4
			15	2	16
THIRD TERM					
LBR	1540	Introduction to Employment and Workplace Law 2	3	0	3
MGT	1833	Compensation Management	3	0	3
MGT	1834	Employee Benefits	3	0	3
MGT	2988	Total Quality for Managers	3	0	3
MGT	2996	Project Management	2	2	3
			14	2	15
					46

Computer Elective: OT 1850 or one of the following: OT 1863, OT 1864, OT 3036, OT 3050, OT 3064, OT 3068
Speech Elective: SPE 1020, SPE 1022, SPE 1024

Internet Marketing Certificate (ECMC)

Advisor - Jim Wood

The Internet Marketing Certificate provides the knowledge and high-level tools to create, maintain, and evolve e-commerce strategy. Graduates are prepared to identify products and services that are right for Web sales, build Web sites that sell, attract targeted traffic, price for maximum profitability, create advertising and promotion strategies, and develop effective e-commerce service.

Students must complete all certificate prerequisites prior to being admitted to the program. These courses include OT 1850, ACC 2911, and MKT 2901 and MKT 2902 or MKT 2903 and MKT 2990.

INTERNET MARKETING CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
MKT	1873	E-Commerce Business Strategy	2	2	3
MKT	1874	Web Site Selling	2	2	3
LAW	1875	E-Commerce Law and Regulation	3	0	3
PUR	1877	Supply Chain Management	3	0	3
MKT	1878	Internet Advertising	2	2	3
MKT	1879	E-Commerce Project	2	4	4
MGT	2989	Customer Service Systems	3	0	3
MGT	2996	Project Management	2	2	3

OT	3096	Internet/Office Communications	2	2	3
IT	5453	Web Development 1: HTML	2	3	3
MKT/IT	XXXX	E-Commerce Elective	3	0	3
			26	17	34
					34

Skills competencies required for program admittance:
The following courses or equivalent knowledge: OT 1850, ACC 2911, MKT 2901 and MKT 2902, or MKT 2903 and MKT 2990
MKT 1879 - Advisor consent required.
MKT/IT Electives: MKT 1883, IT 5431, IT 5454, IT 5455

Paralegal Certificate (PAC)

Advisor - Sait Tarhan

This certificate program prepares students for careers in the legal profession in three key employment areas: employees of attorneys (the dominant category), self-employed individuals who work for attorneys, and self-employed individuals who provide their services directly to the public without attorney supervision. Students learn substantive and procedural law, concentrating on the most prevalent areas of a legal practice, such as domestic relations, as well as general civil and criminal litigation practice. They become proficient at legal research, document drafting and persuasive writing.

PARALEGAL CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
LAW	1823	Business Law 1	3	0	3
OT	3058	Microsoft Word for Windows	2	3	3
			5	3	6
SECOND TERM					
LAW	1824	Business Law 2	3	0	3
LAW	1829	Litigation	3	0	3
			6	0	6
THIRD TERM					
LAW	1830	Legal Research 1	3	0	3
OT	3016	Introduction to Legal Environment	3	0	3
			6	0	6
FOURTH TERM					
LAW	1828	Family Law	3	0	3
LAW	1831	Legal Research 2	3	0	3
			6	0	6
FIFTH TERM					
OT	3017	Legal Formatting	2	3	3
	XXXX	Technical Elective	3	0	3
			5	3	6
SIXTH TERM					
	XXXX	Technical Elective	3	0	3
	XXXX	Technical Elective	3	0	3
			6	0	6
					36

Technical Electives: LAW 1825, LAW 1827, LAW 1875, LBR 1539, LBR 1540, OT 3002, OT 3003, OT 3006, OT 3007, OT 3068, OT 3069, OT 3073

Quality Management Certificate (QMC)

Advisor - Carolyn Waits

With an increasing emphasis on quality and productivity in organizations today, many jobs are available to people who can implement continuous improvement strategies and manage quality initiatives. The Quality Management Certificate provides organizations with skilled and knowledgeable graduates who can help enterprises manage change, improve processes, leverage knowledge, and increase performance. Key components of the program include assessment of systems and processes, strategic planning for quality, customer satisfaction, project management, continuous improvement, team building and facilitation, and training issues.

The program is best suited for those individuals working for or seeking employment in organizations that value quality, agility, creativity, and continuous improvement.

QUALITY MANAGEMENT CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
ENG	1015	Technical Writing 2	3	0	3
SPE	1027	Team Building and Group Facilitation	3	0	3
MGT	2987	Change Management for Quality	3	0	3
MGT	2988	Total Quality for Managers	3	0	3
MGT	2989	Customer Service Systems	3	0	3
MGT	2996	Project Management	2	2	3
QCC	6277	Statistics for Quality 1	3	2	4
QCC	6278	Statistics for Quality 2	2	2	3
QCC	6299	QC/QA Project	0	3	1
	XXXX	Technical Elective	3	0	3
			25	9	29
					29

ENG 1015: Prerequisite is ENG 1010
QCC 6277: Prerequisite is MAT 1124
QCC 6299 by arrangement with ASQC Certified Staff
Technical Electives: MGT 2986, QCC 6275, QCC 6276, QCC 6279, MCH 4886 (Advisor consent required)

Graphic Communications Technologies

Program Chair – Gary Walton
Co-op Coordinator -
Advisors - Kathleen Freed, Al Leicht

The Graphic Communications Technologies programs provide competencies for success in the graphics and printing industry. Programs leading to Associate of Applied Business degrees are available for Graphics Imaging and for Packaging and Advertising. Degree programs require a cooperative education experience.

Graphics Imaging Technology (GIT)

The Graphics Imaging Technology curriculum provides students with a background in creating graphic images from concept to final production on a printing press. Students gain an overview of all facets of the industry including graphic software, digital photography, customer service, sales, management, estimating, and printing processes.

Students may earn a two-year Associate of Applied Business degree that combines classroom coursework, labs, and co-op employment with an area employer. Students receive in-depth training on Macintosh and Windows-based computers using the industry's leading graphic software. They learn to produce jobs on a variety of printing presses such as sheet-fed offset, digital, flexographic, screen, and letterpress. Lecture classes include training in estimating, ink selection, and printing processes emphasizing offset press technology.

GRAPHICS IMAGING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
GC	1419	Survey of Printing Inks	3	0	3
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
			17	6	19
SECOND TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1449	Printing Estimating 1	2	3	3
GC	1480	Digital Photography & Imaging 1	1	4	3
ECO	1512	Microeconomics	3	0	3
OT	1850	Introduction to Computer Applications	3	2	4
			14	12	19
FOURTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
SPE	102X	Speech Elective	3	0	3
GC	1422	Graphic Design for Desktop Publishing	2	2	3
GC	1429	Screen Printing	2	6	4
PSY	1502	Human Relations-Applied Psychology	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
			16	8	19
SIXTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
SEVENTH TERM					
GC	1430	Label and Packaging Presswork 1	1	7	4
GC	1439	Introduction to Offset Presswork	1	4	3
GC	1450	Printing Estimating 2	2	3	3
GC	1481	Computer Graphics for Printing 3	2	3	3
LAW	1823	Business Law 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
			12	19	20
EIGHTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
NINTH TERM					
GC	1440	Offset Presswork	3	9	6
GC	1483	Computer Graphics for Printing 4	2	3	3
MGT	2967	Introduction to Management	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			13	12	17
TENTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
					104

Speech Elective: SPE 1020, SPE 1022, SPE 1024
Social Science Elective: Any PSY, ECO, SOC, LBR, HST, GEO

Packaging and Advertising Technology (PAT)

The Packaging and Advertising Technology curriculum provides students with a background in producing graphic images for the print and packaging industry. Students prepare to enter the industry by receiving an overview of all facets of graphic communication including graphic software, digital photography, customer service, sales, marketing, management, estimating, and printing processes.

Students may earn a two-year Associate of Applied Business degree that incorporates classroom study, lab projects, and co-op employment with area employers in the graphic and packaging industry. Students receive in-depth training on Macintosh and Windows-based computers utilizing the industry's leading graphic software. They learn to produce jobs on a variety of printing presses such as sheet-fed offset, digital, flexographic, screen, and letterpress. Lecture classes include training in ink selection, estimating, and printing processes emphasizing the flexographic press technology used for the packaging industry.

PACKAGING & ADVERTISING TECHNOLOGY

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
GC	1419	Survey of Printing Inks	3	0	3
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
			17	6	19
SECOND TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1449	Printing Estimating 1	2	3	3
GC	1480	Digital Photography & Imaging 1	1	4	3
ECO	1512	Microeconomics	3	0	3
OT	1850	Introduction to Computer Applications	3	2	4
			14	12	19
FOURTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
SPE	102X	Speech Elective	3	0	3
GC	1425	Film and Plates for Packaging	1	4	3
GC	1429	Screen Printing	2	6	4
PSY	1502	Human Relations-Applied Psychology	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
			15	10	19
SIXTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
SEVENTH TERM					
GC	1426	Packaging and Advertising Processes	3	0	3
GC	1430	Label and Packaging Presswork 1	1	7	4
GC	1450	Printing Estimating 2	2	3	3
GC	1481	Computer Graphics for Printing 3	2	3	3
LAW	1823	Business Law 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
			14	15	20
EIGHTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
NINTH TERM					
GC	1431	Label and Packaging Presswork 2	3	9	6
GC	1483	Computer Graphics for Printing 4	2	3	3
MGT	2967	Introduction to Management	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			13	12	17
TENTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
					104

Social Science Elective: Any PSY, ECO, SOC, LBR, HST, GEO
Speech Elective: SPE 1020, SPE 1022, SPE 1024

Advertising Design Certificate (ADC)

The Advertising Design certificate is for students who want to help businesses maximize their return on advertising investments. Students in the Advertising Design program learn to generate ideas, manipulate images, and use various design methods to create effective advertising. Students learn how to pinpoint highly targeted prospects cost-effectively, use advertising to generate a constant stream of inquiries, and convert a high proportion of prospects into clients/customers. Students learn computer design, digital camera processes, concept development, communication techniques, and presentation skills. Graduates master the entire advertising process, from research to developing creative objectives for various advertising and promotional strategies. Advertising Design graduates find career placement in advertising agencies and major industries.

ADVERTISING DESIGN CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
MKT	2901	Principles of Marketing 1	3	0	3
			7	6	9
SECOND TERM					
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1480	Digital Photography & Imaging 1	1	4	3
MKT	2902	Principles of Marketing 2	3	0	3
			6	7	9
THIRD TERM					
GC	1481	Computer Graphics for Printing 3	2	3	3
ART	1692	Design 1	2	3	3
MKT	1844	Principles of Advertising	3	0	3
			7	6	9
FOURTH TERM					
GC	1423	Adobe InDesign	2	3	3
GC	1483	Computer Graphics for Printing 4	2	3	3
MKT	1873	E-Commerce Business Strategy	2	2	3
			6	8	9
FIFTH TERM					
MKT	1810	Principles of Sales	3	0	3
MKT	1878	Internet Advertising	2	2	3
MGT	2989	Customer Service Systems	3	0	3
			8	2	9
SIXTH TERM					
SPE	10XX	Speech Elective	3	0	3
GC	1484	Commercial Portfolio Production	1	0	1
MKT	2990	Entrepreneurial Marketing	3	0	3
			7	0	7
					52

Speech Elective: SPE 1020, SPE 1022, SPE 1023, SPE 1024, SPE 1027

Production Artist Certificate (PDAC)

The Production Artist Certificate provides the skills to prepare design for print media using graphic software and knowledge of printing processes and techniques. The program emphasizes design skills and how jobs are printed on several types of printing presses including issues with color reproduction and basic and digital photography techniques.

PRODUCTION ARTIST CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
GC	1419	Survey of Printing Inks	3	0	3
ART	1685	Introduction to Photography	2	3	3
			9	9	12
SECOND TERM					
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1426	Packaging and Advertising Processes	3	0	3
GC	1480	Digital Photography & Imaging 1	1	4	3
			6	7	9
THIRD TERM					
GC	1422	Graphic Design for Desktop Publishing	2	2	3
GC	1429	Screen Printing	2	6	4
GC	1449	Printing Estimating 1	2	3	3
			6	11	10
FOURTH TERM					
GC	1430	Label and Packaging Presswork 1	1	7	4
GC	1439	Introduction to Offset Presswork	1	4	3
GC	1481	Computer Graphics for Printing 3	2	3	3
			4	14	10
FIFTH TERM					
GC	1483	Computer Graphics for Printing 4	2	3	3
GC	1490	Digital Photography & Imaging 2	1	4	3
MGT	2989	Customer Service Systems	3	0	3
			6	7	9
					50

Printing Management Certificate (PMC)

The Printing Management Certificate program prepares students for entry-level management or trainee positions in the print industry. The coursework blends technical and hands-on experience with management classes, techniques, and strategies. To enhance management or graphic opportunities, students may combine this certificate with an Associate's degree in Graphic Imaging or Business Management Technologies.

PRINTING MANAGEMENT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
GC	1419	Survey of Printing Inks	3	0	3
			7	6	9
SECOND TERM					
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1449	Printing Estimating 1	2	3	3
GC	1480	Digital Photography & Imaging 1	1	4	3
BUS	2925	Business Principles	3	0	3
			8	10	12
THIRD TERM					
GC	1426	Packaging and Advertising Processes	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
			9	0	9
FOURTH TERM					
GC	1430	Label and Packaging Presswork 1	1	7	4

GC	1439	Introduction to Offset Presswork	1	4	3
MKT	1873	E-Commerce Business Strategy	2	2	3
MGT	2966	Principles of Management 2	3	0	3
			7	13	13
FIFTH TERM					
GC	1450	Printing Estimating 2	2	3	3
MGT	2988	Total Quality for Managers	3	0	3
MGT	2989	Customer Service Systems	3	0	3
			8	3	9
					52

Hospitality Management Technologies

Program Chair - Jeff Sheldon
Co-op Coordinator - Rich Hendrix
Advisors - Charalee Allen, Pat Huller, John Kinsella, Jim Myatt

The Hospitality Management Technologies program provides knowledge and skills for a range of positions in food service and lodging. Programs leading to Associate's degrees are available for Culinary Arts, Hotel Management, Restaurant Management, and Dietetic Technology. Degree programs require a cooperative education experience. In addition, a Culinary Arts Certificate that has no co-op requirement is available. All programs include professional management courses certified by the National Restaurant Association.

Culinary Arts Technology (CUL)

In the Culinary Arts program, students receive training in all aspects of food preparation including methods of cookery, sauces, soups, butchery, garde manger, pastry and confectionaries, ala carte, and banquet production, in addition to culinary management. This program is accredited by the American Culinary Federation Educational Institute. Graduates earn an Associate of Applied Business degree and are prepared for employment in hotels, restaurants, clubs, resorts, catering, and health care food service operations. Culinary Arts graduates are qualified to continue their education in the University of Cincinnati's Bachelor of Culinary Arts and Science program.

CULINARY ARTS

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1108	Math for Food Service	1	2	2
HRM	2801	Food & Beverage Sanitation & Safety	3	0	3
HRM	2811	Introduction to Hospitality Management	3	0	3
CUL	2822	Principles & Methods of Cooking 1	0	9	3
CUL	2831	Theory of Cooking 1	3	0	3
BUS	2925	Business Principles	3	0	3
BT	9200	Professional Practices	1	0	1
			14	11	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
HRM	2802	Food & Beverage Cost Control 1	3	0	3
CUL	2823	Principles & Methods of Cooking 2	0	9	3
CUL	2827	Butchery and Fish Mongering	1	5	3
	XXXX	Social Science Elective	3	0	3
OT	XXXX	Computer Elective	2	3	3
			15	17	21
THIRD TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
LAW	1825	Hospitality Law	3	0	3
HRM	2818	Food & Beverage Cost Control 2	2	2	3
CUL	2841	Baking Theory for Restaurants	2	0	2
CUL	2842	Baking for Restaurants 1	0	5	2
ECO	XXXX	Economics Elective	3	0	3
			16	7	19
FIFTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
SIXTH TERM					
ENG	10XX	English Elective	3	0	3
HRM	2805	Food & Beverage Supervision	3	0	3
CUL	2819	Garde Manger Theory	2	0	2
CUL	2824	Garde Manger	0	9	3
HRM	2828	Nutrition for Food Service	2	2	3
CUL	2843	Baking for Restaurants 2	0	5	2
ACC	2924	Accounting for Non-Financial Managers	3	0	3
BUS	9233	Business Competencies	2	0	2
			15	16	21
SEVENTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
EIGHTH TERM					
SPE	1020	Public Speaking	3	0	3
HRM	2808	Dining and Beverage Service	1	6	3
HRM	2821	Hospitality Sales & Marketing	3	0	3
CUL	2826	Restaurant and Banquet Cooking	0	9	3
CUL	2829	International Cuisine	0	9	3
	XXXX	Social Science Elective	3	0	3
CUL	XXXX	Culinary Elective	1	5	3
			11	29	21
NINTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
TENTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
					110

English Elective: ENG 1003, ENG 1010
Social Science Elective: Any ECO, PSY, SOC, LBR, HST, GEO
Economics Elective: ECO 1512, ECO 1513, ECO 1514
Computer Elective: OT 1850, OT 1852, OT 1863, OT 3058
Culinary Elective: See Advisor.

Hotel Management Technology (HMT)

In the Hotel Management program, students learn basic lodging operation skills and progress to hotel management training through classroom instruction, laboratory experience, and cooperative education. Graduates earn an Associate of Applied Business degree and may expect to work in front office, housekeeping, accounting, and sales positions in hotels, motels, resorts, and other lodging operations.

HOTEL MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3

MAT	1121	Business Mathematics 1	3	0	3
OT	18XX	Computer Elective	3	2	4
HRM	2801	Food & Beverage Sanitation & Safety	3	0	3
HRM	2802	Food & Beverage Cost Control 1	3	0	3
HRM	2811	Introduction to Hospitality Management	3	0	3
BT	9200	Professional Practices	1	0	1
			19	2	20
SECOND TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
HRM	2808	Food and Beverage Service Lab	1	3	2
HRM	2812	Hotel Front Office Procedure	4	0	4
HRM	2813	Hospitality Housekeeping	3	0	3
HRM	2818	Food & Beverage Cost Control 2	4	0	4
			18	3	19
FOURTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
FIFTH TERM					
SPE	1020	Public Speaking	3	0	3
ENG	10XX	English Elective	3	0	3
LAW	18XX	Business Law Elective	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
BUS	2925	Business Principles	3	0	3
	XXXX	Social Science Elective	3	0	3
			18	2	19
SIXTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
SEVENTH TERM					
MGT	1832	Human Resource Management	3	0	3
HRM	2805	Food & Beverage Supervision	3	0	3
HRM	2821	Hospitality Sales & Marketing	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			18	0	18
EIGHTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
NINTH TERM					
LBR	1539	Introduction to Employment and Workplace Law 1	3	0	3
HRM	2804	Catering & Banquets	3	0	3
HRM	2806	Hospitality Beverage Management	3	0	3
HRM	28XX	Restaurant Technical Elective	3	0	3
HRM	28XX	Restaurant Technical Elective	2	4	3
BUS	2973	Business Ethics	3	0	3
			17	4	18
TENTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
					104

English Elective: ENG 1003, ENG 1010
Social Science Elective: Any PSY, SOC, GEO, LBR, HST, ECO
Restaurant Technology Elective: HRM 2803, HRM 2828, HRM 2830, HRM 2840
Computer Elective: OT 1850, OT 1861, OT 1863
Business Law Elective: LAW 1823, LAW 1825

Restaurant Management Technology (RMT)

In the Restaurant Management program, students learn basic restaurant operation skills and progress to restaurant management training through classroom instruction, laboratory experience, and cooperative education. Graduates earn an Associate of Applied Business degree and are prepared for supervisory positions in a variety of food service operations including restaurants, clubs, cafeterias, and catering companies.

RESTAURANT MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
HRM	2801	Food & Beverage Sanitation & Safety	3	0	3
HRM	2802	Food & Beverage Cost Control 1	3	0	3
HRM	2811	Introduction to Hospitality Management	3	0	3
BT	9200	Professional Practices	1	0	1
			16	0	16
SECOND TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	18XX	Computer Elective	3	2	4
HRM	2808	Food and Beverage Service Lab	1	3	2
HRM	2818	Food & Beverage Cost Control 2	4	0	4
HRM	2828	Nutrition for Food Service	2	2	3
			16	7	19
FOURTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
FIFTH TERM					
SPE	1020	Public Speaking	3	0	3
ENG	10XX	English Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
LAW	18XX	Business Law Elective	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
BUS	2925	Business Principles	3	0	3
			18	2	19
SIXTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
SEVENTH TERM					
MGT	1832	Human Resource Management	3	0	3
HRM	2805	Food & Beverage Supervision	3	0	3
HRM	2821	Hospitality Sales & Marketing	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
BUS	2973	Business Ethics	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			21	0	21
EIGHTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
NINTH TERM					
LBR	1539	Introduction to Employment and Workplace Law 1	3	0	3
HRM	2803	Menu Production & Facilities Planning	3	0	3
HRM	2804	Catering & Banquets	3	0	3
HRM	2806	Hospitality Beverage Management	3	0	3
HRM	2830	Fundamentals of Cooking	2	4	4
HRM	2840	Restaurant Operations	4	0	4
			18	4	20
TENTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
					105

English Elective: ENG 1003, ENG 1010
Social Science Elective: Any PSY, SOC, ECO, LBR, GEO, HST
Computer Elective: OT 1850, OT 1861, OT 1863
Business Law Elective: LAW 1823, LAW 1825

Culinary Arts Certificate (CAC)

The Culinary Arts certificate program provides a combination of courses in food preparation and culinary management. Students prepare for a variety of positions in the food service industry. This one-year evening program includes courses required for individual certification with the American Culinary Federation.

CULINARY ARTS CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CHT	2831	Theory of Cooking	3	0	3
CUL	2836	Cooking Skills and Methods	2	6	4
			5	6	7
SECOND TERM					
HRM	2801	Food & Beverage Sanitation & Safety	3	0	3
CHT	2832	Preparation and Cooking	2	3	3
			5	3	6
THIRD TERM					
HRM	2802	Food & Beverage Cost Control 1	3	0	3
CHT	2833	Basic Baking	2	3	3
			5	3	6
FOURTH TERM					
HRM	2828	Nutrition for Food Service	2	2	3
CHT	2834	Advanced Baking	2	3	3
			4	5	6
FIFTH TERM					
HRM	2805	Food & Beverage Supervision	3	0	3
CHT	2835	Production Cooking	3	3	4
			6	3	7
					32

Dietetic Technician Program (DT)

Program Chair - Charalee Allen, RD, LD

The Dietetic Technician is a professional in the field of nutrition and dietetics. Dietetic Technicians are often employed in the nutrition services department of a hospital, nursing home, long-term care facility, health maintenance organization, school, or wellness center.

The Dietetic Technician assumes a range of possibilities assisting the Licensed Dietitian in nutrition care and departmental administration. The Dietetic Technician may be responsible for many aspects of health care from nutrition care and client education to managing a food service facility. Dietetic Technicians may obtain client food preferences and meal acceptance, assess client nutritional status with appropriate assessment tools, teach nutrition concepts to individuals of varied age groups and social backgrounds, plan menus and diet modifications, train and schedule food service employees, and supervise food production and service.

Students in the Dietetic Technician program earn an Associate of Applied Science degree. Successfully completing this program qualifies students to take the registration exam given by the Commission on Dietetic Registration of the American Dietetic Association. The Dietetic Technician program has been awarded accreditation from the Commission on Approval/Accreditation on Dietetics Education of the American Dietetic Association. Students enrolled in Culinary courses may take courses from or pursue a degree in the DT Program.

DIETETIC TECHNICIAN

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
CHE	2236	Physiological Chemistry	3	3	4
DT	4136	Personal Nutrition	2	2	3
DT	4137	Personal Healthy Cooking	1	3	2
			9	8	12
SECOND TERM					
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
DT	4100	Nutrition Science	3	0	3
DT	4111	Introduction to Dietetics Technology	2	0	2
DT	4120	Culinary Skills for Healthy Cuisine	2	6	4
			11	10	15
THIRD TERM					
BIO	4015	Anatomy and Physiology 2	3	2	4
DT	4102	Nutrition for the Life Cycle	3	2	4
DT	4112	Dietetics Clinical Practice 1	0	9	3
DT	4124	Food Service Sanitation Certificate	2	0	2
DT	4138	Computing for Clinical Dietetics Applications	0	2	1
			8	15	14
FOURTH TERM					
BIO	4016	Anatomy and Physiology 3	3	2	4
DT	4104	Clinical Nutrition 1	3	2	4
DT	4113	Dietetics Clinical Practice 2	0	9	3
DT	4155	Management of Human Resources for DT	3	0	3
			9	13	14
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
DT	4125	Quantity Food Production	2	6	4
MCH	XXXX	Health Elective	2	0	2
			7	6	9
SIXTH TERM					
SPE	10XX	Speech Elective	3	0	3
DT	4106	Clinical Nutrition 2	3	2	4
DT	4114	Dietetics Clinical Practice 3	0	9	3
DT	4122	Food Systems Management 1	2	3	3
DT	4139	Computing for Food Service Applications	0	2	1
			8	16	14
SEVENTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
DT	4107	Clinical Nutrition 3	3	2	4
DT	4115	Dietetics Clinical Practice 4	1	9	4
	XXXX	Humanities/Social Science Elective	3	0	3
			10	11	14
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
DT	4117	Community Outreach Directed Practice 5	1	6	3
DT	4129	Food Systems Management 2	2	6	4
	XXXX	Humanities/Social Science Elective	3	0	3
			9	12	13
NINTH TERM					
DT	4109	Dietetics Technician Seminar	2	0	2
DT	4116	Dietetics Directed Practice 6	1	6	2
			3	6	4
					109

Humanities/Social Science Elective-Must select 6 credit hours from at least two different departments. Any ECO, CULT, GEO, HST, LBR, PSY, SOC, ART, MUS, LIT, PHI (except PSY 1502)

Speech Elective: SPE 1020, SPE 1022, SPE 1024, SPE 1027
English Elective: ENG 1003, ENG 1010
Health Elective: MCH 4001, MCH 4805, MCH 4810, MCH 4816

Dietary Management Certificate (DMC)

Program Director - Charalee Allen, RD, LD

This one-year certificate program prepares students to manage health care food systems. Coursework occurs through a combination of three to four days on campus and a series of assignments completed at the place of employment.

Graduates are employed in nursing homes, retirement facilities, hospitals, schools, and businesses. Job activities might include supervising food production and distribution; menu planning; employee hiring, training, scheduling, and evaluation; inventory controls; and purchasing, sanitation, and safety controls.

Students enrolled in the Culinary Cluster courses may take courses from the Dietary Management Certificate Program.

DIETARY MANAGEMENT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
DT	4110	Food Service Directed Practice for Dietary Managers	0	6	1
DT	4156	Food Service for Dietary Managers	4	0	4
			4	6	5
SECOND TERM					
DT	4118	Sanitation Directed Practice for Dietary Managers	0	2	0.5
DT	4124	Food Service Sanitation Certificate	2	0	2
			2	2	2.5
THIRD TERM					
DMC	4119	Human Resources Directed Practice for Dietary Managers	0	6	1
DT	4159	Human Resources for Dietary Managers	5	0	5
			5	6	6
FOURTH TERM					
DMC	4140	Nutrition Directed Practice for Dietary Managers	0	6	1
DT	4158	Nutrition for Dietary Managers	5	0	5
			5	6	6
					19.5

Landscape Horticulture Technologies

Program Co-Chairs - Mark Deacon, Ann Fox
Co-op Coordinator -

Landscape Horticulture Technologies programs provide knowledge and skills for several careers in the "green industry." Two programs leading to an Associate of Applied Business degree, one program leading to an Associate of Applied Science degree, and one certificate program are available.

Because of the unique seasonal employment opportunities of horticultural jobs, these degree programs follow a unique co-op schedule. Students spend two terms during the growing season in cooperative employment during each of the two years of the program. These assignments usually occur during the Spring, Summer, and/or Early Fall terms.

Landscape Horticulture Technology (LH)

The Landscape Horticulture major focuses on interior and exterior landscape design, installation, and management. Once students complete the introductory landscape design course they may choose to further their skills with either advanced hand drawing or computer-aided design courses. With a choice of four technical electives, students may also gain additional knowledge to prepare for careers in arboriculture or nursery and greenhouse management. Graduates earn an Associate of Applied Business degree. The Landscape Horticulture degree program is accredited by the Associated Landscape Contractors of America.

LANDSCAPE HORTICULTURE TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11X1	Math Elective	3	2	4
LH	3502	Horticulture Science	2	2	3
LH	3504	Woody Plant Materials 1	2	3	3
LH	3508	Turfgrass Management	2	2	3
BT	9200	Professional Practices	1	0	1
			13	9	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11X2	Math Elective	3	2	4
CHE	22XX	Chemistry Elective	4	2	5
LH	3500	Orientation to Horticulture Occupations	1	0	1
LH	3510	Small Engine Maintenance & Repair	2	2	3
LH	3532	Landscape Management	2	3	3
			15	9	19
THIRD TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
ACC	29XX	Accounting Elective	3	0	3
LH	3501	Soils and Plant Nutrition	2	2	3
LH	3509	Landscape Design 1	2	3	3
LH	3523	Horticulture Entomology	2	2	3
			12	7	15
FOURTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
LH	3505	Introduction to Herbaceous Plant Materials	2	2	3
LH	3511	Introduction to Landscape Construction	2	3	3
LH	3520	Horticulture Lab	0	3	1
LH	3524	Plant Pathology	2	2	3
LH	35XX	Technical Elective	2	3	3
			11	13	16
SIXTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
SEVENTH TERM					
SPE	102X	Speech Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
OT	1850	Introduction to Computer Applications	3	2	4
BUS	2925	Business Principles	3	0	3
LH	3515	Woody Plant Materials 2	2	3	3
LH	35XX	Technical Elective	2	3	3
			16	8	19
EIGHTH TERM					
MKT	1810	Principles of Sales	3	0	3
LAW	1823	Business Law 1	3	0	3

MGT	2967	Introduction to Management	3	0	3
LH	35XX	Technical Elective	2	3	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			16	3	17
NINTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
TENTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
					111

Accounting Elective: ACC 2911 or ACC 2924
Chemistry Elective: CHE 2200, CHE 2231, CHE 2232
Technical Elective: LH 3506, LH 3507, LH 3513, LH 3516, LH 3517, LH 3518, LH 3519, LH 3528, LH 3529, LH 3533, LH 3534, LH 3535, LH 3536, LH 3537, LH 3538, LH 3539, LH 3540, LH 3544, LH 3546, LH 3547, LH 3548
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Economics Elective: ECO 1512, ECO 1513
Social Science Elective: Any PSY, SOC, GEO, LBR, HST, ECO
Math Elective: MAT 1161, MAT 1162, or MAT 1171, MAT 1172, or MAT 1191, MAT 1192

Turfgrass Management Technology (TUR)

The Turfgrass Management major, leading to an Associate of Applied Business degree, concentrates on the areas of golf course management, athletic/sports turf management, and professional lawn care. The Turfgrass Management Certificate is for individuals already in management positions in turf-related industries who desire credentials in their technical area.

LANDSCAPE HORTICULTURE TECHNOLOGY - TURFGRASS MANAGEMENT MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective	3	2	4
LH	3502	Horticulture Science	2	2	3
LH	3504	Woody Plant Materials 1	2	3	3
LH	3508	Turfgrass Management	2	2	3
BT	9200	Professional Practices	1	0	1
			13	9	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11X2	Math Elective	3	2	4
CHE	22XX	Chemistry Elective	3	2	4
LH	3510	Small Engine Maintenance & Repair	2	2	3
LH	3526	Introduction to Golf and Turf Management	1	1	1
LH	3532	Landscape Management	2	3	3
			14	10	18
THIRD TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1502	Human Relations-Applied Psychology	3	0	3
ACC	29XX	Accounting Elective	3	0	3
LH	3501	Soils and Plant Nutrition	2	2	3
LH	3509	Landscape Design 1	2	3	3
LH	3523	Horticulture Entomology	2	2	3
			15	7	18
FOURTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
FIFTH TERM					
LH	3505	Introduction to Herbaceous Plant Materials	2	2	3
LH	3511	Introduction to Landscape Construction	2	3	3
LH	3520	Horticulture Lab	0	3	1
LH	3524	Plant Pathology	2	2	3
LH	3537	Turfgrass Pests	2	2	3
			8	12	13
SIXTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
SEVENTH TERM					
SPE	102X	Speech Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
OT	1850	Introduction to Computer Applications	3	2	4
BUS	2925	Business Principles	3	0	3
LH	3533	Landscape Irrigation	2	2	3
LH	3536	Turfgrass Culture	2	2	3
			16	6	19
EIGHTH TERM					
MKT	1810	Principles of Sales	3	0	3
LAW	1823	Business Law 1	3	0	3
LH	3529	Landscape Grading, Drainage and Surveying	2	3	3
LH	3538	Turfgrass Practices	2	2	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
			15	5	17
NINTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
TENTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
					110

Accounting Elective: ACC 2911 or ACC 2924
Chemistry Elective: CHE 2200, CHE 2231, CHE 2232
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Economics Elective: ECO 1512, ECO 1513
Social Science Elective: Any PSY, SOC, GEO, LBR, HST, ECO
Math Elective: MAT 1161, MAT 1162, or MAT 1171, MAT 1172, or MAT 1191, MAT 1192

TURFGRASS MANAGEMENT CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1161	Applied Algebra	3	2	4
LH	3508	Turfgrass Management	2	2	3
			5	4	7
SECOND TERM					
LH	3502	Horticulture Science	2	2	3
LH	3526	Introduction to Golf and Turf Management	2	0	2
LH	35XX	Horticulture Elective	2	2	3
			6	4	8
THIRD TERM					
LH	3501	Soils and Plant Nutrition	2	2	3
LH	35XX	Horticulture Elective	2	2	3
			4	4	6
FOURTH TERM					
LH	3536	Turfgrass Culture	2	2	3
LH	3538	Turfgrass Practices	2	2	3
			4	4	6
FIFTH TERM					
LH	3529	Landscape Grading, Drainage and Surveying	2	3	3
LH	3537	Turfgrass Pests	2	2	3
			4	5	6
					33

Horticulture Elective: LH 3504, LH 3505, LH 3506, LH 3507, LH 3509, LH 3510, LH 3528, LH 3533, LH 3523, LH 3511, LH 3517, LH 3524, LH 3532

Cemetery Management Technology (CM)

The Cemetery Management program, taught in conjunction with the Cincinnati College of Mortuary Science (CCMS), is an innovative blend of plant sciences and business management courses particularly suited to the specialized area of interment services. Students take five courses (10 credit hours) at the CCMS during the spring and summer between their first and second year. Upon completion of the Associate of Applied Science degree program, students may elect to enter CCMS full time to complete a Bachelor's degree.

CEMETERY MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
LH	3502	Horticulture Science	2	2	3
LH	3504	Woody Plant Materials 1	2	3	3
LH	3508	Turfgrass Management	2	2	3
			12	7	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1161	Applied Algebra	3	2	4
LH	3532	Landscape Management	2	3	3
BIO	4071	Concepts of Biology 1	3	2	4
BT	9200	Professional Practices	1	0	1
			12	7	15
THIRD TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
LAW	1823	Business Law 1	3	0	3
CHE	22XX	Chemistry Elective	4	2	5
LH	3501	Soils and Plant Nutrition	2	2	3
			12	4	14
FOURTH TERM					
SSC	1598	Topics in Social Sciences	3	0	3
LH	3599	Studies in Cemetery Management	3	0	3
CM	9251	Cooperative Education Cemetery Management-Parallel	1	20	1
			7	20	7
FIFTH TERM					
LH	3599	Studies in Cemetery Management	3	2	4
CM	9251	Cooperative Education Cemetery Management-Parallel	1	20	1
			4	22	5
SIXTH TERM					
ENG	1011	Business Communications	3	0	3
ECO	1512	Microeconomics	3	0	3
MKT	1810	Principles of Sales	3	0	3
OT	1850	Introduction to Computer Applications	3	2	4
BUS	2925	Business Principles	3	0	3
			15	2	16
SEVENTH TERM					
SPE	1020	Public Speaking	3	0	3
FIN	1804	Risk & Insurance	3	0	3
MGT	2967	Introduction to Management	3	0	3
MGT	2996	Project Management	2	2	3
ACC	29XX	Accounting Elective	3	0	3
LH	35XX	Technical Elective	2	3	3
			16	5	18
EIGHTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
MGT	1832	Human Resource Management	3	0	3
BUS	2973	Business Ethics	3	0	3
LH	3548	Cemetery Operations & Facilities Management	2	2	3
EVET	7670	Regulations & Permits	2	3	3
BUS	9233	Business Competencies	2	0	2
			15	5	17
NINTH TERM					
CM	9250	Cooperative Education Cemetery Management	1	40	2
TENTH TERM					
CM	9250	Cooperative Education Cemetery Management	1	40	2
					110

Accounting Elective: ACC 2911, ACC 2924
Chemistry Elective: CHE 2200, CHE 2231, CHE 2232
Technical Elective: LH 3507, LH 3509, LH 3510, LH 3529, LH 3540
Courses to be taken at the College of Mortuary Science:
Fifth Term: #300 History of Funeral Service and #400 Psychology of Grief and Counseling Procedures
Tenth Term: #360 Cremation Fundamentals and #442 Cemetery Issues
SSC 1598 to be taken at the College of Mortuary Science: #310 Social Aspects of Death and Dying

Information Management Technologies

Program Chair - Connie Campbell
Co-op Coordinator - Viola Johnson
Advisors - Connie Crossley, Jill Haft, Katye Mindhardt

The Information Management area offers four degree programs: Executive Assistant, Information Processing, Legal Assistant, and Office Management, and one certificate program: Office Support. The curriculums include not only technical skill development but also courses in business principles and management. Advanced placement is available through testing in selected courses. Grades of "C" or higher are required in all technical courses.

Executive Assistant Technology (EA)

Executive Assistant training develops competencies in office procedures, information processing, communications, organizational skills, time management, project management, and computer use. Graduates earn an Associate of Applied Business degree and can expect to work as Administrative or Executive Assistants with top-level executives as part of a management team.

EXECUTIVE ASSISTANT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
BUS	2925	Business Principles	3	0	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			16	9	19
SECOND TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2

THIRD TERM					
ENG	10XX	English Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
OT	3069	Advanced Microsoft Word	2	3	3
			14	11	18
FOURTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
ECO	1512	Microeconomics	3	0	3
OT	3003	Document Formatting 2	2	2	3
OT	3022	Proofreading and Editing	2	2	3
OT	3036	Project Management Applications	2	3	3
OT	30XX	Technical Elective	2	3	3
			14	10	18
SIXTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
SEVENTH TERM					
ENG	1018	Professional Writing Styles 1	2	2	3
PSY	1505	Introduction to Psychology 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
OT	3023	Advanced Machine Transcription and Dictation	2	3	3
OT	3024	Office Procedures 3	2	2	3
OT	3068	Database Management: Access 1	2	3	3
			17	12	22
EIGHTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
NINTH TERM					
SPE	102X	Speech Elective	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
MGT	2967	Introduction to Management	3	0	3
OT	3096	Internet/Office Communications	2	2	3
OT	30XX	Technical Elective	2	3	3
			20	5	22
TENTH TERM					
BUS	9233	Business Competencies	2	0	2
OT	9247	Cooperative Education Office Technologies-Parallel	1	20	1
			3	20	3
					110

Technical Elective: OT 3001, OT 3002, OT 3006, OT 3059, OT 3064, OT 3066, OT 3069, OT 3070, OT 3071, OT 3080, OT 3073, OT 3074, OT 3075
Speech Elective: SPE 1020, SPE 1022
English Elective: ENG 1002, ENG 1003, ENG 1010, ENG 1011

Information Processing Technology (IP)

The Information Processing Technology program develops computer skills and management procedures for processing large volumes of information in the form of text, spreadsheets, and graphics. Hands-on classroom experience on state-of-the-art equipment and popular software packages is the mainstay in the curriculum. Graduates earn an Associate of Applied Business degree and can expect to work in positions that provide information processing support to management or as Information Processing Managers.

INFORMATION PROCESSING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
OT	300X	Keyboarding Elective	2	3	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			15	12	19
SECOND TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	3002	Document Formatting 1	2	3	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
OT	3069	Advanced Microsoft Word	2	3	3
			14	12	18
FOURTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
BUS	2925	Business Principles	3	0	3
OT	3003	Document Formatting 2	2	2	3
OT	3022	Proofreading and Editing	2	2	3
OT	3064	Introduction to PowerPoint	2	3	3
			17	9	21
SIXTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
OT	1864	Advanced Electronic Spreadsheets (Excel)	2	2	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
MGT	2967	Introduction to Management	3	0	3
OT	3068	Database Management: Access 1	2	3	3
OT	3092	Desktop Publishing with Microsoft Publisher	2	2	3
			18	9	22
EIGHTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
NINTH TERM					
SPE	102X	Speech Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
LAW	1823	Business Law 1	3	0	3
OT	3066	Integrated Information Processing	2	3	3
OT	30XX	Technical Elective	3	0	3
			17	3	18
TENTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					110

Keyboarding Elective: OT 3006, OT 3007
Technical Elective: OT 3024, OT 3036, OT 3059, OT 3068, OT 3070, OT 3071, OT 3073, OT 3074, OT 3075, OT 3080, OT 3096
Speech Elective: SPE 1020, SPE 1022
English Elective: ENG 1003, ENG 1010, ENG 1011, ENG 1018

Legal Assistant (LA)

The two-year Legal Assistant program prepares students to perform legal administrative duties for law firms, banks, corporations, and savings and loans. The Legal Assistant program develops competence in word processing, legal terminology, legal office procedures, legal documentation, legal transcription, legal research, time management, and organizational skills. Graduates earn an Associate of Applied Business degree upon successful completion of the Legal Assistant program.

LEGAL ASSISTANT

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
BUS	2925	Business Principles	3	0	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			16	9	19
SECOND TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
THIRD TERM					
ENG	10XX	English Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
LAW	1823	Business Law 1	3	0	3
OT	3016	Introduction to Legal Environment	3	0	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
OT	3069	Advanced Microsoft Word	2	3	3
			18	9	21
FOURTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2911	Principles of Accounting 1	3	2	4
OT	3003	Document Formatting 2	2	2	3
OT	3017	Legal Formatting	2	3	3
OT	3022	Proofreading and Editing	2	2	3
			17	11	22
SIXTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
LAW	1830	Legal Research 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
OT	3018	Legal Transcription	3	2	4
			16	2	17
EIGHTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
NINTH TERM					
SPE	102X	Speech Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
OT	3019	Law Office Practice	3	2	4
OT	3068	Database Management: Access 1	2	3	3
			17	5	19
TENTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					110

English Electives: ENG 1002, ENG 1003, ENG 1011, ENG 1018
Speech Elective: SPE 1020, SPE 1022

Office Management Technology (OM)

The Office Management program develops the fundamental skills necessary for supervision, office management, information processing, accounting, spreadsheet organization, and other techniques that provide the base for a range of office jobs. Graduates earn an Associate of Applied Business degree and can expect to work in positions that assist key personnel with the timely and efficient flow of office functions.

OFFICE MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
BUS	2925	Business Principles	3	0	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			16	9	19
SECOND TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MGT	2967	Introduction to Management	3	0	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
			15	8	18
FOURTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
OT	3003	Document Formatting 2	2	2	3
OT	3022	Proofreading and Editing	2	2	3
OT	3064	Introduction to PowerPoint	2	3	3
			15	9	19
SIXTH TERM					
OT	9227	Cooperative Education Office Technologies	1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
OT	3024	Office Procedures 3	2	2	3
OT	3068	Database Management: Access 1	2	3	3
OT	3070	Administrative Office Management 1	3	0	3
	XXXX	Business Elective	3	0	3
			20	5	22

EIGHTH TERM					
OT	9247	Cooperative Education Office Technologies-Parallel	1	20	1
NINTH TERM					
SPE	102X	Speech Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2913	Principles of Accounting 3	4	0	4
OT	3071	Administrative Office Management 2	3	0	3
	XXXX	Technical Elective	2	3	3
			21	3	22
TENTH TERM					
BUS	9233	Business Competencies	2	0	2
OT	9247	Cooperative Education Office Technologies-Parallel	1	20	1
			3	20	3
					110

Technical Elective: OT 1864, OT 3036, OT 3066, OT 3069, OT 3092, OT 3096, OT 3073, OT 3074, OT 3075
Speech Elective: SPE 1020, SPE 1022
English Elective: ENG 1003, ENG 1010, ENG 1011, ENG 1018
Business Elective: MGT 2970, BUS 2973

Office Support Certificate (OSCP)

Students who wish to develop marketable office skills in a short period of time may be interested in the Office Support Certificate. Students learn office procedures, grammar and punctuation, document formatting, and computer skills.

OFFICE SUPPORT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
OT	3003	Document Formatting 2	2	2	3
OT	3021	Office Procedures 1	2	3	3
			4	5	6
SECOND TERM					
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
			4	6	6
THIRD TERM					
OT	3058	Microsoft Word for Windows	2	3	3
	XXXX	Technical Elective	2	3	3
			4	6	6
FOURTH TERM					
OT	3022	Proofreading and Editing	2	2	3
OT	3024	Office Procedures 3	2	2	3
			4	4	6
FIFTH TERM					
OT	3062	Database/Spreadsheet Applications	2	3	3
	XXXX	Technical Elective	2	3	3
			4	6	6
SIXTH TERM					
	XXXX	Technical Elective	2	3	3
	XXXX	Technical Elective	2	3	3
			4	6	6
					36

If keyboarding skill is less than 30 wpm, OT 3001 and OT 3002 may be necessary as prerequisites to OT 3003.
Technical Elective: LAW 1830, OT 3016, OT 3017, OT 3018, OT 3020, OT 3023, OT 3036, OT 3064, OT 3066, OT 3068, OT 3069, OT 3070, OT 3071, OT 3073, OT 3074, OT 3075, OT 3080, OT 3092, OT 3095, OT 3096

Real Estate Technology (RE)

Program Chairs - Carolyn Waits, Jim Wood
Co-op Coordinator - Kendra Vonderhaar
Advisor - Jim Wood

The Real Estate Technology program prepares students for careers in residential and commercial real estate sales, management, or financing. The program provides an educational foundation that satisfies the requirements for licensing and future requirements for becoming a real estate broker. In addition to meeting the pre-licensing requirements for real estate sales, students learn about residential and commercial property management, property appraisal, marketing, management, and the human relations and customer service systems essential for business success. Students gain hands-on experience with co-op employers such as ReMax Premier, Century 21, and Hart Realty.

Graduates earn an Associate of Applied Business degree and may obtain employment in local and national real estate firms, financial institutions, insurance companies, and many major corporations.

REAL ESTATE TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
RE	2951	Real Estate Principles & Practices	4	0	4
RE	2953	Real Estate Law	4	0	4
BT	9200	Professional Practices	1	0	1
	XXXX	Computer Elective	3	2	4
			18	2	19
SECOND TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
SPE	102X	Speech Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
BUS	2925	Business Principles	3	0	3
RE	2954	Real Estate Finance and Appraisal	4	0	4
			18	2	19
FOURTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MAT	1123	Business Mathematics 3	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
MGT	2967	Introduction to Management	3	0	3
	XXXX	Social Science Elective	3	0	3
			18	2	19
SIXTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
SEVENTH TERM					
ECO	151X	Economics Elective	3	0	3
FIN	1804	Risk & Insurance	3	0	3
MKT	2902	Principles of Marketing 2	3	0	3
ACC	2912	Principles of Accounting 2	4	0	4
RE	2956	Real Estate Appraisal 2 - Income Producing Properties	3	0	3

FIN	2960	Principles of Finance 1	3	0	3
			19	0	19
EIGHTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
NINTH TERM					
MKT	1810	Principles of Sales	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	2989	Customer Service Systems	3	0	3
PM	29XX	Property Management Elective	3	0	3
BUS	9233	Business Competencies	2	0	2
	XXXX	Social Science Elective	3	0	3
	XXXX	Business Elective	3	0	3
			20	0	20
TENTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
					106

Computer Elective: OT 1850, OT 1852 or one of the following: OT 3036, OT 3058, OT 3064, OT 3068, OT 1864.
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, SOC 1524, LBR 1535
Economics Elective: ECO 1512, ECO 1513, ECO 1514
Business Elective: LAW 1824, BUS 2973, MKT 1810, MGT 1832, MGT 2971, PM 2931, PM 2933
Property Management Elective: PM 2931, PM 2933

Engineering Technologies Division

Main Phone Number: (513) 569-1743

The Engineering Technologies Division's mission is to serve students by promoting excellence in engineering technologies through professional instruction, cooperative education, and advising. Numerous outside agencies have recognized the Division for excellence; several of its programs have earned accreditation through the Technology Accreditation Commission for the Accreditation Board for Engineering and Technology (TAC/ABET). The Division actively pursues its mission by offering students a range of learning opportunities and by identifying emerging technologies and addressing industry's changing requirements for qualified employees.

The Engineering Technologies Division offers eight two-year Associate's degree programs, providing seven areas of specialization. Each curriculum includes specialized technical work, basic theory and skill in mathematics and science, and foundation courses in communication skills, humanities, and social sciences. All students must complete the college orientation course CAR 9002, College Success Strategies, within the first 18 credit hours taken at Cincinnati State. Full-time students who follow the published sequence of courses can complete the Associate's degree programs in two years. Completing the Associate's degree programs on a part-time basis requires a longer time.

Certificate programs in the Engineering Technologies Division address areas of special interest requiring less coursework than an Associate's degree program. These programs vary in length from a short selection of technical courses to a full one-year plan of studies, including accompanying math, science, and communications courses. Some certificate programs mesh with existing Associate's degree programs, allowing students to apply earned credit toward obtaining a degree. Others stand alone, offering training in a specific area. In any case, all courses undergo the same rigorous approval process used to ensure quality and relevance in the Division's Associate's degree course offerings.

The Division's Associate's degree programs provide ready access to the job market and also allow ease of transfer to four-year baccalaureate degree programs. The close tie with industry created by the Division's active cooperative education component ensures that each program remains technically current. Articulation agreements are in place with Miami University, the University of Cincinnati, Northern Kentucky University, the University of Findlay, Embry-Riddle Aeronautical University, and the University of Toledo. Each of these agreements varies in content, and interested students should meet with their program advisor as early as possible to review the details of each arrangement.

The articulation agreement with the University of Toledo allows graduates of four Cincinnati State programs to complete a Bachelor of Computer Science and Engineering Technology degree on Cincinnati State's campus. These programs are: Electro-Mechanical Engineering Technology, Electronics Engineering Technology, Biomedical Equipment & Information Systems Technology and Computer Network Engineering Technology.

Entrance Competencies

In order to ensure a high degree of success in academic studies in engineering technologies, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education

The Engineering Technologies Division provides technology instruction that combines classroom and laboratory instruction with practical, hands-on experience in real work environments. This combination helps prepare students for immediate employment upon graduation and positions them for advancement in technology and mid-management careers. The cooperative education experience is a cornerstone of the educational process in the Engineering Technologies Division.

All students enrolled in the Division's Associate's degree programs are required to earn up to 10 credit hours in cooperative education. Most students complete this requirement through on-site cooperative education assignments. Students may earn credit by alternating full-time terms in the classroom with full-time terms of cooperative education, typically over a ten-term period. Students may be able to substitute appropriate academic courses or pre-

vious related work experience for cooperative education employment, with prior approval from the appropriate program co-op coordinator.

For eligibility requirements, co-op registration policies, and other issues related to cooperative education, please refer to the "Cooperative Education Program" section of the catalog.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

Associate's degree programs in the Engineering Technologies Division contain in their curriculums many of the required courses for the Cincinnati State Transfer Module. Students who wish to complete the transfer module should schedule the additional courses at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that the Cincinnati State Associate of Applied Science degree, combined with a transfer module showing grades of "C" or higher, receives preferential consideration at the receiving institution. Additionally, the transfer process has been streamlined for graduates of Engineering Technologies programs by the articulation agreements described above.

Aviation Maintenance Technology (AMT)

Program Chair - James Schmid
Co-op Coordinator – Sue Dolan

This two-year program prepares students to perform inspections and repairs on all types of aircraft, approving them for flight after maintenance has been performed. Classroom study involves learning every system of the aircraft and developing mechanical skills on the fleet of aircraft that Cincinnati State owns. In addition, students have opportunities to co-op with a variety of aircraft operators ranging from general aviation to jet airliners.

The FAA has approved this program under Part 147 of the Federal Aviation Regulations (Air Agency Certificate Number AD9T00R). Graduates earn an Associate of Applied Science degree and are eligible to test for the FAA Aviation Mechanic Certificate with Airframe and Powerplant ratings. Certification requirements are subject to current Federal Aviation Requirements and may change without notice.

All Aviation courses are conducted at the Cincinnati West Airport in Harrison, Ohio. Some non-core courses may be taken at the Cincinnati West Facility or the main campus.

AVIATION MAINTENANCE TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2221	Technical Physics 1	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
			14	14	18
SECOND TERM					
MAT	11XX	Algebra Elective	4	0	4
PHY	2222	Technical Physics 2	2	3	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
			17	16	21
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8130	Airframe Structures 1	3	7	5
AVT	8132	Aircraft Electrical & Generating Systems	4	6	6
AVT	8143	Airframe Hydraulic & Pneumatic Systems	1	4	2
			13	20	19
FOURTH TERM					
ENG	1010	Technical Writing 1	3	0	3
AVT	8140	Airframe Structures 2	3	7	5
AVT	8142	Assembly & Rigging	3	7	5
AVT	8151	Landing Gear Systems	3	7	5
			12	21	18
FIFTH TERM					
ENG	1015	Technical Writing 2	3	0	3
AVT	8131	Welding Processes	1	4	2
AVT	8150	Airframe Electronic and Instrument Sys.	4	6	6
AVT	8152	Airframe Inspection	1	4	2
AVT	8154	Airframe Systems	4	6	6
			13	20	19
SIXTH TERM					
ECO	15XX	Economics Elective	3	0	3
EET	7035	Computer Applications for Engineering Technology	2	3	3
AVT	8172	Ignition Systems	4	6	6
AVT	8180	Engine Systems & Inspection	5	5	5
			14	14	17
SEVENTH TERM					
SPE	1022	Professional Presentations	2	2	3
AVT	8160	Powerplant Theory & Maintenance 1	5	5	7
AVT	8162	Propellers	4	4	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			12	51	16
EIGHTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
AVT	8170	Powerplant Theory & Maintenance 2	5	5	7
AVT	8171	Powerplant Fuel Metering Systems 1	5	5	5
			13	10	15
NINTH TERM					
AVT	8181	Engine Inspection	4	4	5
AVT	8183	Powerplant Theory & Maintenance 3	5	5	7
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			10	49	14
TENTH TERM					
PHI	1625	Ethics	3	0	3
AVT	8161	Powerplant Lubrication	3	2	4
AVT	8182	Engine Instruments & Fire Protection	2	3	3
			8	5	10
					167

Economics Elective: ECO 1512, ECO 1513
Algebra Elective: MAT 1173, MAT 1192

Avionics Certificate (AVONC)

Program Chair - James Schmid

The Avionics Certificate provides advanced skills in aviation electronics for students who are FAA certified aviation mechanics. When taken in conjunction with Aviation Maintenance Technology the Avionics certificate requires only three additional courses. Graduates are able to troubleshoot and repair, in a flight line environment, onboard computers, automatic pilot, instrument navigation and communication equipment, and powerplant electronic control systems. Potential employers include corporate aviation departments and airlines. Certification requirements are subject to current Federal Aviation Requirements and may change without notice.

AVIONICS CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
ENG	1001	English Composition 1	3	0	3
ENG	1010	Technical Writing 1	3	0	3
ENG	1015	Technical Writing 2	3	0	3
MAT	1191	Algebra and Trigonometry 1	4	0	4
MAT	1192	Algebra and Trigonometry 2	4	0	4
PHY	2221	Technical Physics 1	2	3	3
PHY	2222	Technical Physics 2	2	3	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
AVT	8132	Aircraft Electrical & Generating Systems	4	6	6
AVT	8150	Airframe Electronic & Instrument Systems	4	6	6
AVT	8154	Airframe Systems	4	6	6
AVT	8182	Engine Instruments & Fire Protection	2	3	3
AVT	8200	Avionics Orientation	3	2	4
AVT	8201	Avionics 1	3	2	4
AVT	8202	Avionics 2	3	2	4
			66	58	84
					84

Prerequisites for Admission: Scores on the COMPASS Test (Admissions Test) must indicate the student is: a) Ready to begin Algebra 1 (MAT 1191); b) Ready to begin College English (ENG 1001); c) Capable of College Reading Level.

Aviation Maintenance Certificates (AVAC and AVPC)

The Aviation Maintenance Technology program includes two certificate programs, Aviation Mechanics Airframe and Mechanics Airframe Powerplant. Following successful completion of the Airframe and/or Powerplant certificate requirements students may take FAA licensing tests. Certification requirements are subject to current Federal Aviation Requirements and may change without notice.

AVIATION MECHANICS AIRFRAME CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
ENG	1001	English Composition 1	3	0	3
ENG	1010	Technical Writing 1	3	0	3
ENG	1015	Technical Writing 2	3	0	3
MAT	1191	Algebra and Trigonometry 1	4	0	4
MAT	1192	Algebra and Trigonometry 2	4	0	4
PHY	2221	Technical Physics 1	2	3	3
PHY	2222	Technical Physics 2	2	3	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
AVT	8130	Airframe Structures 1	3	7	5
AVT	8131	Welding Processes	1	4	2
AVT	8132	Aircraft Electrical & Generating Systems	4	6	6
AVT	8140	Airframe Structures 2	3	7	5
AVT	8142	Assembly & Rigging	3	7	5
AVT	8143	Airframe Hydraulic & Pneumatic Systems	1	4	2
AVT	8150	Airframe Electronic and Instrument Systems	4	6	6
AVT	8151	Landing Gear Systems	3	7	5
AVT	8152	Airframe Inspection	1	4	2
AVT	8154	Airframe Systems	4	6	6
AVT	8155	Airframe Comprehensive	2	1	2
			72	90	97
					97

AVIATION MECHANICS POWERPLANT CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
ENG	1001	English Composition 1	3	0	3
ENG	1010	Technical Writing 1	3	0	3
ENG	1015	Technical Writing 2	3	0	3
MAT	1191	Algebra and Trigonometry 1	4	0	4
MAT	1192	Algebra and Trigonometry 2	4	0	4
PHY	2221	Technical Physics 1	2	3	3
PHY	2222	Technical Physics 2	2	3	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
AVT	8160	Powerplant Theory & Maintenance 1	5	5	7
AVT	8161	Powerplant Lubrication	3	2	4
AVT	8162	Propellers	4	4	4
AVT	8170	Powerplant Theory & Maintenance 2	5	5	7
AVT	8171	Powerplant Fuel Metering Systems 1	5	5	5
AVT	8172	Ignition Systems	4	6	6
AVT	8180	Engine Systems & Inspection	5	5	5
AVT	8181	Engine Inspection	4	4	5
AVT	8182	Engine Instruments & Fire Protection	2	3	3
AVT	8183	Powerplant Theory & Maintenance 3	5	5	7
AVT	8185	Powerplant Comprehensive	2	1	2
			87	76	106
					106

Chemical Technology (CMT)

Program Chair - Martha Brosz

Co-op Coordinator - Adam Waits

The Chemical Technology Program prepares students for employment in industry or government laboratories performing research and analytical testing on specific products and processes. Graduates may fulfill a variety of jobs including the instrumental analysis of pharmaceuticals and

other consumer products to testing polymer properties or the chemical analysis of the forensics samples.

Because the Chemical Technology curriculum has ample science requirements, including chemistry and physics, students who wish to earn a Bachelor of Science degree from a university may find that the CMT curriculum serves their transfer needs well. Students may also select electives from biology courses if they choose to pursue a career or further degree in biochemistry/biotechnology.

CHEMICAL TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
CMT	6611	Chemistry 1 & Quantitative Analysis	4	4	6
CMT	6619	Computer Analysis of Laboratory Data	3	0	3
BT	9200	Professional Practices	1	0	1
			14	6	17
SECOND TERM					
MET	7111	Engineering Materials	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
THIRD TERM					
MAT	1111	Statistics 1	3	0	3
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
CMT	6621	Chemistry 2 & Quantitative Analysis	4	4	6
			14	6	17
FOURTH TERM					
CMT	6630	Chemical Process Technology	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
CMT	6631	Chemistry 3 & Quantitative Analysis	4	4	6
	XXXX	Technical Elective	2	2	3
			12	11	17
SIXTH TERM					
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
ENG	1002	English Composition 2	3	0	3
SPE	1024	Group Dynamics & Problem Solving	3	0	3
MAT	1112	Statistics 2	3	0	3
CMT	6641	Instrumental Chemical Analysis 1	3	3	4
	XXXX	Social Science Elective	3	0	3
			15	3	16
EIGHTH TERM					
CMT	6651	Instrumental Chemical Analysis 2	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5
NINTH TERM					
ENG	101X	Technical Writing Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
CMT	6649	Chemical Technology	2	3	3
	XXXX	Social Science Elective	3	0	3
	XXXX	Technical Elective	2	2	3
	XXXX	Technical Elective	2	2	3
			15	7	18
TENTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
					109

Technical Writing Elective: ENG 1010, ENG 1015, ENG 1017, ENG 1018, ENG 1019
Social Science Elective: Any PSY, SOC, HST, PHI, HUM
Technical Elective: MAT 1154, MAT 1155, MAT 1193, MAT 1194, MAT 1195, CHE 2233, BIO 4009, QCC 6271, QCC 6274, LOT 6710, LOT 6720, EVET 7607, EVET 7608, EVET 7612, EVET 7616, EVET 7646, EVET 7670, EVET 7671, EVET 7675, EVET 7676

Civil Engineering Technology

Program Chair - Tom Burns, P.E.
Co-op Coordinator – Noelle Grome
Advisors - George Armstrong, P.E., P.S., John Buttelwerth, James Decker, P.S., Elias Feghali, Ralph Wells

Civil Engineering Technology is a single program from which students may select one of three majors: architectural, construction management, or surveying. The CET program prepares its graduates to successfully enter and pursue baccalaureate degrees and to enter and advance professionally through technical and mid-management positions in local industry.

Day and evening courses are available. Students may earn an Associate's degree in approximately three years while attending class only two nights per week.

The Civil Engineering Technology program is accredited by TAC/ABET and has received an Ohio Board of Regents Program Excellence Award. Additionally, the Construction Management major has earned accreditation from the American Council for Construction Education (ACCE) making it the only program in the United States to hold both accreditations.

Architectural Major (CETA)

This CET major prepares its graduates to bridge the gap between the architect and design engineer by assisting in the design of architectural, mechanical, electrical, and lighting systems for buildings. To prepare students for the current needs of the profession, the architectural technology curriculum features a heavy emphasis on mechanical systems, water, waste, electrical, lighting systems, and computer aided drafting. In addition, the program instructs students in the areas of construction methods and principles, architectural drafting and design, and structural design involved in building construction. Job titles for graduates may include CAD Technician Manager, Architectural Designer/Detailer, Mechanical Designer/Detailer, and Electrical Designer/Detailer.

CIVIL ENGINEERING TECHNOLOGY - ARCHITECTURAL MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CET	7024	Architectural Drafting	3	4	4

CET	7910	Surveying Measurements	3	2	4
CET	7913	Introduction to Civil Engineering Technologies	1	0	1
CET	7935	Introduction to CAD (CET)	2	3	3
			12	11	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
CET	7025	Site Drafting	2	3	3
CET	7926	Building Codes	1	3	2
CET	7927	CAD 1 (CET)	2	3	3
CET	7934	Statics (CET)	3	2	4
			12	11	16
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
ECO	1512	Microeconomics	3	0	3
CET	7026	Architectural Design	2	5	4
CET	7944	Strength of Materials (CET)	3	2	4
			15	7	18
SIXTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
CET	7928	CAD 2 (CET)	1	6	3
CET	7943	Construction Estimating	2	3	3
CET	7956	Structural Steel Design	3	2	4
CET	7964	Mechanical Systems	2	3	3
CET	7968	Lighting Systems	2	3	3
			10	17	16
EIGHTH TERM					
ENG	1010	Technical Writing 1	3	0	3
SPE	1022	Professional Presentations	2	2	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			6	42	8
NINTH TERM					
ECO	1513	Macroeconomics	3	0	3
CET	7936	HVAC Design Systems	3	2	4
CET	7954	Reinforced Concrete Design	3	2	4
CET	7963	Electrical Design Systems	3	2	4
CET	7969	Building Systems Design	3	5	5
			15	11	20
TENTH TERM					
LBR	1535	Introduction to Labor/Management Relations	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	42	9
					120

Construction Management Major (CETC)

This CET major prepares its graduates to effectively apply project documentation, building methods and materials, as well as estimate project costs and schedule building activities. Early in the curriculum, students learn about construction materials and methods, manual and computer-aided architectural drafting, survey drafting, elements of structures, and light construction principles. They learn structural fundamentals through the four-course sequence of statics, strength of materials, structural steel design, and reinforced concrete. Later, they investigate principles of construction management such as project control, scheduling, estimating, project safety, contracting, heavy construction, value engineering, and labor relations. In most courses students use leading industry architectural, scheduling, and estimating software. Graduates may be employed as Project Estimators, Project Schedulers, Assistant Project Managers, Construction Layout Specialists, or Senior Civil Technicians.

CIVIL ENGINEERING TECHNOLOGY - CONSTRUCTION MANAGEMENT MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CET	7024	Architectural Drafting	3	4	4
CET	7910	Surveying Measurements	3	2	4
CET	7913	Introduction to Civil Engineering Technologies	1	0	1
CET	7935	Introduction to CAD (CET)	2	3	3
			12	11	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
CET	7025	Site Drafting	2	3	3
CET	7927	CAD 1 (CET)	2	3	3
CET	7934	Statics (CET)	3	2	4
CET	7943	Construction Estimating	2	3	3
			13	11	17
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
CET	7921	Construction Surveying	2	3	3
CET	7931	Light Construction	3	2	4
CET	7944	Strength of Materials (CET)	3	2	4
			15	7	18
SIXTH TERM					
ECO	1512	Microeconomics	3	0	3
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	42	9
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
CET	7941	Computer Integrated Construction (CIC)	1	5	3
CET	7942	Construction Management 1	2	3	3

CET	7945	Cost Engineering	2	3	3
CET	7956	Structural Steel Design	3	2	4
			11	13	16
EIGHTH TERM					
SPE	1022	Professional Presentations	2	2	3
LBR	1535	Introduction to Labor/ Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
	XXXX	Humanties/Social Science Elevtive	3	0	3
			9	42	11
NINTH TERM					
ECO	1513	Macroeconomics	3	0	3
MGT	2929	Construction Business Practices	3	0	3
CET	7953	Construction Management 2	2	4	4
CET	7954	Reinforced Concrete Design	3	2	4
CET	7955	Building Construction	3	2	4
			14	8	18
TENTH TERM					
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
					122

Humanities/Social Science Elective: Any PSY, SOC, ECO, GEO, LBR, HST, PHI, HUM, CULT

Construction Materials Testing Certificate (CETMT)

This certificate is for students interested in entering the Civil Engineering field. Students gain a fundamental knowledge of construction material properties, including the ability to perform fundamental testing procedures on concrete and soil for quality control of a constructed project. Full-time certificate students may participate in cooperative education, thereby gaining on-the job experience to supplement their academic achievements. Students who earn this certificate may be employed as Asphalt Testing Technicians, Concrete Testing Technicians, or Quality Control Technicians.

Upon completion of the certificate, students are well positioned to continue their education by entering the Civil Engineering Technology (CET) program. Many courses completed in the certificate are in the CET curriculum, thereby providing a seamless pathway for students to earn an Associate of Applied Science degree.

CONSTRUCTION MATERIALS TESTING CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1161	Applied Algebra	3	2	4
	15XX	Social Science Elective	3	0	3
CET	7901	CET Measurement Skills	1	2	2
CET	7913	Introduction to Civil Engineering Technologies	3	0	3
			10	4	12
SECOND TERM					
MAT	1162	Applied Geometry & Trigonometry	3	2	4
ECO	1513	Macroeconomics	3	0	3
CET	7024	Architectural Drafting	3	4	4
CET	7916	Construction Materials	3	0	3
			12	6	14
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1171	Technical Mathematics 1	4	0	4
CET	7917	Properties of Concrete	2	2	3
CET	7918	Properties of Soil	2	2	3
			11	4	13
FOURTH TERM					
SPE	102X	Speech Elective	3	0	3
CET	7935	Introduction to CAD (CET)	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			6	43	8
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1172	Technical Mathematics 2	4	0	4
PHY	2270	Introduction to Physics	2	3	3
CET	7931	Light Construction	3	2	4
			12	5	14
					61

Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR
Speech Elective: SPE 1020 or SPE 1022

Land Surveying Certificate (LSC)

This certificate is designed for graduates and students of four-year civil engineering programs who wish to qualify for the examinations to obtain registration as a Professional Surveyor in the State of Ohio. The Ohio State Board of Registration for Professional Engineering and Surveyors requires graduates from an approved four-year civil engineering program to successfully complete 24 quarter hours in surveying and mapping arts and sciences to become eligible for registration. The LSC certificate satisfies this requirement and is approved by the Ohio State Board of Registration for Professional Engineers and Surveyors.

LAND SURVEYING CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
RE	2953	Real Estate Law	3	0	3
CET	7920	Surveying Calculations	2	3	3
CET	7930	Route Surveying	4	2	5
CET	7940	Elements of Land Surveying	3	3	4
CET	7948	Subdivision Design 1	2	3	3
CET	7950	Surveying Field Project	1	6	3
CET	7958	GIS/GPS Control Surveying	1	6	3
			16	23	24
					24

Surveying Major (CETS)

This CET major prepares its graduates to effectively operate surveying equipment and computer software to design subdivisions and site plans and to effectively conduct topographical and boundary surveys utilizing conventional equipment and global positioning satellites for data acquisition. Students train using state-of-the-art electronic surveying and computing equipment to learn instrument usage, computer graphics, document research and resolution, route design, control surveying, subdivision planning, satellite positioning (GPS), and geographic information systems (GIS). Professional surveyors are called upon to perform diverse tasks such as designing subdivisions, retracing original boundary lines, laying out construction projects, preparing legal descriptions, and orienting com-

munications systems. Possible job titles for graduates include Survey Crew Chief, Computer Mapping Technician, Construction Layout Specialist, and GIS-GPS Technician.

CIVIL ENGINEERING TECHNOLOGY - SURVEYING MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CET	7024	Architectural Drafting	3	4	4
CET	7910	Surveying Measurements	3	2	4
CET	7913	Introduction to Civil Engineering Technologies	1	0	1
CET	7935	Introduction to CAD (CET)	2	3	3
			12	11	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
CET	7025	Site Drafting	2	3	3
CET	7920	Surveying Calculations	2	3	3
CET	7927	CAD 1 (CET)	2	3	3
CET	7934	Statics (CET)	3	2	4
			13	11	17
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
CET	7921	Construction Surveying	2	3	3
CET	7930	Route Surveying	4	2	5
CET	7944	Strength of Materials (CET)	3	2	4
			16	7	19
SIXTH TERM					
ECO	1512	Microeconomics	3	0	3
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	42	9
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
CET	7940	Elements of Land Surveying 1	3	3	4
CET	7947	Drainage Control Systems	3	2	4
CET	7948	Subdivision Design 1	2	3	3
CET	7949	Introduction to Geographic Information Systems	3	2	4
			14	10	18
EIGHTH TERM					
SPE	1022	Professional Presentations	2	2	3
LBR	1535	Introduction to Labor/Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			6	42	8
NINTH TERM					
ECO	1513	Macroeconomics	3	0	3
CET	7950	Surveying Field Project	1	6	3
CET	7958	GIS/GPS Control Surveying	1	6	3
CET	7959	Subdivision Design 2	2	3	3
CET	7981	Geographical Information Systems 2	3	2	4
			10	17	16
TENTH TERM					
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
					120

Electro-Mechanical Engineering Technology (EMET)

Program Chair – Mike DeVore, P.E.
Co-op Coordinator – Kim Richards
Advisor – Kenneth V. Stoll

The Electro-Mechanical Engineering Technology program prepares its graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local industry, and to effectively install, maintain, troubleshoot, and test industrial equipment in an automated manufacturing environment. The program combines the study of mechanical systems used in industry and the electronic systems that control them. The curriculum includes theory and application of analog and digital electronics and devices, electric motors and controls, computer control applications/programming, industrial hydraulic and pneumatic systems, mechanisms and machine drives, programmable logic controllers, servomechanisms, variable speed drives, and robotics.

Graduates are equipped to enter diverse positions such as Robotics/Automation Technician, Field Service Technician, Maintenance Technician, Process Control/Instrumentation Technician, and similar fields. Many EMET graduates continue their education after earning an Associate's degree from Cincinnati State. Articulation agreements simplify credit transfer to local colleges.

The Electro-Mechanical Engineering Technology program is accredited by TAC/ABET and has received an Ohio Board of Regents Program Excellence Award.

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
MET	7310	Manufacturing Processes with CNC Programming 1	2	3	3
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
CPET	7728	Digital Combinational Logic	3	2	4
BT	9200	Professional Practices	1	0	1
			14	10	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5

THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
CPET	7738	Digital Sequential Logic	3	3	4
			15	8	18
FOURTH TERM					
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7145	Statics and Strength of Materials	2	3	3
EET	7730	Electronics 1	5	2	6
EMT	7758	Motors & Controls	2	3	3
			15	10	19
SIXTH TERM					
MET	7125	Visual BASIC (MET)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
MET	7132	Hydraulics & Pneumatics	3	3	4
MET	7141	Kinematics & Dynamics of Machines	3	2	4
EMT	7146	Electro-Mechanical Controls 1 (Programmable Controllers-PLCs)	3	3	4
EMT	7154	Variable Speed Drives	2	2	3
			14	10	18
EIGHTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			5	40	6
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
ECO	1513	Macroeconomics	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EMT	7157	Electro-Mechanical Controls 2 (Servomechanisms)	3	3	4
EMT	7167	Robotics 1	2	2	3
			14	7	17
TENTH TERM					
SPE	1020	Public Speaking	3	0	3
LBR	1535	Introduction to Labor/Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	40	8
					120

HVAC and Energy Management Certificate (HVACC)

Advisor – Paul Weingartner, P.E.

Students in the HVAC and Energy Management Certificate program study HVAC systems theory, operation, and design and learn to select, install and maintain systems, and troubleshoot and correct problems within an HVAC system and its individual components. All of the courses in this certificate program are offered in the evening.

HVAC AND ENERGY MANAGEMENT CERTIFICATE

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
MAT	1171	Technical Mathematics 1	4	0	4
PHY	2221	Technical Physics 1	2	3	3
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
EMT	7154	Variable Speed Drives	2	2	3
EMT	7501	HVAC - Plant Maintenance	3	2	4
EMT	7525	HVAC Fundamentals	3	2	4
EMT	7535	HVAC Equipment and Systems	3	0	3
EMT	7536	Evaluation of Building Electrical Systems	3	2	4
EMT	7541	Evaluation of Energy-Efficient Building Systems	3	2	4
EMT	7555	Energy Economics, Accounting and Auditing	3	2	4
EMT	7758	Motors & Controls	2	3	3
			30	21	39
					39

Electrical Engineering Technologies Programs

Program Chair – Steve Yelton, P.E.

The Electrical Engineering Technologies group includes a degree program in Electronics Engineering Technology, majors in Biomedical Equipment & Information Systems Technology and Laser Electro-Optics Engineering Technology, and a certificate program in Computer Repair.

Electronics Engineering Technology (EET)

Program Chair – Steve Yelton, P.E.
Co-op Coordinator - Sue Dolan
Advisors - Mike Carroll, Linda Hollstegge, Bob McLain, P.E., Larry Morris, P.E.

The Electronics Engineering Technology program prepares its graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local industry, and to effectively install, calibrate, and repair electronic equipment.

Electronics Engineering Technology includes studies in analog and digital electronics, computer system hardware, and software design and testing, and computer repair and instrumentation. Coursework covers the theory and application of electronic systems and computer systems including time spent in labs fully equipped for electronic or computer design and applications.

Job titles for graduates may include Applications Technician, Computer Hardware Technician, Software Specialist, Service Technician, Engineering Technician, Communications Technician, Avionics Technician, or Field Service Technician. Graduates of the EET program also fill traditional Electronics Technician positions. With some additional study, graduates may also become certified as Computer Technicians, Electronics Technicians, and Network Technicians.

Students pursing a two-year Associate's degree in EET are required to hold on-site, related, paid cooperative education positions in order to meet graduation requirements. Exceptions to this policy may be permitted with the

approval of the cooperative education coordinator.

The Electronics Engineering Technology program is accredited by TAC/ABET.

ELECTRONICS ENGINEERING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
CPET	7728	Digital Combinational Logic	3	2	4
BT	9200	Professional Practices	1	0	1
			15	7	18
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
CPET	7738	Digital Sequential Logic	3	3	4
			15	9	18
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
MAT	1154	Calculus 1	5	0	5
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
EET	7730	Electronics 1	5	2	6
CPET	7748	Microprocessor Systems 1	3	3	4
			16	7	19
SIXTH TERM					
IT	5151	Network Communications 1	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
IT	5152	Network Communications 2	2	3	3
EET	7740	Electronics 2	5	2	6
CPET	7768	Microprocessor Systems 2	3	3	4
	XXXX	Social Science Elective	3	0	3
			13	8	16
EIGHTH TERM					
SPE	102X	Speech Elective	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
CPET	7747	Computer Instrumentation	4	2	5
EET	7750	Electronics 3	3	3	4
			16	7	19
TENTH TERM					
ECO	15XX	Economics Elective	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
					116

Speech Elective: SPE 1020, SPE 1024
Social Science Elective: Any PSY, SOC, ECO, GEO, LBR, HST, PHI, HUM (Except PSY 1502 and ECO 1513)
Economics Elective: ECO 1512, ECO 1513

Biomedical Equipment & Information Systems Technology Major (BMET)

Program Chair – Steve Yelton, P.E.
Co-op Coordinator - Sue Dolan
Advisors - Mike Carroll, Linda Hollstegge, Bob McLain, P.E., Larry Morris, P.E.,

The Biomedical Equipment and Information Systems Technology major prepares its graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local industry, and to effectively install, calibrate, and repair biomedical equipment and information systems.

BMET students gain skills in electronics, computer networking, computer software and medical instrumentation. Graduates may find employment in hospitals, medical equipment companies, and electronics firms. Potential job titles include Biomedical Technician, Information Systems Technician, and Maintenance Technician.

Students pursuing a two-year Associate's degree in BMET are required to hold on-site, related, paid cooperative education positions in order to meet graduation requirements. Exceptions to this policy may be permitted with the approval of the co-op coordinator and the program chair of the BMET major.

The Biomedical Equipment and Information Systems Technology program is accredited by TAC/ABET.

BIOMEDICAL EQUIPMENT AND INFORMATION SYSTEMS TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
CPET	7728	Digital Combinational Logic	3	2	4
BMT	7739	Introduction to Biomedical Information Systems and Technology	2	3	3
			16	10	20
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
BT	9200	Professional Practices	1	0	1
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			5	40	6
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
CPET	7738	Digital Sequential Logic	3	3	4
			15	9	18

FOURTH TERM					
BIO	4073	Concepts of Biology 3	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
MAT	1154	Calculus 1	5	0	5
CHE	2231	Fundamentals of General Chemistry	3	3	4
EET	7730	Electronics 1	5	2	6
CPET	7748	Microprocessor Systems 1	3	3	4
			16	8	19
SIXTH TERM					
IT	5151	Network Communications 1	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
IT	5152	Network Communications 2	2	3	3
EET	7740	Electronics 2	5	2	6
BMT	7749	Biomedical Instrumentation 1	3	5	5
	XXXX	Social Science Elective	3	0	3
			13	10	17
EIGHTH TERM					
SPE	102X	Speech Elective	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EET	7750	Electronics 3	3	3	4
BMT	7759	Biomedical Instrumentation 2	3	5	5
			15	10	19
TENTH TERM					
ECO	15XX	Economics Elective	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
					120

Speech Elective: SPE 1020, SPE 1024
Social Science Elective: Any PSY, SOC, ECO, GEO, LBR, HST, PHI, HUM
Economics Elective: ECO 1512, ECO 1513

Laser Electro-Optics Engineering Technology Major (LEOT)

Program Chair – Steve Yelton, P.E.
Co-op Coordinator – Sue Dolan
Advisors – Prem Batra, David Simmermon

The Laser Electro-Optics Engineering Technology major prepares its graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local industry, and to effectively program laser material processing systems and operate optical systems including lasers, lens systems, fiber optics, and holographic imaging systems.

The Laser Electro-Optics Technology major gives students practical experience and theoretical training in the field. Graduates of this program learn the fundamentals of lasers and electronic principles. Graduates find jobs in organizations that use lasers including hospitals, research laboratories, and industries that manufacture or assemble laser systems.

The Laser Electro-Optics Engineering Technology major is accredited by TAC/ABET and has been a recipient of an Ohio Board of Regents Program Excellence Award.

LASER ELECTRO-OPTICS ENGINEERING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
LOT	6710	Introduction to Lasers	3	3	4
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
CPET	7728	Digital Combinational Logic	3	2	4
BT	9200	Professional Practices	1	0	1
			15	10	19
SECOND TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			5	40	6
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
LOT	6715	Laser Safety	2	2	3
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
CPET	7738	Digital Sequential Logic	3	3	4
			16	11	20
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
MAT	1154	Calculus 1	5	0	5
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
LOT	6720	Geometrical and Wave Optics	3	3	4
EET	7730	Electronics 1	5	2	6
			16	7	19
SIXTH TERM					
ENG	1002	English Composition 2	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
SEVENTH TERM					
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
LOT	6730	Optical Components and Devices	3	3	4
LOT	6735	Industrial Laser Systems	3	3	4
EET	7740	Electronics 2	5	2	6
			14	10	18
EIGHTH TERM					
SPE	102X	Speech Elective	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
LOT	6740	Applications of Lasers	3	3	4
	XXXX	Social Science Elective	3	0	3
			12	3	13
TENTH TERM					
ECO	15XX	Economics Elective	3	0	3

ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
					116

Speech Elective: SPE 1020, SPE 1024
Social Science Elective: Any PSY, SOC, ECO, GEO, LBR, HST, PHI, HUM (Except PSY 1502 and ECO 1513)
Economics Elective: ECO 1512, ECO 1513

Computer Repair Certificate (CPTR)

Advisor – Mike Carroll

This certificate prepares students for employment as Computer Repair Technicians. The certificate is a valuable add-on for students with Associate's degrees in computer-related majors to increase understanding of computer hardware, electronics, wiring and power distribution systems. The certificate may also be used as a first step toward an Associate's degree and satisfies course requirements in the Network Administration Technology and the PC Support and Administration programs in the Information Technologies Division.

COMPUTER REPAIR CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
MAT	1161	Applied Algebra	3	2	4
MAT	1162	Applied Geometry & Trigonometry	3	2	4
IT	5231	Operating Systems: DOS/Windows 1	2	3	3
IT	5232	Operating Systems: DOS/Windows 2	2	3	3
EET	7701	Electronic Fundamentals 1	3	2	4
EET	7702	Electronic Fundamentals 2	3	2	4
CPET	7705	Survey of Digital Systems	3	2	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7780	Computer Repair: General Systems	2	3	3
EET	7781	Computer Repair: Advanced Systems	2	3	3
			26	25	36
					36

Environmental Engineering Technology (EVET)

Program Chair - Ann Gunkel
Co-op Coordinator - Kathy McClusky
Advisor - Ann Fallon

The Environmental Engineering Technology program prepare its graduates to successfully enter and pursue baccalaureate degrees to enter and advance professionally through technical and mid-management positions in local industry. Graduates are prepared to effectively sample, monitor, test, and evaluate environmental media and to effectively conduct assessments, minimize and treat waste, and ensure compliance with environmental regulations. In the program, students gain skills in key environmental areas which include collecting soil and water samples, air monitoring, managing cleanup activities, complying with regulations, making recommendations concerning solid and hazardous waste management, and performing laboratory testing. Graduates earn an Associate of Applied Science degree and are prepared to enter positions in environmental restoration sites, government agencies, laboratories, consulting firms, conservation districts, and local industries.

The Environmental Engineering Technology program is accredited by TAC/ABET.

ENVIRONMENTAL ENGINEERING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CHE	2231	Fundamentals of General Chemistry	3	3	4
EVET	7607	Environmental Sampling	2	3	3
EVS	7622	Environmental Science 2	3	2	4
EVET	7670	Regulations & Permits	2	3	3
			13	13	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	43	9
THIRD TERM					
MAT	11XX	Algebra Elective	4	0	4
EVET	7613	Environmental Surveying & Drafting	3	3	4
EVET	7616	Environmental Chemistry	2	3	3
EVS	7623	Environmental Geology	3	2	4
EVET	7675	Solid Waste Management	2	3	3
			14	11	18
FOURTH TERM					
SPE	102X	Speech Elective	3	0	3
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	42	9
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Calculus Elective	4	0	4
PHI	1625	Ethics	3	0	3
EVET	7676	Hazardous Waste Management	2	3	3
CET	7935	Introduction to CAD (CET)	2	3	3
			14	6	16
SIXTH TERM					
MAT	1179	Applied Statistics	4	0	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			5	40	6
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
EVET	7612	Environmental Microbiology	3	3	4
EVET	7614	Basic Mechanics of Fluids	3	3	4
EVET	7646	Water & Wastewater Technology	3	2	4
EVET	7671	Air Pollution Control	3	3	4
			15	11	19
EIGHTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
NINTH TERM					
ECO	1513	Macroeconomics	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EVET	7677	Treatment Technologies	2	3	3
	7XXX	Technical Elective	2	3	3
			10	8	13

TENTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
	XXXX	Social Science Elective	3	0	3
			4	40	5
					119

Technical Elective: Any EVET, EVS, CET, CMT. Other courses with program chair consent.
Social Science Elective: Any PSY, SOC, HST, PHI
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Algebra and Calculus Electives: MAT 1192 or MAT 1173 and MAT 1193; MAT 1152 and MAT 1154
Physics: PHY 2295, PHY 2296, PHY 2297 may be substituted for PHY 2291, PHY 2292, PHY 2293

Water and Wastewater Major (EVETW)

The Environmental Engineering Technology – Wastewater program prepares its graduates to assist in the design, operation, and maintenance of water and wastewater treatment facilities.
The Water and Wastewater Technology major under the EVET program emphasizes water and wastewater treatment in addition to operating and designing water and wastewater treatment facilities. Courses focus on biological as well as physical-chemical treatment processes, collection and distribution systems, calculations for water and wastewater personnel, safety, statistics, and quality assurance/quality control. Graduates earn an Associate of Applied Science degree.

ENVIRONMENTAL ENGINEERING TECHNOLOGY - WATER AND WASTEWATER MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
CHE	2231	Fundamentals of General Chemistry	3	3	4
EVET	7607	Environmental Sampling	2	3	3
EVET	7670	Regulations & Permits	2	3	3
			13	11	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	43	9
THIRD TERM					
MAT	11XX	Algebra Elective	4	0	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
EVET	7613	Environmental Surveying & Drafting	3	3	4
EVET	7616	Environmental Chemistry	2	3	3
EVET	7646	Water & Wastewater Technology	3	2	4
			15	10	19
FOURTH TERM					
EVET	7602	Supervisory Management in the Environmental Field	3	2	4
EVET	764X	Calculations for Operators Elective	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			6	45	9
FIFTH TERM					
SPE	10XX	Speech Elective	3	0	3
MAT	1179	Applied Statistics	4	0	4
MAT	11XX	Calculus Elective	4	0	4
PHI	1625	Ethics	3	0	3
CET	7935	Introduction to CAD (CET)	2	3	3
			16	3	17
SIXTH TERM					
EVET	760X	Operations of Treatment Plants Elective	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
EVET	7612	Environmental Microbiology	3	3	4
EVET	7614	Basic Mechanics of Fluids	3	3	4
			12	8	15
EIGHTH TERM					
EVET	7647	Collection & Distribution Systems	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5
NINTH TERM					
ECO	1513	Macroeconomics	3	0	3
	15XX	Social Science Elective	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EVET	7677	Treatment Technologies	2	3	3
EVET	76XX	Technical Elective	2	3	3
			13	8	16
TENTH TERM					
EVET	7605	Environmental Statistics	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
					119

All curriculum courses meet the Ohio EPA requirements for license renewal except PHI 1625 and ET 9400.
Calculations for Operators Elective: EVET 7643 or EVET 7644
Operations of Treatment Plants Elective: EVET 7603 or EVET 7604
Algebra and Calculus Electives: MAT 1192 or MAT 1173 and MAT 1193; MAT 1152 and MAT 1154
Social Science Elective: Any PSY, SOC, HST, PHI
Technical Elective: Any EVET, EVS, CET, CMT. Other courses with program chair consent.
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Physics Electives: PHY 2295, PHY 2296, PHY 2297 may be substituted for PHY 2291, PHY 2292, PHY 2293

Industrial Design Technology (IDT)

Program Chair – Mike DeVore, P.E.
Co-op Coordinator – Larry Feist
Advisors – Larry Feist, Kenneth V. Stoll

Industrial Design Technology deals with the form and function of manufactured goods. Industrial Design combines artistic abilities with technical skills to define and develop new products, create computer-generated images, create models, and build prototypes. An Industrial Design Technician creates new product shapes and styles or redesigns existing products to increase their usefulness. Products such as tools, toys, electronic equipment, appliances, furniture, medical equipment, and transportation equipment are all designed by Industrial Designers. An Industrial Design Technologist is a specialist supporting industrial design and interfacing with engineering and

manufacturing to create new products. The program concentrates on maximizing hands-on experiences using modern computer technology. Graduates earn an Associate of Applied Science degree.

INDUSTRIAL DESIGN TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
ART	1692	Design 1	2	2	3
TC	5001	Introduction to Multimedia Information Design Careers	2	0	2
IT	5201	Information Technology Concepts	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
MET	7008	Engineering Drawing 1	2	3	3
			13	10	17
SECOND TERM					
MAT	1171	Technical Mathematics 1	4	0	4
ART	1690	Drawing 1	2	2	3
IT	5420	Digital Media Concepts	2	3	3
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
MET	7310	Manufacturing Processes with CNC Programming 1	2	3	3
IDT	7825	Human Factors in Design	2	3	3
			14	14	19
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
PHY	2222	Technical Physics 2	2	3	3
IT	5441	Graphics Tools: Photoshop 1	2	3	3
MET	7120	AutoCAD 2 (Mechanical)	2	3	3
MET	7220	Plastic Materials and Processes 1	2	3	3
IDT	7850	Computer Modeling 1	2	3	3
			13	15	18
FOURTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
FIFTH TERM					
MAT	1172	Technical Mathematics 2	4	0	4
ART	1694	Introduction to Sculpture	2	3	4
MET	7122	MET CAD 3	2	3	3
MET	7145	Statics and Strength of Materials	2	3	3
IDT	7855	Computer Modeling 2	2	3	3
			12	12	17
SIXTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
SEVENTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7330	CAD-CAM 1	2	3	3
IDT	7870	Model Making/Prototyping	2	3	3
			10	8	13
EIGHTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
SPE	1024	Group Dynamics & Problem Solving	3	0	3
MKT	2903	Introduction to Marketing	3	0	3
IDT	7890	Industrial Design Project	2	3	3
			11	3	12
TENTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
					104

Mechanical Engineering Technology

Program Chair - Mike DeVore, P.E.
Co-op Coordinator - Kim Richards
Advisors - Kenneth V. Stoll, Larry Feist

The Mechanical Engineering Technology program prepares its graduates to successfully enter and pursue baccalaureate degrees and to enter and advance professionally through technical and mid-management positions in local industry.

Students learn to use the latest technology to design and manufacture devices and systems for use in consumer products, machine tools, automotive, and aerospace industries. The MET program is a two-year Associate's degree program that includes three majors, MET-Design, MET-Manufacturing Management, and MET-Plastics.

Graduates of the MET program are prepared to design mechanical systems, operate CAD systems, manage design projects, and perform product testing. Examples of program graduate job titles include Product Designer, CAD/CAM System Specialist, Product Support Manager, Design Engineering Technician, and Project Engineering Technician. Many MET graduates continue their education after earning an Associate's degree from Cincinnati State. Articulation agreements simplify credit transfer to local colleges.

The Mechanical Engineering Technology program is accredited by TAC/ABET.

Mechanical Engineering Technology – Design (MET)

MET Design is the traditional Mechanical Engineering Technology program, which prepares its graduates to design, develop, and test consumer products, industrial machinery, and automated manufacturing systems.
The curriculum prepares students for solving real-world problems using logical thinking, problem solving, and computer software. Courses emphasize CAD (Computer Aided Design) and CAE (Computer Aided Engineering) as students learn to produce designs from concept to completion.

MECHANICAL ENGINEERING TECHNOLOGY - DESIGN

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
MET	7008	Engineering Drawing 1	2	3	3
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
MET	7310	Manufacturing Processes with CNC Programming 1	2	3	3
BT	9200	Professional Practices	1	0	1
			13	13	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4

PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7120	AutoCAD 2 (Mechanical)	2	3	3
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7130	Engineering Mechanics-Statics	3	2	4
			14	10	18
FOURTH TERM					
MET	7125	Visual BASIC (MET)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
MET	7122	MET CAD 3	2	3	3
MET	7132	Hydraulics & Pneumatics	3	3	4
MET	7140	Strength of Materials	3	3	4
MET	7141	Kinematics & Dynamics of Machines	3	2	4
			15	11	19
SIXTH TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	43	6
SEVENTH TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7150	Machine Design 1	3	3	4
EET	7733	Electrical Applications	3	2	4
			15	7	18
EIGHTH TERM					
SPE	1020	Public Speaking	3	0	3
MET	7198	MET Design Project 1	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			6	43	8
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
ECO	1512	Microeconomics	3	0	3
MET	7148	Applied Thermodynamics	3	2	4
MET	7155	Machine Design 2	3	3	4
MET	7158	MET Design Project 2	2	3	3
			14	8	17
TENTH TERM					
LBR	1535	Introduction to Labor/Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
					120

Manufacturing Management Major (METM)

The MET Manufacturing Management prepares its graduates to function effectively as technicians in production and quality control in automated manufacturing environments. The curriculum contains hands-on manufacturing processes and state-of-the-art Computer Aided Drafting and Computer Aided Machining (CAD/CAM) integrated with Statistical Process Control (SPC), manufacturing facility layout, and material handling.

MECHANICAL ENGINEERING TECHNOLOGY -MANUFACTURING MANAGEMENT MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
MET	7008	Engineering Drawing 1	2	3	3
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
MET	7310	Manufacturing Processes with CNC Programming 1	2	3	3
BT	9200	Professional Practices	1	0	1
			13	13	18
SECOND TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	43	6
THIRD TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7120	AutoCAD 2 (Mechanical)	2	3	3
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7220	Plastic Materials and Processes 1	2	3	3
MET	7320	Manufacturing Processes with CNC Programming 2	2	3	3
			11	14	16
FOURTH TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1192	Algebra and Trigonometry 2	4	0	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			8	40	9
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
MET	7132	Hydraulics & Pneumatics	3	3	4
MET	7145	Statics and Strength of Materials	2	3	3
MET	7230	Plastic Materials and Processes 2	2	3	3
			14	9	17
SIXTH TERM					
MET	7125	Visual BASIC (MET)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7330	CAD-CAM 1	2	3	3
MET	7345	Manufacturing Process Planning and Estimating	2	3	3
EET	7733	Electrical Applications	3	2	4
			13	10	17
EIGHTH TERM					
SPE	1020	Public Speaking	3	0	3
MET	7198	MET Design Project 1	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			6	43	8
NINTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
ECO	1512	Microeconomics	3	0	3
MET	7158	MET Design Project 2	2	3	3
MET	7346	Manufacturing Facility Layout and Material Handling	2	3	3
MET	7355	Quality Control with SPC	2	3	3
			12	9	15

TENTH TERM					
LBR	1535	Introduction to Labor/Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
					117

Plastics Major (METP)

The Mechanical Engineering Technology – Plastics program prepares its graduates to function effectively as technicians in the plastics materials and processing industry. In the MET Plastics major students receive specialized training in the areas of thermoplastic, thermoset, and composite materials, blow molds and injection molds, and plastics joining and assembly techniques.

MECHANICAL ENGINEERING TECHNOLOGY - PLASTICS OPTION

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
MET	7008	Engineering Drawing 1	2	3	3
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
MET	7310	Manufacturing Processes with CNC Programming 1	2	3	3
BT	9200	Professional Practices	1	0	1
			13	13	18
SECOND TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	43	6
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7120	AutoCAD 2 (Mechanical)	2	3	3
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7130	Engineering Mechanics-Statics	3	2	4
MET	7220	Plastic Materials and Processes 1	2	3	3
			16	13	21
FOURTH TERM					
ENG	1001	English Composition 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
MET	7122	MET CAD 3	2	3	3
MET	7132	Hydraulics & Pneumatics	3	3	4
MET	7140	Strength of Materials	3	3	4
MET	7230	Plastic Materials and Processes 2	2	3	3
			14	12	18
SIXTH TERM					
MET	7125	Visual BASIC (MET)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
ENG	1002	English Composition 2	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7150	Machine Design 1	3	3	4
MET	7240	Plastic Materials and Processes 3	3	2	4
EET	7733	Electrical Applications	3	2	4
			15	9	19
EIGHTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
SPE	1020	Public Speaking	3	0	3
ECO	1512	Microeconomics	3	0	3
MET	7155	Machine Design 2	3	3	4
MET	7250	Plastic Materials and Processes 4	3	2	4
			15	5	17
TENTH TERM					
LBR	1535	Introduction to Labor/Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
					120

Mechanical Engineering Technology-Manufacturing CNC Certificate (METMC)

This is a short-term certificate program for the specialized field of CNC Programming and Computer Aided Manufacturing. Most students are able to complete the certificate course requirements in one year or less. All courses required for the CNC Certificate may be applied directly toward the two-year Associate of Applied Science degree in the Mechanical Engineering Technology-Manufacturing Management Major.

MECHANICAL ENGINEERING TECHNOLOGY - MANUFACTURING CNC CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
MAT	1191	Algebra and Trigonometry 1	3	2	4
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
MET	7310	Manufacturing Processes with CNC Programming 1	2	3	3
MET	7320	Manufacturing Processes with CNC Programming 2	2	3	3
MET	7330	CAD-CAM 1	2	3	3
			11	14	16
					16

Health Technologies Division

Main Phone Number: (513) 569-1670

The Health Technologies Division at Cincinnati State brings together in one unit all programs for the education and training of health personnel. When available, the Division's programs are accredited or approved by their respective professional bodies.

The Health Technologies Division offers clinically intensive Associate's degree and certificate programs that prepare students to perform immediately upon graduation. Prerequisite courses for all programs are available at Cincinnati State. Additionally, the Division offers special courses, workshops, seminars and forums at which participants can learn new skills, acquire new knowledge or update the knowledge and skills needed to perform effectively on the job. The Division affiliates with over fifty hospitals and other health care agencies and institutions to provide clinical experiences for health students.

All students must complete the college orientation course CAR 9002, College Success Strategies, within the first 18 credit hours taken at Cincinnati State.

Entrance Competencies

In order to ensure a high degree of success in academic studies in health technologies, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education

The Health Division supports the College's mission of providing a combination of theory and practice with its well-established tradition of including experience in the clinical setting as an integral part of the educational process. Both clinical and cooperative education components provide students with the practical experience they need to begin work immediately upon graduation. Refer to individual program descriptions below for specific information.

Health Excel Services

Health Excel provides Cincinnati State Health Technologies students with a comprehensive range of educational and professional support services to enhance classroom learning and assist in professional development. Support services available to students include special seminars; individualized tutorial assistance; career, personal, and financial counseling; job shadowing opportunities; mentoring; writing and study skills assistance; and development of a re-entry plan following failure in a technical program.

Bethesda Foundation Scholars Program

The Bethesda Foundation Scholars Program is a joint venture with TriHealth and Cincinnati State Health Technologies Division. The Scholars Program helps to improve the employment status of residents served by Bethesda Oak Hospital who are unemployed or underemployed by focusing on post-secondary education. Participants receive special assistance in completing one of the approved health care degrees or certificates offered by the Health Technologies Division. Additionally, students who do not meet Federal guidelines for financial aid may be eligible for tuition, books, and fees through provisions of the Bethesda Foundation. Interested students should contact the Health Division's Health Excel Services Coordinator for program admission criteria.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

Associate's degree programs in the Health Technologies Division contain in their curriculums many of the required courses for the Cincinnati State Transfer Module. Students who wish to complete the transfer module should schedule the additional courses at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that the Cincinnati State Associate of Applied Science degree, combined with a transfer module showing grades of "C" or higher, receives preferential consideration at the receiving institution.

Clinical Laboratory Technician Program (CLT)

Program Chair - Janelle Gohn, MT (ASCP)

Clinical Laboratory Technicians work closely with physicians, providing much of the information needed to diagnose and treat patients. They work in the laboratories of hospitals, clinics, research centers, and industry. In clinical chemistry, hematology, microbiology, and blood bank laboratories they form a vital part of the health care team.

The Clinical Laboratory Technician program is an Associate of Applied Science degree program that includes two unpaid clinical laboratory rotations and four terms of paid parallel cooperative employment. The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631, (773) 714-8880.

Clinical Laboratory Technicians employed in a laboratory, hospital, or clinic may specialize in one or two of the several areas of laboratory work or may rotate through all the departments in the laboratory. In clinical chemistry they perform chemical analysis of the blood for constituents, including glucose, urea, chloride, sodium, potassium, and enzymes. In hematology they take blood samples from patients; count red and white cells; determine coagulation, bleeding, and prothrombin times; measure sedimentation rates; and determine hemoglobin concentrations. In microbiology they prepare and stain slides; grow and identify the cause of infectious disease; determine the susceptibility of bacteria to antibiotics; and examine specimens for parasites. In immunohematology, they process and prepare donor blood for transfusions. In the serology department they examine specimens for antibodies against various diseases.

Successful completion of the curriculum qualifies students to apply to take a national certification exam. Graduates may apply to the American Society for Clinical Pathology Board of Registry to obtain certification as a Medical Laboratory Technician, MLT (ASCP), or the National Certification Agency for Medical Laboratory Personnel to obtain certification as a Clinical Laboratory Technician, CLT (NCA).

CLINICAL LABORATORY TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1151	College Algebra	4	0	4
CHE	2231	Fundamentals of General Chemistry	3	3	4
BIO	4014	Anatomy and Physiology 1	3	2	4
CLT	4321	Introduction to Clinical Laboratory Science	0.5	0	0.5
CLT	4392	Safety and Standard Precautions for Health Care Personnel	0	1	0.5
CLT	4393	Point-of-Care Laboratory Testing	1	3	2
			12	9	15
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CHE	2236	Physiological Chemistry	3	3	4
BIO	4015	Anatomy and Physiology 2	3	2	4
CLT	4302	Basic Hematology and Hemostasis	2	6	4
CLT	4322	Physical and Chemical Urinalysis	1	1.5	1.5
CLT	4323	Analysis of Urine Sediment and Body Fluids	1	1.5	1.5
			13	14	18
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
CLT	4304	Clinical Chemistry	3	6	5
CLT	4307	Hematology & Hemostasis 2	2	3	3
CLT	4317	Instrumentation for the Clinical Laboratory	1	3	2
			12	14	17
FOURTH TERM					
PSY	15XX	Psychology Elective	3	0	3
BIO	4023	Immunology	3	0	3
CLT	4311	Clinical Applications 1 - Hematology and Coagulation	0	6	2
CLT	4312	Clinical Applications 2 - Clinical Chemistry and Urinalysis	0	6	2
CLT	4340	Introduction to Phlebotomy Techniques	0	3	1
CLT	4350	Orientation to the Clinical Lab	0	8	1
			6	23	12
FIFTH TERM					
CLT	4353	Clinical Laboratory Practice	1	40	6
SIXTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
SOC	152X	Sociology Elective	3	0	3
CLT	4305	Immunohematology	3	6	5
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
			10	26	12
SEVENTH TERM					
BIO	4011	Microbiology Principles and Techniques	2	6	4
CLT	4308	Immunochemistry	2	3	3
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
			5	29	8
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
CLT	4306	Clinical Microbiology	3	6	5
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
	XXXX	Humanities/Social Science Elective	3	0	3
			10	26	12
NINTH TERM					
CLT	4309	Clinical Laboratory Seminar	0	3	1
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
			1	23	2
TENTH TERM					
CLT	4313	Clinical Applications 3 - Blood Bank Serology	0	6	2
CLT	4314	Clinical Applications 4 - Clinical Microbiology	0	6	2
			0	12	4
NINTH TERM					
BIO	4020	Fundamentals of Pathophysiology	5	0	5
					111

Humanities/Social Science Elective: ECO 1512, ECO 1513, ECO 1514, GEO 1551, GEO 1552, GEO 1553, HST 1561, HST 1562, HST 1563, HST 1568, HST 1569, HST 1570, HST 1575, HST 1576, HST 1577, HST 1578, LBR 1535, LBR 1538, LBR 1539, CULT 1602, CULT 1645, CULT 1646, CULT 1647, ART 1660, MUS 1665, LIT 1040, LIT 1041, LIT 1042, LIT 1045, LIT 1046, LIT 1047, LIT 1050, LIT 1055, LIT 1059, PHI 1620, PHI 1621, PHI 1625, PHI 1630
Psychology Elective: PSY 1502, PSY 1503, PSY 1505, PSY 1506, PSY 1508, PSY 1509, PSY 1510
Sociology Elective: SOC 1521, SOC 1523, SOC 1524, SOC 1525, SOC 1526, SOC 1527, SOC 1528, SOC 1529
English Elective: ENG 1003, ENG 1010

Diagnostic Medical Sonography Program (DMSG and DMSC)

Program Chair, DMSG - Susan Watson, RDMS
Program Chair, DMSC - Jackie Turner, RDCS, RVT

The Diagnostic Medical Sonography Program offers students the opportunity to become entry-level diagnostic medical sonographers in the specialty areas of echocardiography and vascular sonography or abdominal, obstetrical, and gynecological sonography.

The Diagnostic Medical Sonography program at Cincinnati State offers two plans of study: a two-year Associate of Applied Science degree and a one-year certificate program (described on page 118). The Associate's degree curriculum includes a balance of general education and sonography courses in addition to supervised clinical experience obtained on site at various health care facilities in the Greater Cincinnati area. The certificate curriculum includes sonography courses and clinical experience. To be admitted to the certificate program, students must hold an Associate's degree in nursing, radiography, or respiratory therapy.

Graduates are eligible to apply to take the American Registry of Diagnostic Medical Sonographers adult echocardiography and vascular technology registry exams or the abdominal/obstetrical/gynecological exams.

DIAGNOSTIC MEDICAL SONOGRAPHY - ABDOMINAL/OBSTETRIC-GYNECOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1151	College Algebra	4	0	4

MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
DMS	4632	Principles of Diagnostic Medical Sonography	1	0	1
			12	4	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
BIO	4015	Anatomy and Physiology 2	3	2	4
EMS	4730	CPR for Health Care Professionals	0	2	1
			10	6	13
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
EMS	4731	First Aid	0	2	1
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	3	2	4
	XXXX	Social Sciences/Humanities Elective	3	0	3
			12	6	15
FOURTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
BIO	4019	Cross Sectional Anatomy	2	2	3
MCH	4805	Patient Care Skills	1	3	2
MCH	4840	Orientation to the Health Record	2	2	3
			11	7	14
FIFTH TERM					
BIO	4020	Fundamentals of Pathophysiology	5	0	5
DMS	4634	Principles of Abdominal/OB/GYN Sonography	1	4	2
			6	4	7
SIXTH TERM					
DMS	4637	Sonographic Physics and Instrumentation 1	3	0	3
DMS	4672	Clinical Sonography 1	0	24	3
DMS	4676	Abdominal Sonography	3	2	4
DMS	4683	Gynecological Sonography	2	2	3
			8	28	14
SEVENTH TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4673	Clinical Sonography 2	0	24	3
DMS	4677	Superficial Small Parts Sonography	2	2	3
DMS	4684	Obstetrical Sonography 1	3	2	4
			8	28	13
EIGHTH TERM					
MCH	4001	Introduction to the Health Care System	2	0	2
DMS	4639	Sonographic Physics and Instrumentation 3	3	0	3
DMS	4640	Sonography Department Administration	2	0	2
DMS	4674	Clinical Sonography 3	0	24	3
DMS	4685	Obstetrical Sonography 2	3	2	4
			10	26	14
NINTH TERM					
DMS	4675	Clinical Sonography 4	0	36	5
DMS	4687	Sonography Seminar	2	0	2
			2	36	7
					110

DIAGNOSTIC MEDICAL SONOGRAPHY - CARDIOVASCULAR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1151	College Algebra	4	0	4
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
DMS	4632	Principles of Diagnostic Medical Sonography	1	0	1
			12	4	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
BIO	4015	Anatomy and Physiology 2	3	2	4
EMS	4730	CPR for Health Care Professionals	0	2	1
			10	6	13
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
EMS	4731	First Aid	0	2	1
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	3	2	4
	XXXX	Social Sciences/Humanities Elective	3	0	3
			12	6	15
FOURTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
BIO	4019	Cross Sectional Anatomy	2	2	3
MCH	4805	Patient Care Skills	1	3	2
MCH	4840	Orientation to the Health Record and Legal Issues	2	2	3
			11	7	14
FIFTH TERM					
BIO	4020	Fundamentals of Pathophysiology	5	0	5
DMS	4636	Principles of Cardiovascular Sonography	1	4	2
			6	4	7
SIXTH TERM					
DMS	4637	Sonographic Physics and Instrumentation	13	0	3
DMS	4641	Cardiovascular Clinical 1	0	24	3
DMS	4645	Echocardiography 1	2	2	3
DMS	4648	Vascular Sonography 1	2	2	3
			7	28	12
SEVENTH TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4642	Cardiovascular Clinical 2	0	24	3
DMS	4646	Echocardiography 2	2	2	3
DMS	4649	Vascular Sonography 2	2	2	3
			7	28	12
EIGHTH TERM					
MCH	4001	Introduction to the Health Care System	2	0	2
DMS	4639	Sonographic Physics and Instrumentation 3	3	0	3
DMS	4640	Sonography Department Administration	2	0	2
DMS	4643	Cardiovascular Clinical 3	0	24	3
DMS	4647	Echocardiography 3	3	0	3
			10	24	13
NINTH TERM					
DMS	4644	Cardiovascular Clinical 4	0	36	5
DMS	4654	Vascular Sonography 3	2	0	2
			2	36	7
TENTH TERM					
DMS	4650	Cardiovascular Seminar	2	0	2
DMS	4655	Cardiovascular Clinical 5	0	24	3
			2	24	5
					112

Humanities/Social Science Elective: Any 15XX or 16XX

Dietetic Technician Program (DT)

Program Chair – Charalee Allen, RD, LD

The Dietetic Technician is a professional in the field of nutrition and dietetics. Dietetic Technicians are often employed in the nutrition services department of a hospi-

tal, nursing home, long-term care facility, health maintenance organization, school, or wellness center.

The Dietetic Technician assumes a range of possibilities assisting the Licensed Dietitian in nutrition care and departmental administration. The Dietetic Technician may be responsible for many aspects of health care from nutrition care and client education to managing a food service facility. Dietetic Technicians may obtain client food preferences and meal acceptance, assess client nutritional status with appropriate assessment tools, teach nutrition concepts to individuals of varied age groups and social backgrounds, plan menus and diet modifications, train and schedule food service employees, and supervise food production and service.

Students in the Dietetic Technician program earn an Associate of Applied Science degree. Successfully completing this program qualifies students to take the registration exam given by the Commission on Dietetic Registration of the American Dietetic Association. The Dietetic Technician program has been awarded accreditation from the Commission on Approval/Accreditation on Dietetics Education of the American Dietetic Association. Students enrolled in Culinary courses may take courses from or pursue a degree in the Dietetic Technician Program.

DIETETIC TECHNICIAN

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
CHE	2236	Physiological Chemistry	3	3	4
DT	4136	Personal Nutrition	2	2	3
DT	4137	Personal Healthy Cooking	1	3	2
			9	8	12
SECOND TERM					
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
DT	4100	Nutrition Science	3	0	3
DT	4111	Introduction to Dietetics Technology	2	0	2
DT	4120	Culinary Skills for Healthy Cuisine	2	6	4
			11	10	15
THIRD TERM					
BIO	4015	Anatomy and Physiology 2	3	2	4
DT	4102	Nutrition for the Life Cycle	3	2	4
DT	4112	Dietetics Clinical Practice 1	0	9	3
DT	4124	Food Service Sanitation Certificate	2	0	2
DT	4138	Computing for Clinical Dietetics Applications	0	2	1
			8	15	14
FOURTH TERM					
BIO	4016	Anatomy and Physiology 3	3	2	4
DT	4104	Clinical Nutrition 1	3	2	4
DT	4113	Dietetics Clinical Practice 2	0	9	3
DT	4155	Management of Human Resources for DT	3	0	3
			9	13	14
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
DT	4125	Quantity Food Production	2	6	4
MCH	XXXX	Health Elective	2	0	2
			7	6	9
SIXTH TERM					
SPE	10XX	Speech Elective	3	0	3
DT	4106	Clinical Nutrition 2	3	2	4
DT	4114	Dietetics Clinical Practice 3	0	9	3
DT	4122	Food Systems Management 1	2	3	3
DT	4139	Computing for Food Service Applications	0	2	1
			8	16	14
SEVENTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
DT	4107	Clinical Nutrition 3	3	2	4
DT	4115	Dietetics Clinical Practice 4	1	9	4
	XXXX	Humanities/Social Science Elective	3	0	3
			10	11	14
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
DT	4117	Community Outreach Directed Practice 5	1	6	3
DT	4129	Food Systems Management 2	2	6	4
	XXXX	Humanities/Social Science Elective	3	0	3
			9	12	13
NINTH TERM					
DT	4109	Dietetics Technician Seminar	2	0	2
DT	4116	Dietetics Directed Practice 6	1	6	2
			3	6	4
					109

Humanities/Social Science Elective-Must select 6 credit hours from at least two different departments. Any ECO, CULT, GEO, HST, LBR, PSY, SOC, ART, MUS, LIT, PHI (except PSY 1502)
Speech Elective: SPE 1020, SPE 1022, SPE 1024, SPE 1027
English Elective: ENG 1003, ENG 1010
Health Elective: MCH 4001, MCH 4805, MCH 4810, MCH 4816

Emergency Medical Technician - Paramedic Program (EMTP)

Program Chair - Debra Lierl, RRT
Program Director - Dale Van de Hatert, EMT/P

Emergency Medical Technicians administer life saving care for the sick and injured. The EMTP program includes training in basic and advanced life support management. Students learn to apply biophysical and psychosocial principles to the complex practice of the paramedic.

The EMT Paramedic training program elevates the skills of the EMT-Basic to the paramedic level through the paramedic curriculum approved by the Ohio Department for Public Safety, Division of Emergency Medical Services. Students are eligible to take the national registry exam after completing the five Paramedic Theory and Practice classes. (See the certificate program description on page 120.)

Graduates earn an Associate of Applied Science degree and are prepared for employment in agencies providing pre-hospital emergency medical care as well as jobs in emergency and other acute care areas of the hospital.

EMT PARAMEDIC TECHNOLOGY

Prerequisite: EMT-Basic Certification in the State of Ohio. All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
SPE	1024	Group Dynamics & Problem Solving	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
	XXXX	Health Elective	2	0	2
	XXXX	Health Elective	2	0	2
			13	2	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PHI	1625	Ethics	3	0	3

BIO	4015	Anatomy and Physiology 2	3	2	4
BIO	4016	Anatomy and Physiology 3	3	2	4
			12	4	14
THIRD TERM					
EMS	4763	Paramedic Theory and Practice 1	6	4	8
FOURTH TERM					
EMS	4764	Paramedic Theory and Practice 2	5	14	12
FIFTH TERM					
EMS	4765	Paramedic Theory and Practice 3	7	6	10
SIXTH TERM					
EMS	4766	Paramedic Theory and Practice 4	7	8	11
SEVENTH TERM					
EMS	4767	Paramedic Theory and Practice 5	6	8	10
EIGHTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
BIO	4018	Pharmacology	3	0	3
MCH	4871	Advanced Arrhythmia Recognition	3	0	3
			9	0	9
NINTH TERM					
ENG	10XX	English Elective	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
BIO	4020	Fundamentals of Pathophysiology	5	0	5
EMS	4782	Pediatric Education for Pre-hospital	1	2	2
			12	2	13
					101

English Electives: ENG 1003, ENG 1010
Health Electives: MCH 4000, MCH 4001, MCH 4002, MCH 4806, MCH 4807, MCH 4816, MCH 4882, MCH 4819, DT 4136, DT 4137, PE 4066, EMS 4762, EMS 4763, EMS 4764, EMS 4765, EMS 4766, EMS 4767, EMS 4772

Fire Service Technology Program (FST)

Advisor - Phil Vossmeyer, C, P/F

The Fire Service Technology program provides entry-level firefighting and EMT training to those seeking firefighter careers and advanced training and leadership skills for firefighters who wish to advance in their careers. Graduates earn an Associate of Applied Science degree.

The scope of fire service encompasses many needs of communities served. Many demands, small and large, are placed on fire service providers. Removing a bird's nest from a light fixture and extricating injured victims from a vehicle collision are examples of day-to-day details handled by fire departments. Fire personnel must therefore be trained and then cross-trained in diverse subject areas.

FIRE SERVICE TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PE	4066	Resistance and Cardiorespiratory Training	0	2	1
EMS	4760	Emergency Medical Technician Basic Training 1	3	3	4
FST	4773	Volunteer Firefighter	2	2	3
			8	7	11
SECOND TERM					
EMS	4761	Emergency Medical Technician Basic Training 2	3	6	5
FST	4785	Law and Emergency Service Providers	3	0	3
FST	4789	Firefighter Internship	0	12	2
MCH	4816	Health and Wellness Promotion	2	0	2
			8	18	12
THIRD TERM					
PHI	1625	Ethics	3	0	3
ASM	2528	Outdoor Power Equipment Service and Repair	2	2	3
FST	4774	Firefighter Transition	4	4	5
			9	6	11
FOURTH TERM					
FST	4775	Firefighter Agility Skills	1	2	2
FST	4776	Thermal Imaging for the Firefighter	1	2	2
FST	4784	Firefighter 2	6	6	8
			8	10	12
FIFTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
PHY	2224	Fire Service Physics	2	3	3
DT	4136	Personal Nutrition	2	2	3
	XXXX	OT Elective	3	0	3
			10	5	12
SIXTH TERM					
ENG	1010	Technical Writing 1	3	0	3
FST	4786	Fire Company Officer Management	3	0	3
EVET	7607	Environmental Sampling	2	3	3
EET	7736	Electrical Power Systems	4	2	4
			12	5	13
SEVENTH TERM					
ENG	1015	Technical Writing 2	3	0	3
FST	4777	Emergency Vehicle Safety and Maintenance	1	2	2
FST	4778	Fire Service Rapid Intervention Techniques	1	2	2
FST	4790	Firefighter Self Rescue	1	3	2
	XXXX	Humanities/Social Science Elective	3	0	3
			9	7	12
EIGHTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
FST	4787	Structures and Fire Concerns 1	2	0	2
EVET	7670	Regulations & Permits	2	3	3
	XXXX	Fire Service Program Elective	3	0	3
			10	3	11
NINTH TERM					
SPE	1027	Team Building and Group Facilitation	3	0	3
FST	4788	Structures and Fire Concerns 2	2	0	2
FST	4792	Fire Service Blueprint Reading	2	2	3
	XXXX	Fire Service Program Elective	3	0	3
			10	2	11
TENTH TERM					
	XXXX	Electives	12	0	12
					117

Tenth Term: Students complete the minimum of 12 credit hours of Fire Service Program electives.
Fire Service Program Electives: FRN 1060, GRM 1070, SPN 1080, ITP 1086, MAT 1111, ART 1690, ASM 2528, ASM 2540, BIO 4014, BIO 4015, BIO 4016, PE 4055, PE 4056, PE 4057, EMS 4762, FST 4779, CET 7916, CET 7931, FST 4791, FST 4793, FST 4796, FST 4798, FST 4799, HFT 4170, HFT 4171, EVET 7608, EVET 7610, ITET 5971, ITET 5972, ITET 5973, ITET 5974, ITET 5975, ITET 5976, ITET 5977, ITET 5978, ITET 5979
Humanities/Social Science Electives: Any ECO, GEO, HIS, SOC, LIT, ART 1660, CULT 1645, CULT 1646, CULT 1647, MUS 1665, LBR 1535, LBR 1537, LBR 1538, LBR 1539, PSY 1502, PSY 1503, PSY 1505, PSY 1506, PSY 1508, PSY 1509, PSY 1510, PHI 1620, PHI 1621, PHI 1625, PHI 1628, PHI 1630
OT Electives: OT 1861, OT 1863, OT 3007, OT 3058, OT 3059, OT 3062, OT 3068, OT 3092, OT 3095, OT 3096

Health and Fitness Technology Program (HFT)

Program Chair - Pat Morganroth, RN, CDE

Health and Fitness Technicians work in many areas of

health promotion. Technicians may conduct health and fitness screenings and design and lead land and/or aquatic aerobic exercise programs. They may organize special events, health promotion programs, and recreational activities. Health and Fitness Technicians motivate members, adapt exercises, and monitor safety and progress.

The Health and Fitness program is a two-year Associate of Applied Science degree program that includes a health and fitness internship and two paid cooperative education terms. Health and Fitness Technicians may obtain certification in one or more areas: group fitness instructor, aquatic aerobics instructor, personal fitness trainer, resistance training instructor, and special populations trainer.

HEALTH AND FITNESS TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4153	Foundations of Exercise Science	3	2	4
HFT	4163	Foundations of Health and Fitness	2	2	3
EMS	4730	CPR for Health Care Professionals	0	2	1
EMS	4731	First Aid	0	2	1
			5	8	9
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
PE	40XX	Physical Education Elective	0	2	1
MCH	4817	Integrative Therapies for Holistic Health	3	2	4
			9	6	12
THIRD TERM					
DT	4136	Personal Nutrition	2	2	3
ENG	1002	English Composition 2	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
PE	40XX	Physical Education Elective	0	2	1
			8	6	11
FOURTH TERM					
BIO	4016	Anatomy and Physiology 3	3	2	4
PE	40XX	Physical Education Elective	0	2	1
DT	4102	Nutrition for the Life Cycle	3	2	4
BUS.	XXXX	Business Elective	3	0	3
			9	6	12
FIFTH TERM					
ENG	10XX	English Elective	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
MCH	4819	Problem-Solving for the Health Care Professional	2	0	2
	XXXX	Humanities/Social Science Elective	3	0	3
			9	2	10
SIXTH TERM					
CULT	1602	Issues in Human Diversity	3	0	3
DT	4137	Personal Healthy Cooking	1	3	2
HFT	4169	Fitness Assessment	2	2	3
HFT	4180	Leading and Developing Exercise Programs	2	2	3
			8	7	11
SEVENTH TERM					
HFT	4161	Health and Fitness Practicum	1	13	2
HFT	4164	Developing Exercise Prescriptions	2	2	3
BUS	XXXX	Business Elective	3	0	3
			6	15	8
EIGHTH TERM					
MKT	2901	Principles of Marketing 1	3	0	3
HFT	4182	Community Health Assessment	2	2	3
	XXXX	Humanities/Social Science Elective	3	0	3
			8	2	9
NINTH TERM					
SPE	1022	Professional Presentations	2	2	3
HFT	4183	Health and Fitness Internship	1	16	3
HFT	4XXX	HFT Electives	7	7	14
			10	25	20
					102

Health and Fitness Electives: Select a minimum of 14 credit hours from the following courses: HFT 4058, HFT 4060, HFT 4160, HFT 4162, HFT 4165, HFT 4166, HFT 4170, HFT 4171, HFT 4172, HFT 4173, HFT 4174, HFT 4175, HFT 4176, HFT 4177, HFT 4178, HFT 4185, HFT 4186, HFT 4167, HFT 4168. Students may complete HFT electives during any term.
Business Elective: ACC 2911, MGT 1832, MGT 2967, MGT 2971, MGT 2972
Physical Education Elective: PE 4055, PE 4056, PE 4057, PE 4062, PE 4063, PE 4064, PE 4065, PE 4066, PE 4067, PE 4068, PE 4069, PE 4070, PE 4051, PE 4052, PE 4050, PE 4076, PE 4077, PE 4078
Humanities/Social Science Elective: Any 15XX or 16XX course
English Elective: ENG 1003, ENG 1010, ENG 1011

Health Information Management Program (HIM) (formerly Medical Records Technology)

Program Chair - Gail Smith, RHIA, CCS-P

Health Information Management focuses on health care data and managing information resources. Students learn to collect, integrate, and analyze primary and secondary health care data; disseminate information; and manage information resources related to the research, planning, provision, payment, and evaluation of health care services. Students have the opportunity for paid cooperative education experiences.

The HIM program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the American Health Information Management Association's Council on Accreditation. Graduates earn an Associate of Applied Science degree and are eligible to take the national certification examination for health information technicians. After successful completion of this exam, the individual is designated as a Registered Health Information Technician (RHIT).

HEALTH INFORMATION MANAGEMENT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4002	Informatics in Health Care	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
HIM	4405	Orientation to Health Information	3	0	3
HIM	4406	Records Management	1	2	2
MCH	4806	Medical Terminology 1	3	0	3
			11	6	14
SECOND TERM					
BIO	4074	Human Disease	3	0	3
HIM	4407	Health Record Content and Format	2	2	3
HIM	4415	Legal Aspects of Health Information	3	0	3
MCH	4807	Medical Terminology 2	3	0	3
			11	2	12
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1502	Human Relations-Applied Psychology	3	0	3
HIM	4411	Clinical Abstracting	2	4	4
HIM	4420	Basic ICD-9-CM Coding	2	2	3

HIM	4428	Health Information Management-Record Management Directed Practice	1	4	2
			11	10	15
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
HIM	4421	Intermediate ICD-9-CM Coding	3	2	4
HIM	4432	Alternative Health Record Systems	3	0	3
HIM	9373	Cooperative Parallel Education - HIM	1	20	1
OT	XXXX	Computer Elective	2	2	3
			12	24	14
FIFTH TERM					
SPE	1020	Public Speaking	3	0	3
HIM	4410	Basic CPT Coding	3	2	4
HIM	4417	Statistical Applications in Health Care	3	2	4
HIM	9373	Cooperative Parallel Education - HIM	1	20	1
			10	24	12
SIXTH TERM					
HIM	4449	Medical Billing Procedures	2	4	4
HIM	4451	Intermediate CPT Coding	2	2	3
HIM	9373	Cooperative Parallel Education - HIM	1	20	1
			5	26	8
SEVENTH TERM					
HIM	4422	Clinical Classification Systems	2	2	3
HIM	4450	Reimbursement Methodologies	2	2	3
HIM	4452	Coding Skills Clinical Lab	0	3	1
HIM	9373	Cooperative Parallel Education - HIM	1	20	1
	XXXX	Humanities/Social Science Elective	3	0	3
			8	27	11
EIGHTH TERM					
HIM	4431	Health Information Department Management	4	0	4
HIM	4453	Quality Assessment in Health Information Management	3	0	3
	XXXX	Humanities/Social Science Elective	3	0	3
			10	0	10
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
HIM	4409	HIM Seminar	3	0	3
HIM	4429	Health Information Management Directed Practice 2	2	8	4
HIM	4490	HIM Capstone	1	0	1
			9	8	11
					107

Humanities/Social Science Elective (Must select coursework from at least two different departments: ECO 1512, ECO 1513, ECO 1514, GEO 1551, GEO 1552, GEO 1553, HST 1561, HST 1562, HST 1563, HST 1568, HST 1569, HST 1570, HST 1575, HST 1576, HST 1577, 1578, LBR 1535, LBR 1538, LBR 1539, PSY 1502, PSY 1503, PSY 1505, PSY 1506, PSY 1508, PSY 1509, PSY 1510, SOC 1521, SOC 1523, SOC 1524, SOC 1525, SOC 1526, SOC 1527, SOC 1528, SOC 1529, CULT 1602, CULT 1645, CULT 1646, CULT 1647, CULT 1660, CULT 1665, LIT 1040, LIT 1041, LIT 1042, LIT 1045, LIT 1046, LIT 1047, LIT 1050, LIT 1055, LIT 1059, PHI 1620, PHI 1621, PHI 1625, PHI 1630

Computer Electives: OT 1863, OT 3036, OT 3058, OT 3062, OT 3064, OT 3068

Integrative Medical Massage Therapy Program (IMT)

Program Chair - Carolyn Laemmle, MT (ASCP)
Advisor - Daphne Robinson, RHIT

The Medical Massage Therapist is rapidly becoming an important member of the health care team, providing specialized massage therapy for a range of health problems. As the health care industry expands to incorporate wellness, fitness, disease prevention, and chronic pain management, the massage therapist works in a variety of health care settings, including hospitals, clinics, extended care facilities, and wellness centers. A Medical Massage Therapist is also qualified to establish a private practice.

The Integrative Medical Massage Therapy program is a two-year Associate of Applied Science degree program that combines courses related to health and wellness, business, and general education with the specialized massage therapy courses. Cincinnati State offers this program through a partnership with the SHI Integrative Medical Massage School. Upon successful completion of the two-year program the graduate is eligible to take the State of Ohio licensure examination for medical massage.

INTEGRATIVE MEDICAL MASSAGE THERAPY TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MCH	4001	Introduction to the Health Care System	2	0	2
BIO	4014	Anatomy and Physiology 1	3	2	4
MCH	4816	Health and Wellness Promotion	2	0	2
			10	2	11
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PHI	1625	Ethics	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
EMS	4730	CPR for Health Care Professionals	0	2	1
EMS	4731	First Aid	0	2	1
			9	6	12
THIRD TERM					
SPE	10XX	Speech Elective	3	0	3
PSY	15XX	Psychology Elective	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
IMT	4855	Introduction to Integrative Medical Massage	1	2	2
			10	4	12
FOURTH TERM					
CULT	1602	Issues in Human Diversity	3	0	3
IMT	4085	Clinical Anatomy and Physiology for the Massage Therapist 1	3	6	5
IMT	4856	Integrative Medical Massage 2	3	4	5
			9	10	13
FIFTH TERM					
IMT	4086	Clinical Anatomy and Physiology for the Massage Therapist 2	3	6	5
MCH	4840	Orientation to the Health Record and Legal Issues	2	2	3
IMT	4857	Integrative Medical Massage 3	3	4	5
			8	12	13
SIXTH TERM					
MGT	2971	Small Business Start-Up 1	3	0	3
IMT	4087	Clinical Anatomy and Physiology for the Massage Therapist 3	3	6	5
IMT	4858	Integrative Medical Massage 4	3	4	5
			9	10	13
SEVENTH TERM					
IMT	4088	Clinical Anatomy and Physiology for the Massage Therapist 4	3	6	5
IMT	4859	Integrative Medical Massage 5	3	4	5
IMT	4892	Business Practices for the Medical Massage Therapist	3	0	3
			9	10	13
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
IMT	4089	Clinical Anatomy and Physiology			

		for the Massage Therapist 5	3	6	5
IMT	4852	Integrative Medical Massage Student Clinic	3	6	5
			9	12	13
NINTH TERM					
IMT	4894	IMT Clinical Anatomy Review	3	0	3
IMT	4895	IMT Comprehensive Review of Massage Therapy	3	0	3
	XXXX	Business Elective	3	0	3
			9	0	9
					109

English Elective: ENG 1003, ENG 1010
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Psychology Elective: PSY 1502, PSY 1505
Business Elective: OT 1850, MKT 2901, MGT 2967

Associate of Technical Studies - Integrative Medical Massage Therapy (IMT-ATS) (for licensed therapists)

Program Chair – Carolyn Laemmle, MT (ASCP)

Licensed Massage Therapists work in many specialized areas of interest including sports massage, pain management, hospital massage, and on-site in businesses and industry.

The Integrative Medical Massage Therapy Program is offered through a partnership between Cincinnati State and the SHI Integrative Medical Massage School. Graduates earn an Associate of Technical Studies degree (ATS).

The course of study combines courses related to health and wellness, business, and general education studies to prepare graduates for employment in a variety of settings with a variety of patients. Many graduates seek self-employment as private practitioners or as associates in a physician's office, psychiatric or community hospital, hospice organization, or health spa.

ASSOCIATE OF TECHNICAL STUDIES - INTEGRATIVE MEDICAL MASSAGE THERAPY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State. Admission to the program requires a current license in massage therapy from the Ohio Medical Board.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective	4	0	4
PSY	1505	Introduction to Psychology 1	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
MCH	4816	Health and Wellness Promotion	2	0	2
			13	2	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PHI	1625	Ethics	3	0	3
MCH	4817	Integrative Therapies for Holistic Health	3	2	4
MCH	4840	Orientation to the Health Record and Legal Issues	2	2	3
			11	4	13
THIRD TERM					
ENG	1010	Technical Writing 1	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
MCH	4882	Law and Ethics for Health Care	3	0	3
	XXXX	Business Elective	3	0	3
			12	0	12
FOURTH TERM					
SPE	1022	Professional Presentations	2	2	3
BIO	4020	Fundamentals of Pathophysiology	5	0	5
IMT	4851	Integrative Medical Massage in Health Care Settings	1	3	2
MCH	4897	Massage Therapy Special Studies	45	0	45
	XXXX	Business Elective	3	0	3
			56	5	58
					97

Completed at SHI Integrative Medical Massage School: MCH 4897
Business Elective: OT 1850, MKT 2901, MGT 2967, MGT 2971
Math Elective: MAT 1105, MAT 1151

Medical Assistant Technology Program (MAC and MA)

Program Chair - Olivia Watts, RN

Medical Assistants are multicompetent, multiskilled professionals who perform administrative, clinical, and management functions. They keep up with the dynamic changes in health care and medical practice organizations.

The Medical Assistant Program prepares students to work in physicians' offices providing patient care, performing administrative tasks, and managing the medical office. Administrative tasks include: filing, scheduling appointments, handling correspondence, maintaining patient records, office management, billing, bookkeeping, and completing insurance forms. Clinical tasks involve: taking and recording medical histories, preparing patients for examinations, assisting with examinations and office surgeries, and measuring vital signs, performing therapeutic and diagnostic tests, and giving injections. Graduates earn an Associate of Applied Science degree. As managers, Medical Assistants manage patient care, office personnel, and physician's time.

Students may earn the Medical Assistant technical certificate (MAC) in one year. Students who take additional courses may earn the Medical Assistant Clinical Specialist Associate's degree (MA). The first year of the degree program is identical to the curriculum of the certificate program. Students in both the degree and certificate programs must complete supervised clinical practices or externships to develop Medical Assistant competencies. Graduates of the degree and the certificate programs are eligible to take the examination to become a Certified Medical Assistant (CMA). The Medical Assistant Program holds a probationary accreditation status from the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

MEDICAL ASSISTANT CLINICAL SPECIALIST

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
MA	4202	Clinical Procedures 1	3	3	4
MA	4204	Medical Laboratory Procedures 1	3	3	4
MA	4214	Medical Office Computer Literacy	1	3	2
			11	13	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
MA	4200	Medical Office Practice 1	2	3	3

MA	4203	Clinical Procedures 2	3	3	4
MA	4205	Medical Laboratory Procedures 2	3	3	4
			11	9	14
THIRD TERM					
MA	4201	Medical Office Practice 2	2	3	3
MA	4208	Medical Office Insurance and Coding	3	6	5
MA	4211	Medical Assisting Certificate Clinical Experience	1	16	3
			6	25	11
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MA	4209	Medical Assistant Seminar	2	3	3
MA	4245	Medical Office Billing and Reimbursement	3	3	4
			11	6	13
FIFTH TERM					
PSY	1506	Introduction to Psychology 2	3	0	3
MA	4211	Medical Assisting Certificate Clinical Experience	1	16	3
			4	16	6
SIXTH TERM					
ENG	1003	English Composition 3	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
DT	4130	Introduction to Nutrition	3	0	3
MA	4224	Advanced Clinical Procedure	2	3	3
MA	9387	Introduction to Medical Assisting Service Learning	1	1	1
			12	6	14
SEVENTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
PHI	1625	Ethics	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
MA	4206	Office Diagnostic & Treatment Procedures for Medical Assistants 1	2	3	3
			11	5	13
EIGHTH TERM					
ITP	1086	Beginning ASL 1	3	2	4
BIO	4016	Anatomy and Physiology 3	3	2	4
MA	4207	Office Diagnostic & Treatment Procedures for Medical Assistants 2	2	3	3
MCH	4811	Home Health Aide Training	2	0	2
			10	7	13
NINTH TERM					
BIO	4018	Pharmacology	3	0	3
MA	4213	MA Clinical Experience	1	16	3
MA	4215	Medical Assisting Clinical Applications	2	3	3
MA	9388	Medical Assisting Service Learning Project	0	3	1
			6	22	10
					110

MEDICAL ASSISTANT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
MA	4202	Clinical Procedures 1	3	3	4
MA	4204	Medical Laboratory Procedures 1	3	3	4
MA	4214	Medical Office Computer Literacy	1	3	2
			11	13	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
MA	4200	Medical Office Practice 1	2	3	3
MA	4203	Clinical Procedures 2	3	3	4
MA	4205	Medical Laboratory Procedures 2	3	3	4
			11	9	14
THIRD TERM					
MA	4201	Medical Office Practice 2	2	3	3
MA	4208	Medical Office Insurance & Coding	3	6	5
MA	4211	Medical Assisting Certificate Clinical Experience	1	16	3
			6	25	11
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MA	4209	Medical Assistant Seminar	2	3	3
MA	4245	Medical Office Billing and Reimbursement	3	3	4
			11	6	13
FIFTH TERM					
PSY	1506	Introduction to Psychology 2	3	0	3
MA	4211	Medical Assisting Certificate Clinical Experience	1	16	3
			4	16	6
					60

Multi-Competency Health Technician Program (MCH)

Program Chair - Daphne Robinson, RHIT

The Multi-Competency Health Technician program offers a flexible, innovative curriculum that meets the needs of a changing health care marketplace. While working toward the completion of a two-year Associate of Applied Science degree students learn to perform multiple functions in more than one discipline.

While few employment advertisements read, "Multi-Competent Health Technician wanted," there are many jobs requiring multiple skills. Most graduates practice in the area of one of their completed certificates while some manage two allied departments. Others obtain leadership roles in the certificate area they emphasized as students. Graduates work in acute care hospitals, subacute care centers, ambulatory care settings, community health care centers, health maintenance organizations, physician offices and clinics, retirement facilities, and long-term care facilities.

General Education Requirements: 21 credit hours total

- Communication Skills (12 credit hours) including written and oral communication courses
- Social/Behavioral Sciences (6 credit hours)
- Arts and Humanities (3 credit hours)

Basic Studies Requirements: 24 credit hours total

- Sciences (20 credit hours)
- Math (4 credit hours)

Core Technical Requirements: 20 credit hours total

- Medical Terminology
- Introduction to Health Care System
- Emergency Medical Procedures
- Patient Care Skills
- Health Care Management
- Electives

Cooperative Work Experience (4 credit hours total)

- Advanced Placement for related work experience may be possible.

Certificate Courses: A minimum of 34 credit hours of coursework. Select from the clusters below. Students must choose a minimum of two certificates.

Patient Care Cluster - Acute Care Focus

Certificate Title	Technical Credit Hours
Nurse Aide Training (MCH 4810)	6
Patient Care Assistant (MCH 4812)	4
EMT-Basic	9
EKG-Basic & Advanced	7
Geriatric Activity Coordinator	10
	36

Patient Care Cluster - Elder Care Focus

Certificate Title	Technical Credit Hours
Nurse Aide Training (MCH 4810)	6
Geriatric Activities Coordinator	10
EKG – Basic and Advanced	7
Personal Fitness Trainer	10
	33

Environmental Cluster

Certificate Title	Technical Credit Hours
Central Service Technician	29
OSHA Certificate (EVET 7608)	4
Fundamentals of Industrial Hygiene (EVET 7609)	4
	37

Information Technology Cluster

Certificate Title	Technical Credit Hours
Medical Transcription	17
Health Unit Coordinator	16
Medical Billing and Reimbursement (MCH 4898)	3
	36

Diagnostic Cluster

Certificate Title	Technical Credit Hours
Clinical Assistant	11
Lab Value and Interpretation	3
EKG Basic and Advanced.	7
EMT - Basic	10
Home Health Care	1
Medical Billing and Reimbursement (MCH 4898)	3
General X-Ray Machine Operator (MCH 4883)	2
	37

Food Service Cluster

Certificate Title	Technical Credit Hours
Dietary Manager	18
Culinary Arts Certificate	32
	50

The Cincinnati State Bethesda School of Nursing (NUR and NURP)

Program Chair/Director - Alice Palmer, RN, ANP
Program Coordinator/Assistant Director - Joanne Johnson, RNC

The School of Nursing prepares graduate nurses who are eligible to take the national standardized nursing examination (NCLEX-RN) and upon passing, work as registered nurses.

The program is approved by the Ohio Board of Nursing and is accredited by the National League for Nursing Accrediting Commission (61 Broadway, New York, NY 10006, 800-669-1656). Graduates are members of the health team prepared to provide nursing care to clients with common health problems in a variety of settings.

For program eligibility, applicants must be graduates of an accredited high school or give evidence of high school equivalency by GED scores that meet standard core requirements set by the Ohio State Department of Education. Applicants must have grades of "C" or higher in high school or college biology, chemistry, and algebra courses. These courses must have been taken within seven years of application. COMPASS scores must meet program requirements. Applicants must be Ohio state-tested nurse aides. A cumulative grade point average and a specific grade point average of at least 2.5 on a 4.0 scale are required for entry. The cumulative grade point average is based upon all courses attempted at Cincinnati State. The specific grade point average is based upon attempted courses designated as Level One nursing curriculum courses. These courses are: ENG 1001, ENG 1002, PSY 1505, PSY 1506, BIO 4009, BIO 4014, BIO 4015, SOC 1521, and MCH 4816.

Support courses must be taken in the sequence listed in the program curriculum outline unless they have been taken previous to the term required. Students must meet all requirements of the program, receive a minimum grade of "C" or "Pass" in all curriculum courses, attain satisfactory clinical evaluation, and maintain a minimum overall grade point average of 2.0 to remain in, progress through, and complete the program.

Current certification in CPR for health care providers is required for admission into all clinical nursing courses. Students must provide a recent physical exam with up-to-date immunizations, including Hepatitis B, prior to commencing course work. Students must obtain a two-step TB skin test to enter the program and obtain an annual repeat to remain in the program.

During the final term of the curriculum, students must pass a nationally standardized exit exam in order to pass the final clinical course.

Prospective students are advised that when applying for the state licensure examination that they will be required to answer a series of questions related to criminal convictions and reasons for dismissal from work positions. A positive response to any of these questions can result in disqualification as a candidate for licensure. Refer to Ohio Revised Code 4723.28 for clarification.

Students who are admitted to the program who have been convicted of felonies and/or misdemeanors are required to contact the program director to discuss their situation before entering the first nursing course. Students who are convicted of possession and/or distribution of controlled substances, or have positive drug screens for non-prescription controlled substances while enrolled in the program will be automatically dismissed.

A special track for Licensed Practical Nurses (NURP) with recent experience in hospitals or skilled long-term facilities exists, and those interested in this track should request information through the pre-technology nursing advisor or NURP coordinator.

Students who wish to transfer nursing credit from another nursing program to Cincinnati State must contact the pro-

gram chair for specific information after being admitted to the College and program. Students may transfer a maximum of 26 quarter credits. Restrictions may be placed on nursing credit transfer for students who failed a nursing course or courses in another program. Because nursing is a dynamic profession, the program reserves the right to change the curriculum as necessary.

NURSING

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
MCH	4816	Health and Wellness Promotion	1	2	2
			13	4	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4009	General Microbiology	3	3	4
BIO	4015	Anatomy and Physiology 2	3	2	4
			12	5	14
THIRD TERM					
PSY	1508	Psychology: Child Development	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
NUR	4931	Nursing Skills Laboratory 1	0	3	1
NUR	4933	Introduction to Nursing	4	3	5
			10	8	13
FOURTH TERM					
BIO	4018	Pharmacology	3	0	3
NUR	4941	Nursing Skills Laboratory 2	0	3	1
NUR	4943	Common Health Problems in Nursing	6	6	8
NUR	4946	Health Assessment in Nursing 1	1	3	2
			10	12	14
FIFTH TERM					
NUR	49XX	Fifth Term Nursing Elective	1	16	2
SIXTH TERM					
NUR	4953	Mental Health Nursing	3	6	5
NUR	4954	Gerontological Nursing	3	6	5
NUR	4956	Health Assessment in Nursing 2	1	3	2
			7	15	12
SEVENTH TERM					
SPE	102X	Speech Elective	3	0	3
NUR	4963	Perinatal Nursing and Women's Health Issues	3	6	5
NUR	4964	Nursing Care of Children	3	6	5
			9	12	13
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
NUR	4973	Adult Nursing	6	12	10
			9	12	13
NINTH TERM					
NUR	4981	Transitional Clinical Experience	0	18	6
NUR	4982	Management of Client Care	6	0	6
			6	18	12
					108

Fifth Term Nursing Elective: Choose one of the following courses for a minimum of two credit hours: NUR 4937, NUR 4993, or NUR 9372
Speech Elective: SPE 1022, SPE 1024
English Elective: ENG 1010, ENG 1003
Students must complete all courses within a level with minimum grades of C or Pass before progressing to the next curriculum level.

NURSING - LPN ALTERNATIVE

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
MCH	4816	Health and Wellness Promotion	1	2	2
			13	4	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4009	General Microbiology	3	3	4
BIO	4015	Anatomy and Physiology 2	3	2	4
			12	5	14
THIRD TERM					
BIO	4016	Anatomy and Physiology 3	3	2	4
NUR	4920	Applied Nursing Theory Concepts	0	2	1
NUR	4921	Nursing Skills (NURP)	0	2	1
NUR	4945	Health & Physical Assessment 1 (NURP)	1	2	2
			4	8	8
FOURTH TERM					
NUR	4922	Role Transition in Nursing 1	4	4	6
NUR	4955	Health & Physical Assessment 2 (NURP)	1	2	2
			5	6	8
FIFTH TERM					
PSY	1508	Psychology: Child Development	3	0	3
NUR	4923	Role Transition in Nursing 2	4	4	6
			7	4	9
SIXTH TERM					
NUR	4924	Nursing of Children (NURP)	3	4	5
NUR	4925	Perinatal Nursing and Women's Health Issues (NURP)	3	4	5
			6	8	10
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
SPE	10XX	Speech Elective	3	0	3
			6	0	6
EIGHTH TERM					
NUR	4926	Adult Nursing (NURP)	6	8	10
NINTH TERM					
NUR	4927	Role Transition in Nursing 3	6	12	12
					92

Speech Elective: SPE 1022, SPE 1024
English Elective: ENG 1010, ENG 1003
Students may apply for advanced standing credit for the following courses:
BIO 4018 - 3 credits with minimum grade of C in NUR 4921
NUR 4943 - 8 credits with minimum grade of C in NUR 4922
NUR 4954 - 5 credits with minimum grade of C in NUR 4923
NUR 9372 - 2 credits with valid work experience

Required Course Credits: 92
Advanced Standing Credits: 18
Total Credits Required: 108

All courses within a level must be completed with a minimum grade of C or Pass before progressing to the next curriculum level.

Occupational Therapy Assistant Program (OTA)

Program Chair - Claudia Miller, MHS, OTR/L

Occupational therapy is the art and science of directing the human response to selected activity to promote and maintain health, prevent disability, assess behavior, and

treat or train patients with physical or psychological dysfunction.

The graduate Occupational Therapy Assistant is a technically qualified member of the health team who functions under the supervision or consultation of a certified/registered occupational therapist. The Assistant accepts clinical responsibilities in hospitals, nursing homes, schools, rehabilitation centers, or those organizations directed to maintain health and socialization. The graduate demonstrates entry-level competency in analyzing activities and their application to patient needs; occupational therapy concepts and skills (daily living skills, group activities, media used in treatment, and adaptive equipment); direction of activity programs; department operation management; data collection; self understanding and the realization of the effect that one's behavior has on the patient/client and others; upholding the standards of the profession; identifying the need for continuing professional education and growth; and relating occupational therapy to the total health care system.

The mission of this program is to meet community manpower needs, to prepare graduates for entry-level practice in the community, to educate the community, and to function within standards of the College and the American Occupational Therapy Association (AOTA).

The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220, (301) 652-AOTA. Graduates earn an Associate of Applied Science degree and are eligible to sit for the National Certification Examination for the Occupational Therapy Assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be certified as a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. All OTA students must complete Level II fieldwork within 20 months following completion of academic preparation.

OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
OTA	4600	Introduction to Occupational Therapy	2	3	3
			12	7	15
SECOND TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
OTA	4610	Theory of Occupational Therapy	5	0	5
OTA	4620	Techniques of Occupational Therapy	0	4	2
EMS	4735	BLS for Healthcare Providers	0	1	0.5
			14	7	17.5
THIRD TERM					
PSY	1508	Psychology: Child Development	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
OTA	4612	Occupational Therapy Concepts and Skills Infants and Children	3	0	3
OTA	4622	Therapeutic Media - Infants and Children	0	4	2
OTA	4652	Occupational Therapy Assisting Field Work 2 (Level 1)	0	9	2
			9	15	14
FOURTH TERM					
SPE	1027	Team Building and Group Facilitation	3	0	3
OTA	4611	Occupational Therapy Concepts and Skills - Psychosocial	3	0	3
OTA	4621	Occupational Therapy Media - Psychosocial	0	4	2
OTA	4651	Occupational Therapy Assisting Field Work 1 (Level 1)	0	9	2
			6	13	10
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MCH	4001	Introduction to the Health Care System	2	0	2
BIO	4020	Fundamentals of Pathophysiology	5	0	5
OTA	4635	Static Hand Splinting	0	1	0.5
			13	1	13.5
SIXTH TERM					
PSY	1509	Psychology: Adult Development	3	0	3
OTA	4613	Occupational Therapy Concepts and Skills - Physical Disabilities	3	0	3
OTA	4623	Therapeutic Media for Occupational Therapy-Physical Disabilities	0	6	3
OTA	4633	Kinesiology for Occupational Therapy	2	2	3
			8	8	12
SEVENTH TERM					
OTA	4614	Occupational Therapy Concepts and Skills - Gerontology	3	0	3
OTA	4624	Occupational Therapy Therapeutic Media - Gerontology	0	4	2
OTA	4653	Occupational Therapy Assisting Field Work 3 (Level 1)	0	9	2
			3	13	7
EIGHTH TERM					
ENG	1010	Technical Writing 1	3	0	3
OTA	4625	Survey of Therapeutic Media for Occupational Therapy	0	6	3
OTA	4631	Occupational Therapy Fundamentals Practice	3	0	3
			6	6	9
NINTH TERM					
OTA	4660	Occupational Therapy Assisting Field Work 4 (Level 2)	0	40	6
TENTH TERM					
OTA	4661	Occupational Therapy Assisting Field Work 5 (Level 2)	0	40	6
					110

Respiratory Care Program (RC)

Program Chair - Debra Lierl, RRT

Respiratory Care education at Cincinnati State is an Associate of Applied Science degree program that prepares students to administer all routine respiratory care procedures, continuous mechanical ventilation, hemodynamic monitoring, and other specialized diagnostic and therapeutic procedures. Students also receive training in nontraditional areas such as home care and pulmonary rehabilitation. The program is 22 months in duration and includes paid cooperative education and unpaid clinical experiences. Graduates are prepared to work in acute care, long-term care, and home care settings.

The program is fully accredited by the Committee on Accreditation for Respiratory Care (CoARC). Program graduates may apply for the certification examination and registry examination administered by the National Board for Respiratory Care (NBRC). Candidates who pass these exams are recognized as Certified Respiratory Therapy Therapists (CRT) and as Registered Respiratory Therapists (RRT).

RESPIRATORY CARE TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	11XX	Math Elective	4	0	4
PHY	2244	Health Physics 1	3	2	4
BIO	4014	Anatomy and Physiology 1	3	2	4
MCH	4805	Patient Care Skills	1	3	2
			11	7	14
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
RT	4701	Respiratory Care Science 1	3	2	4
RT	4720	Cardiopulmonary Anatomy & Physiology	4	2	5
			13	6	16
THIRD TERM					
BIO	4009	General Microbiology	3	3	4
BIO	4016	Anatomy and Physiology 3	3	2	4
RT	4702	Respiratory Care Science 2	3	3	4
RT	4711	Respiratory Care Clinical Practice 1	0	9	1
			9	17	13
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
BIO	4018	Pharmacology	3	0	3
RT	4703	Respiratory Care Science 3	3	2	4
RT	4712	Respiratory Care Clinical Practice 2	0	9	1
RT	4718	Pulmonary Diseases 1	3	0	3
			12	11	14
FIFTH TERM					
RT	4704	Respiratory Care Science 4	4	3	5
RT	4713	Respiratory Care Clinical Practice 3	0	17	3
RT	4719	Pulmonary Diseases 2	3	0	3
			7	20	11
SIXTH TERM					
RT	4705	Respiratory Care Science 5	3	2	4
RT	4714	Respiratory Care Clinical Practice 4	0	22	4
	XXXX	Humanities/Social Science Elective	3	0	3
			6	24	11
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
BIO	4020	Fundamentals of Pathophysiology	5	0	5
RT	4706	Respiratory Care Science 6	5	0	5
RT	9376	Parallel Cooperative Education - Respiratory Care	1	20	1
RT	9386	Internship - Respiratory Care	1	20	1
			15	40	15
EIGHTH TERM					
RT	4707	Respiratory Care Science 7	3	0	3
RT	4715	Respiratory Care Clinical Practice 5	0	18	3
	XXXX	Humanities/Social Science Elective	3	0	3
	XXXX	Humanities/Social Science Elective	3	0	3
			9	18	12
NINTH TERM					
SPE	10XX	Speech Elective	3	0	3
RT	4716	Respiratory Care Clinical Practice 6	0	20	3
RT	4723	Respiratory Care Seminar	2	2	3
			5	22	9
					115

Humanities/Social Science Elective (Must select coursework from at least two different departments): ECO 1512, ECO 1513, ECO 1514, GEO 1551, GEO 1552, GEO 1553, HST 1561, HST 1562, HST 1563, HST 1568, HST 1569, HST 1570, HST 1575, HST 1576, HST 1577
Math Elective: MAT 1105, MAT 1151
English Elective: ENG 1003, ENG 1010
Speech Elective: SPE 1020, SPE 1022, SPE 1024, SPE 1027

Surgical Technology Program (ST)

Program Chair - Wanda Dantzler, RN, CNOR, CRCST

Surgical Technology, an Associate of Applied Science degree program, prepares practitioners specifically for the operating room scrub role. Employment opportunities include hospital operating room departments, obstetrical departments, surgical supply/processing departments, outpatient surgery centers, and surgeon office practices. Most of the area hospitals are affiliated with the program.

During operative procedures, Surgical Technologists function as an integral part of the surgical team and work directly with the surgeon and registered nurse. Their responsibilities include preparation of operative equipment and supplies, instrumentation during operative procedures, and other intra-operative patient care activities.

Theory and practice are integrated through the use of simulated laboratory experiences and hospital operating room experiences. Students also take supportive coursework in basic sciences, communication skills, and social sciences. Students receive no monetary compensation for clinical coursework.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs in collaboration with the Accreditation Review Committee on Education in Surgical Technology.

Upon satisfactory completion of the curriculum, students are eligible to take the Surgical Technologist National Certifying Examination administered by the Liaison Council on Certification for the Surgical Technologist for designation as a Certified Surgical Technologist (CST). A CST may practice in all 50 states.

SURGICAL TECHNOLOGY

Program prerequisites: MAT 0025 or MAT 1105. All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MCH	4000	Introduction to Medical Terminology	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
ST	4505	Introduction to Surgery 1	5	0	5
			12	4	14
SECOND TERM					
PHY	2245	Health Physics 2	3	2	4
BIO	4009	General Microbiology	3	3	4
ST	4506	Introduction to Surgery 2	5	0	5
ST	4541	ST Surgery Lab	0	3	1
			11	8	14
THIRD TERM					
MCH	4002	Informatics in Health Care	1	2	2
BIO	4015	Anatomy and Physiology 2	3	2	4
ST	4531	General Surgery 1	5	0	5
ST	4542	ST Clinical & Lab Integration 1	1	6	3
			10	10	14

FOURTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
ST	4532	General Surgery 2	5	0	5
ST	4543	ST Clinical & Lab Intregration 2	0	7	3
			11	9	15
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
BIO	4018	Pharmacology	3	0	3
ST	4533	Surgical Specialties 1	5	0	5
ST	4544	Introduction to Clinical Practice	0	6	2
			11	6	13
SIXTH TERM					
ST	4534	Surgical Specialties 2	5	0	5
ST	4551	ST Clinical Practice 1	0	25	5
	XXXX	Humanities/Social Science Elective	3	0	3
			8	25	13
SEVENTH TERM					
ST	4535	Surgical Specialties 3	5	0	5
ST	4552	ST Clinical Practice 2	0	25	5
	XXXX	Humanities/Social Science Elective	3	0	3
			8	25	13
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
MCH	4001	Introduction to the Health Care System	2	0	2
ST	4553	ST Clinical Practice 3	0	25	5
	XXXX	Humanities/Social Science Elective	3	0	3
			8	25	13
					109

Humanities/Social Science Elective (Must select coursework from at least two different departments): ECO 1512, ECO 1513, ECO 1514, GEO 1551, GEO 1552, GEO 1553, HST 1561, HST 1562, HST 1563, HST 1568, HST 1569, HST 1570, HST 1575, HST 1576, HST 1577, HST 1578, LBR 1535, LBR 1538, LBR 1539, PSY 1502, PSY 1503, PSY 1505, PSY 1506, PSY 1508, PSY 1509, PSY 1510, SOC 1521, SOC 1523, SOC 1524, SOC 1525, SOC 1526, SOC 1527, SOC 1528, SOC 1529, CULT 1602, CULT 1645, CULT 1646, CULT 1647, ART 1660, MUS 1665, LIT 1040, LIT 1041, LIT 1042, LIT 1045, LIT 1046, LIT 1047, LIT 1050, LIT 1055, LIT 1059, PHI 1620, PHI 1621, PHI 1625, PHI 1630

English Elective: ENG 1003, ENG 1010

Program Certificates

Aquatic Group Fitness Instructor Certificate (AFIC)

Advisor - Pat Morganroth, RN, CDE

This two-term certificate program prepares students to design and lead comprehensive aquatic classes, teaching to various fitness levels.

After successful completion of the courses graduates are prepared to sit for a National Certification Examination to become a Certified Aquatic Instructor.

Graduates may be employed by health clubs, corporate fitness centers, recreation programs, hospitals, or senior centers. Job activities might include designing safe aquatic classes, scheduling classes, goal setting, and motivation.

AQUATIC GROUP FITNESS INSTRUCTOR CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4162	Fundamentals of Water Aerobics	1	3	2
EMS	4730	CPR for Health Care Professionals	0	2	1
			1	5	3
SECOND TERM					
HFT	4166	Aquatic Group Fitness Instructor	3	2	4
					7

Prerequisites: Admission to college; DE 0020, DE 0010, DE 0003 (or test out); history and physical examination within the last year.

Central Service Technology (CSST)

Program Chair - Wanda Dantzler, RN

This short certificate program acquaints entry-level technicians with the scope of the central service profession and the scientific principles that underlie their daily work. Individuals in this field must have a working knowledge of central service techniques for providing patient care items used in the health care facility.

Central Service Technicians process, store, and distribute supplies and equipment used for patient care. In addition, they participate in the selection and evaluation process of patient care items and assist with inventory control management and preventative equipment maintenance.

The Central Service Technology program is approved by the International Association of Healthcare Central Service Material Management (IAHCSMM). After successful completion of the program, graduates are recognized as Registered Central Service Technicians (RCST). Graduates are eligible for the International Certification Examination administered by IAHCSMM for designation as a Certified Registered Central Service Technician (CRCST). Central Service Technicians may be employed in health care facilities in purchasing, sterile processing, material management, and central service.

CENTRAL SERVICE CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4000	Introduction to Medical Terminology	1	2	2
ST	4584	Introduction to CS Clinical Practice	1	10	2
ST	4590	Introduction to Central Service	5	0	5
ST	4592	Principles of Material Management in Health Care 1	3	0	3
			10	12	12
SECOND TERM					
ST	4580	Central Service Technology 1	5	0	5
ST	4585	Central Service Clinical Practice 1	1	15	3
ST	4593	Principles of Material Management in Health Care 2	3	0	3
			9	15	11
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1502	Human Relations-Applied Psychology	3	0	3
ST	4581	Central Service Technology 2	5	0	5

ST	4586	Central Service Clinical Practice 2	1	15	3
			12	15	14
					37

Clinical Assistant Certificate (CALC)

Program Chair - Janelle Gohn, MT (ASCP)

Clinical Assistants work in clinical laboratories with other laboratory professionals at hospitals and clinics. They collect and process patient specimens used to prevent, detect, treat, and monitor disease. Clinical Assistants prepare specimens for analysis in hematology, clinical chemistry, urinalysis, blood banking, immunology, and microbiology. They also take vital signs and perform basic laboratory tests.

The Clinical Assistant program consists of three terms including a clinical rotation and a paid cooperative education term. The program provides entry into the clinical laboratory profession for those seeking marketable skills in a short period of time.

CLINICAL ASSISTANT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
OT	3007	Introduction to Keyboarding	3	0	3
CLT	4321	Introduction to Clinical Laboratory Science	0.5	0	0.5
CLT	4392	Safety and Standard Precautions for Health Care Personnel	0	1	0.5
CLT	4393	Point-of-Care Laboratory Testing	1	3	2
MCH	4805	Patient Care Skills	1	3	2
			9	7	11
SECOND TERM					
CLT	4322	Physical and Chemical Urinalysis	1	1.5	1.5
CLT	4340	Introduction to Phlebotomy Techniques	0	3	1
CLT	4342	Clinical Specimens and Laboratory Information	0	1	0.5
CLT	4343	Specimen Processing in the Clinical Laboratory	0	3	1
CLT	4350	Orientation to the Clinical Lab	0	8	1
			1	17	5
THIRD TERM					
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
					17

Prerequisites: COMPASS scores that indicate readiness for college level reading, English, and math at the level of DE 0025. High school biology and chemistry with grades of C or higher and within 5 years or BIO 4073 and CHE 2202, CHE 2203.

Coding Specialist Certificate (COC)

Program Chair - Gail Smith, RHIA, CCS-P

This certificate program prepares students to accurately determine coding assignments for ambulatory health care services using ICD-9-CM and CPT coding systems. In many instances, financial reimbursement is tied to these numeric coding assignments.

Coding specialists are in demand in hospitals, physician offices, billing companies, long-term care facilities, and insurance companies.

CODING SPECIALIST CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4002	Informatics in Health Care	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
HIM	4423	Introduction to Coding	2	0	2
MCH	4806	Medical Terminology 1	3	0	3
			9	4	11
SECOND TERM					
BIO	4074	Human Disease	3	0	3
HIM	4407	Health Record Content and Format	2	2	3
MCH	4807	Medical Terminology 2	3	0	3
			8	2	9
THIRD TERM					
HIM	4411	Clinical Abstracting	2	4	4
HIM	4420	Basic ICD-9-CM Coding	2	2	3
			4	6	7
FOURTH TERM					
HIM	4421	Intermediate ICD-9-CM Coding	3	2	4
FIFTH TERM					
HIM	4410	Basic CPT Coding	3	2	4
SIXTH TERM					
HIM	4449	Medical Billing Procedures	2	4	4
HIM	4451	Intermediate CPT Coding	2	2	3
			4	6	7
SEVENTH TERM					
HIM	4450	Reimbursement Methodologies	2	2	3
HIM	4452	Coding Skills Clinical Lab	0	3	1
			2	5	4
					46

Diagnostic Medical Sonography Certificate (DMSGC and DMSCC)

Program Chair, DMSGC - Susan Watson, RDMS
Program Chair, DMSCC - Jackie Turner, RDCS, RVT

Admission to the certificate program requires the completion of an Associate's degree in nursing, radiography, or respiratory therapy. See the Diagnostic Medical Sonography program description on page 105.

DIAGNOSTIC MEDICAL SONOGRAPHY - ABDOMINAL/OBSTETRIC-GYNECOLOGY CERTIFICATE

Admission to the Diagnostic Medical Sonography - Abdominal/ Obstetric-Gynecology Certificate program requires the completion of an Associate Degree in nursing, radiography or respiratory therapy.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4019	Cross Sectional Anatomy	2	2	3
BIO	4020	Fundamentals of Pathophysiology	5	0	5
			7	2	8
SECOND TERM					
DMS	4632	Principles of Diagnostic Medical Sonography	1	0	1
DMS	4637	Sonographic Physics and Instrumentation 1	3	0	3
DMS	4672	Clinical Sonography 1	0	24	3
DMS	4676	Abdominal Sonography	3	2	4
DMS	4683	Gynecological Sonography	2	2	3
			9	28	14
THIRD TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3

DMS	4673	Clinical Sonography 2	0	24	3
DMS	4677	Superficial Small Parts Sonography	2	2	3
DMS	4684	Obstetrical Sonography 1	3	2	4
			8	28	13
FOURTH TERM					
MCH	4001	Introduction to the Health Care System	2	0	2
DMS	4639	Sonographic Physics and Instrumentation 3	3	0	3
DMS	4640	Sonography Department Administration	2	0	2
DMS	4674	Clinical Sonography 3	0	24	3
DMS	4685	Obstetrical Sonography 2	3	2	4
			10	26	14
FIFTH TERM					
DMS	4675	Clinical Sonography 4	0	36	5
DMS	4687	Sonography Seminar	2	0	2
			2	36	7
					56

DIAGNOSTIC MEDICAL SONOGRAPHY CARDIOVASCULAR CERTIFICATE

Admission to the Diagnostic Medical Sonography certificate program requires the completion of an Associate Degree in nursing, radiography, or respiratory therapy.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4019	Cross Sectional Anatomy	2	2	3
BIO	4020	Fundamentals of Pathophysiology	5	0	5
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	3	2	4
			10	4	12
SECOND TERM					
DMS	4632	Principles of Diagnostic Medical Sonography	1	0	1
DMS	4637	Sonographic Physics and Instrumentation 1	3	0	3
DMS	4641	Cardiovascular Clinical 1	0	24	3
DMS	4645	Echocardiography 1	2	2	3
DMS	4648	Vascular Sonography 1	2	2	3
			8	28	13
THIRD TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4642	Cardiovascular Clinical 2	0	24	3
DMS	4646	Echocardiography 2	2	2	3
DMS	4649	Vascular Sonography 2	2	2	3
			7	28	12
FOURTH TERM					
MCH	4001	Introduction to the Health Care System	2	0	2
DMS	4639	Sonographic Physics and Instrumentation 3	3	0	3
DMS	4640	Sonography Department Administration	2	0	2
DMS	4643	Cardiovascular Clinical 3	0	24	3
DMS	4647	Echocardiography 3	3	0	3
			10	24	13
FIFTH TERM					
DMS	4644	Cardiovascular Clinical 4	0	36	5
DMS	4654	Vascular Sonography 3	2	0	2
			2	36	7
SIXTH TERM					
DMS	4650	Cardiovascular Seminar	2	0	2
DMS	4655	Cardiovascular Clinical 5	0	24	3
			2	24	5
					62

Dietary Management Certificate (DMC)

Advisor - Charalee Allen, RD, LD

This one-year certificate program prepares students to manage health care food systems. Coursework occurs through a combination of three to four days on campus and a series of assignments completed at the place of employment.

Graduates are employed in nursing homes, retirement facilities, hospitals, schools, and businesses. Job activities might include supervising food production and distribution; menu planning; employee hiring, training, scheduling, and evaluation; inventory controls; and purchasing, sanitation, and safety controls.

Students enrolled in Culinary courses may take courses from the Dietary Management Certificate Program.

DIETARY MANAGEMENT CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
DT	4110	Food Service Directed Practice for Dietary Managers	0	6	1
DT	4156	Food Service for Dietary Managers	4	0	4
			4	6	5
SECOND TERM					
DT	4118	Sanitation Directed Practice for Dietary Managers	0	2	0.5
DT	4124	Food Service Sanitation Certificate	2	0	2
			2	2	2.5
THIRD TERM					
DMC	4119	Human Resources Directed Practice for Dietary Managers	0	6	1
DT	4159	Human Resources for Dietary Managers	5	0	5
			5	6	6
FOURTH TERM					
DMC	4140	Nutrition Directed Practice for Dietary Managers	0	6	1
DT	4158	Nutrition for Dietary Managers	5	0	5
			5	6	6
					19.5

Electrocardiography (Basic) Certificate

Program Chair - Daphne Robinson, RHIT

This course acquaints students with the basic principles of electrocardiography. The course covers topics in the electrical conductive system of the heart, patient preparation, setting up the ECG machine, and recognizing and correcting distortion problems.

ELECTROCARDIOGRAPHY (BASIC) CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
One Term Certificate					
MCH	4870	Basic Electrocardiography	3	2	4

Electrocardiography (Advanced) - Arrhythmia Recognition Certificate

Program Chair - Daphne Robinson, RHIT

This course is a continuation of the Basic ECG certificate with special emphasis on recognizing arrhythmias. After reviewing basic ECG principles, students learn interpretation of various types of atrial function and ventricular dysrhythmias, performance measurement, and calculation to aid in interpretation of electrocardiograms.

ELECTROCARDIOGRAPHY (ADVANCED) - ARRHYTHMIA RECOGNITION CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
One Term Certificate					
MCH	4871	Advanced Armythmia	3	0	3

Emergency Medical Technician - Basic Certificate (EMT)

Program Chair - Debra Lierl, RRT

This two-term certificate program meets State of Ohio requirements and prepares students to take the EMT-Basic National Registry Exam. Students learn to evaluate the nature and seriousness of patient injuries; assess requirements for emergency care; administer appropriate emergency care to stabilize patient conditions; and lift, move, position, and otherwise handle patients in such a way as to minimize discomfort and further injury. After successfully passing the National Registry Exam, students are eligible to apply for an EMT-Basic certificate in the State of Ohio.

EMERGENCY MEDICAL TECHNICIAN CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
EMS	4760	Emergency Medical Technician Basic Training 1	3	3	4
SECOND TERM					
EMS	4761	Emergency Medical Technician Basic Training 2	3	6	5
					9

Emergency Medical Technician - Paramedic Certificate (EMS)

Program Director - Dale Van de Hatert, EMT/P

Students who have already earned an EMT-Basic certificate may elevate their skills to the paramedic level by completing the EMT-Paramedic certificate curriculum approved by the Ohio Department for Public Safety, Division of Emergency Medical Services. After completing the paramedic certificate curriculum, students are eligible to take the national registry exam. Students who wish to earn an Associate of Applied Science degree as an Emergency Medical Technician-Paramedic should complete the curriculum described on page 107.

EMT-PARAMEDIC CERTIFICATE

Program prerequisites: College level reading, DE 0024 or equivalent, and EMT-basic certification from the State of Ohio. All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
EMS	4762	Paramedic Anatomy and Physiology	4	0	4
SECOND TERM					
EMS	4763	Paramedic Theory and Practice 1	6	4	8
THIRD TERM					
EMS	4764	Paramedic Theory and Practice 2	5	14	12
FOURTH TERM					
EMS	4765	Paramedic Theory and Practice 3	7	6	10
FIFTH TERM					
EMS	4766	Paramedic Theory and Practice 4	7	8	11
SIXTH TERM					
EMS	4767	Paramedic Theory and Practice 5	6	8	10
					55

General X-Ray Machine Operation Certificate

Program Chair - Daphne Robinson, RHIT

This course prepares students for Ohio licensure as general x-ray machine operators. The curriculum includes instruction on radiation physics, radiographic techniques, darkroom processing and film handling, radiation health safety and protection, and radiation biology.

GENERAL X-RAY MACHINE OPERATION CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
One Term Certificate					
MCH	4883	General X-Ray Machine Operation	2	0	2

Geriatric Activities Coordinator Certificate (GAC)

Program Chair - Claudia Miller, OTR/L

In this three-term certificate program students learn to plan and implement diversional activities for geriatric clients. Graduates are eligible for employment in facilities that use diversional activities with geriatric clients. Job duties include planning and implementing individual and group diversional activities and involvement on the care planning team. An additional 90 hours of practicum experience is necessary for NCCAP-BEC certification.

GERIATRIC ACTIVITIES COORDINATOR CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
OTA	4680	Introduction to Activities for Geriatrics	3	2	4
SECOND TERM					
OTA	4681	Activity Planning for Geriatrics	3	3	4
THIRD TERM					
OTA	4682	Geriatric Activity Coordinator Practicum	1	10	2
					10

Prerequisites: Admitted to Cincinnati State; COMPASS scores indicating readiness for DE 0011, DE 0004, DE 0024; history and physical examination within the last year.

Group Fitness Instructor Certificate (GFIC)

Program Chair - Pat Morganroth, RN, CDE

Job activities for Group Fitness Instructors may include designing safe traditional and/or step aerobic classes, scheduling classes, setting goals, and motivating participants. After successful completion of the certificate program, graduates are prepared to sit for a national certification examination to become a Certified Group Fitness instructor. Graduates may work in health clubs, corporate fitness centers, aerobic studios, or recreation programs.

GROUP FITNESS INSTRUCTOR CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4160	Fundamentals of Aerobics	1	3	2
EMS	4730	CPR for Health Care Professionals	0	2	1
			1	5	3
SECOND TERM					
HFT	4165	Group Fitness Instructor	2	4	4
					7

Prerequisites: Admission to Cincinnati State; DE 0010, DE 0003, DE 0020, or test out; history and physical examination within the last year.

Health Unit Coordinator (UCMR)

Program Chair - Daphne Robinson, RHIT

This program is for students who wish to develop marketable skills as entry-level medical clerical workers. Job duties include assembling and maintaining patient charts; processing doctor's orders; processing admissions, transfers, and discharges; and scheduling diagnostic procedures.

The first two terms of this four-term program consist of coursework covering Health Unit Coordinator procedures and communication skills. The third and fourth terms include a non-paid clinical rotation at an area health care organization along with additional classes.

The Health Unit Coordinator program meets the standards of education as published by the National Association of Health Unit Coordinators. Completion of the program qualifies students to take the National Certification Exam for Health Unit Coordinators.

HEALTH UNIT COORDINATOR CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MCH	4000	Introduction to Medical Terminology	1	2	2
MCH	4840	Orientation to the Health Record	2	2	3
			6	4	8
SECOND TERM					
OT	30XX	Word Processing Elective	2	3	3
MCH	4004	Medical Terminology 2	1	2	2
MCH	4841	Unit Coordinator Procedures 1	2	2	3
			5	7	8
THIRD TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
MCH	4001	Introduction to the Health Care System	2	0	2
MCH	4008	Medical Terminology 3	1	2	2
MCH	4842	Unit Coordinator Procedures 2	2	4	4
			8	6	11
FOURTH TERM					
MCH	4849	Unit Coordinator Practicum and Seminar	3	18	6
			3	18	6
					33

Word Processing Elective: OT 3061 or other courses approved by Program Chair

Medical Assistant Certificate - see page 112.

Medical Transcriptionist (MRTC)

Advisor - Sandy Speller, RHIT

The Medical Transcriptionist program is for students who wish to develop marketable medical transcription skills in a short period of time. The program is offered in four terms with classes held in the late afternoon, evening, and on the Internet. Medical Transcriptionists transcribe dictation by physicians and other healthcare professionals regarding patient assessment, workup, therapeutic procedures, clinical course, and other reports in order to document patient care and facilitate delivery of healthcare services.

Medical Transcriptionists work in the medical transcription or central dictation area in hospitals, clinics, physicians' offices, neighborhood health centers, health departments, health maintenance organizations, medical transcription companies, health insurance offices, and medical research and teaching centers.

MEDICAL TRANSCRIPTIONIST CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MCH	4000	Introduction to Medical Terminology	1	2	2
MCH	4840	Orientation to the Health Record and Legal Issues	2	2	3
			6	4	8
SECOND TERM					
MCH	4004	Medical Terminology 2	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
MCH	4820	Medical Transcription 1	3	2	4
			7	6	10
THIRD TERM					
MCH	4008	Medical Terminology 3	1	2	2
BIO	4074	Human Disease	3	0	3
MCH	4821	Medical Transcription 2	3	2	4
			7	4	9
FOURTH TERM					
MCH	4822	Medical Transcription 3	3	2	4
			3	2	4
					31

Nurse Aide Training Certificate

Program Director - Stephanie Heesten, RN

The Nurse Aide Training course teaches the skills needed to care for patients in a nursing home or long-term care facility. These skills include bed making, checking temperatures, monitoring pulse and respiration, giving baths and back rubs, understanding infection control precautions, feeding residents, and lifting safely to accomplish tasks without injury to self or residents. Students practice these skills in a simulated patient room and apply them in long-term care facilities with guidance from professional instructors.

Upon successful completion of the program, students are eligible to take the Competency Test offered by the Ohio Department of Health.

Students must obtain a health history, physical, and 2-step PPD prior to starting the program.

NURSE AIDE TRAINING CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
One Term Certificate					
MCH	4810	Nurse Aide Training	4	6	6

Patient Care Assistant Certificate

Program Director - Stephanie Heesten, RN

The Patient Care Assistant is an unlicensed assistant who supports the professional nurse in providing basic patient care in an acute care setting. Patient Care Assistants are trained to work in hospitals in general Medical/Surgical units. The program builds upon the content covered in the Nurse Aide Training and Competency Evaluation Program. It addresses role definition, clarification, and patient focus; communication (including medical terminology); overview of basic anatomy and physiology concepts and associated common normal/abnormal observations; overview of nutrition and diet therapy; pre- and post- operative care; functional health patterns related to hospitalized patients; and associated patient care skills.

Prospective students must have State-Tested Nurse Aide certification and a high school diploma or GED equivalent.

PATIENT CARE ASSISTANT CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
One Term Certificate					
MCH	4812	Intro to Patient Care Assistant Role	4	0	4

Personal Fitness Trainer Certificate (PFTC)

Program Chair - Pat Morganroth, RN, CDE

This three-term certificate program prepares students to develop safe fitness programs focused on health maintenance for healthy individuals.

Graduates may be employed by health clubs, fitness centers, or wellness centers. Job activities may include fitness testing and risk factor identification, conducting individual and group exercise programs, counseling in behavior modification, and designing individualized fitness programs.

After successful completion of the courses (or certificate program) graduates are prepared to sit for a national examination to become a Certified Personal Fitness Instructor.

PERSONAL FITNESS TRAINER CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4073	Concepts of Biology 3	3	2	4
EMS	4730	CPR for Health Care Professionals	0	2	1
EMS	4731	First Aid	0	2	1
			3	6	6
SECOND TERM					
BIO	4075	Foundations of Exercise Science	3	2	4
HFT	4170	Personal Fitness Trainer 1	3	2	4
			6	4	8
THIRD TERM					
HFT	4171	Personal Fitness Trainer 2	3	2	4
					18

Prerequisites: Admission to Cincinnati State; DE 0024, DE 0011, DE 0005, or test out; history and physical examination within the last year.

Resistance Training Certificate (RSTC)

Program Chair - Pat Morganroth, RN, CDE

This certificate prepares students to develop safe, effective, and efficient resistance training programs. Students evaluate biomedical, physiological, and genetics factors affecting strength and muscle tissue gain and learn proper form, technique, and spotting for resistance exercises using body weight, free weights, resistance machines, and other resistance-training disciplines. Proper program design and implementation are applied to both healthy adults and special populations.

Graduates may be employed as corporate, community, or hospital-based fitness and personal resistance program trainers.

RESISTANCE TRAINING CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4185	Fundamentals of Resistance Training	2	2	3
EMS	4730	CPR for Health Care Professionals	0	2	1
EMS	4731	First Aid	0	2	1
			2	6	5
SECOND TERM					
HFT	4186	Resistance Training Development and Implementation	2	2	3
					8

Prerequisites: Admission to Cincinnati State; DE 0020, DE 0010, DE 0003, or test out; history and physical examination within the last year.

Restorative Aide Certificate

Program Director - Stephanie Heesten, RN

This course provides an overview of the restorative aide's role and responsibilities. Students learn lifting, moving, and ambulation procedures; care of individuals with musculoskeletal, neurological, and integumentary conditions; restorative approaches to meeting nutrition, hydration, activities of daily living, and personal care needs; and care documentation.

Prospective students must have State-Tested Nurse Aide or current Nurse Aide Certification.

RESTORATIVE AIDE CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
One Term Certificate					
MCH	4813	Restorative Aide Training	1	2	2

Humanities Division

Main Phone Number: (513) 569-1700

The Humanities Division recognizes that each student has a unique combination of attitudes, beliefs, values, and experiences. The Humanities Division's courses enable students to understand the forces that shape them, especially in the psychological, social, and economic areas, and provide tools that assist students either in controlling or adapting to these forces.

Foremost among these tools is effective communication, both oral and written. Therefore, the Division offers a number of courses that enhance communication skills by

developing critical thinking techniques and the ability to present information in a clear, organized manner. To set the stage for success in the college experience, degree-seeking students are required to complete the college orientation course CAR 9002, College Success Strategies, within the first 18 credit hours taken at Cincinnati State.

The Humanities Division offers the following degrees: Associate of Arts, Associate of Applied Science in Early Childhood Care and Education, Associate of Applied Science in Interpreter Training, and Associate of Technical Study in Law Enforcement. The Division also offers the four certificate programs described below.

Entrance Competencies

In order to ensure a high degree of success in academic studies in Humanities, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education

The Humanities Division shares the College's commitment to cooperative education as an integral part of the curriculum. Cooperative education allows students to apply concepts learned in the classroom with practical, hands-on experience in full-time or part-time on-site work environments. In some cases, degree-seeking students with prior work experience related to their post-baccalaureate career goals may be eligible to receive credit through the standard College procedures for granting Advanced Standing Credit. The program chair and cooperative education coordinator must approve all substitutions in advance.

For eligibility requirements, co-op registration policies, and other issues related to cooperative education, please refer to the “Cooperative Education” section of the catalog on pages 27 and 28.

The Writing Center

The Writing Center provides full-service tutoring to Cincinnati State students. Tutors are available by appointment or walk-in to help provide guidance to students in all facets of the writing process.

Individualized composition courses are offered in the Writing Center. For individualized courses, students meet one-on-one with the course instructor to review material and complete assignments. The individualized courses offered each term are designated as course type "I" in class schedules.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

The Associate of Arts degree contains all of the required courses for the transfer module, and the two Associate of Applied Science degrees contain many of the required courses. Students may schedule additional courses needed to complete the transfer module at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that an Associate of Arts degree or an Associate of Applied Science degree, combined with a transfer module showing grades of "C" or higher, leads to preferential consideration at the receiving institution.

Early Childhood Care and Education Program (ECE)

Program Chair - Crystal Bossard

The Early Childhood Care and Education Program includes three components: the Associate of Applied Science degree, the one-year Early Childhood Care and Education certificate, and the Early Childhood Care and Education Leadership certificate. The program espouses the values of the National Association for the Education of Young Children and the Council for Early Childhood Professional Recognition. Students who complete the one-year ECEC certificate or the Associate’s degree are eligible to apply for the Child Development Association (CDA) credential awarded by the Council for Early Childhood Professional Recognition.

Graduates of the program may find employment in the following jobs: Child Care Teacher, School Age Program Teacher, Pre-Kindergarten Program Teacher, Head Start Lead Teacher, Center Director, Exceptional Child Program Assistant, Parent Cooperative Worker, or Public School Teacher Assistant.

EARLY CHILDHOOD CARE AND EDUCATION

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
OT	305X	Word Processing Elective	2	3	3
ECE	4359	Introduction to Childcare	2	0	2
ECE	4368	Early Childhood Observation Techniques	2	0	2
ECE	4371	Communicable Diseases of Early Childhood	1	0	1
ECE	4372	Child Abuse Recognition and Prevention	1	0	1
EMS	4733	CPR - Pedriatric Basic Life Support	0	1	0.5
EMS	4734	CPR & First Aid - BLS Heartsaver FACTS	0	1	0.5
			11	5	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
ECE	4360	Principles of Early Childhood Education	3	0	3

ECE	4361	Early Childhood 1 - Infant/Toddler	3	0	3
ECE	4362	Early Childhood Practicum 1 - Infant/Toddler	1	7	2
ECE	4374	Language Development and Literature for Childhood Programs	3	0	3
			16	7	17
THIRD TERM					
ENG	1010	Technical Writing 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
ECE	4363	Early Childhood 2 - Preschool	3	0	3
ECE	4364	Early Childhood Practicum 2 - Preschool	1	7	2
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
			15	7	16
FOURTH TERM					
PSY	1508	Psychology: Child Development	3	0	3
	16XX	Art or Music Elective	3	0	3
ECE	4365	Early Childhood 3 - School Age	3	0	3
ECE	4366	Early Childhood Practicum 3 - School Age	1	7	2
ECE	4367	Enrichment Activities for Early Childhood Programs	3	0	3
ECE	4370	Nutrition and Health for Early Childhood Programs	3	0	3
			16	7	17
FIFTH TERM					
SPE	1020	Public Speaking	3	0	3
BIO	4071	Concepts of Biology 1	3	2	4
ECE	4373	Creating Safe Environments for Early Childhood Programs	3	0	3
ECE	4375	Diversity Education for Early Childhood Programs	3	0	3
ECE	4381	Early Literacy 1	3	0	3
			15	2	16
SIXTH TERM					
ECE	4376	Special Needs Children	3	0	3
ECE	4382	Early Literacy 2	3	0	3
ECE	4384	Curriculum Design and Technology	3	0	3
ECE	4386	Professional, Legal, and Ethical Issues in Childcare	3	0	3
	XXXX	Humanities/Social Sciences Elective	3	0	3
			15	0	15
SEVENTH TERM					
ECE	4378	Administration of Childcare Centers	3	0	3
ECE	4379	Administration Practicum	1	7	2
ECE	4383	Early Literacy 3	3	0	3
ECE	4387	Special Topics in Early Childhood Care and Education	0	0	0
TC	5034	Planning and Developing Proposals	3	2	4
			10	9	12
EIGHTH TERM					
ECE	9901	Cooperative Education - Early Childhood Care and Education	1	40	2
					109

Word Processing Elective: OT 3058, OT 3059
Art Elective: ART 1660, ART 1662, ART 1663, ART 1664
Music Elective: MUS 1665, MUS 1666, MUS 1667
Humanities/Social Sciences Elective: LIT 1040, LIT 1054, LIT 1057, SOC 1526, GEO 1551, HST 1561, HST 1562, HST 1563, HST 1568, HST 1569, HST 1570, HST 1576, HST 1577, HST 1578, PHI 1630, THE 1670, THE 1671

Early Childhood Care and Education Certificate (ECEC)

Program Chair - Crystal Bossard

The Early Childhood Care and Education certificate program prepares students for entry-level positions in a variety of child care settings. Graduates are prepared to assist parents in meeting the physical, emotional, and maturational needs of children from infancy to kindergarten.

Entrance requirements include: a background check, ability to perform and assist children in daily activities, physical examination, and up-to-date immunizations.

Students who complete the certificate are eligible to apply for the Child Development Association (CDA) credential, awarded by the Council for Early Childhood Professional Recognition. This credential is awarded to competent care providers and home providers who have demonstrated the ability to meet the needs of children and parents in the home and in various childcare centers.

EARLY CHILDHOOD CARE AND EDUCATION CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
ECE	4359	Introduction to Childcare	2	0	2
ECE	4360	Principles of Early Childhood Education	3	0	3
ECE	4368	Early Childhood Observation Techniques	2	0	2
ECE	4372	Child Abuse Recognition and Prevention	1	0	1
EMS	4730	CPR for Health Care Professionals	0	2	1
EMS	4731	First Aid	0	2	1
			11	4	13
SECOND TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
ECE	4361	Early Childhood 1 - Infant/Toddler	3	0	3
ECE	4362	Early Childhood Practicum 1 - Infant/Toddler	1	7	2
ECE	4367	Enrichment Activities for Early Childhood Programs	3	0	3
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
ECE	4371	Communicable Diseases of Early Childhood	1	0	1
			13	7	14
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
ECE	4363	Early Childhood 2 - Preschool	3	0	3
ECE	4364	Early Childhood Practicum 2 - Preschool	1	7	2
ECE	4370	Nutrition and Health for Early Childhood Programs	3	0	3
ECE	4373	Creating Safe Environments for Early Childhood Programs	3	0	3
			13	7	14
FOURTH TERM					
SPE	1020	Public Speaking	3	0	3
ECE	4374	Language Development and Literature for Childhood Programs	3	0	3
ECE	9900	Internship - Early Childhood Care and Education	1	20	1
			7	20	7
FIFTH TERM					
ECE	4375	Diversity Education for Early Childhood Programs	3	0	3
ECE	9900	Internship - Early Childhood Care and Education	1	20	1
	XXXX	Humanities/Social Science Elective	3	0	3
			7	20	7
					55

Humanities/Social Science Elective: SOC 1273, SOC 1521, SOC 1523, SOC 1526, SOC 1528, HUM 1660, HUM 1665, PSY 1506, PSY 1508
ECE 9901 may be taken instead of ECE 9900

Early Childhood Care and Education Leadership Certificate (ECELC)

Program Chair - Crystal Bossard

The Early Childhood Care and Education Leadership Certificate provides training for students, administrators, and other Early Childhood Care and Education personnel. Participants learn state-of-the-art program management techniques in administration, personnel management, fiscal management, and small business startup strategies. This certificate provides skills for directors who must handle many management responsibilities as well as supervise the care of children.

EARLY CHILDHOOD CARE AND EDUCATION LEADERSHIP CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
ACC	2924	Accounting for Non-Financial Managers	3	0	3
MGT	2967	Introduction to Management	3	0	3
MGT	2971	Small Business Start-Up 1	3	0	3
ECE	4378	Administration of Childcare Centers	3	0	3
ECE	4379	Administration Practicum	1	7	2
ECE	4386	Professional, Legal, and Ethical Issues in Childcare	3	0	3
TC	5034	Planning and Developing Proposals	3	2	4
			19	9	21
					21

Employee and Labor Relations Certificate (ELRC)

Advisor - Marcha Hunley

The Employee and Labor Relations Certificate includes business and social sciences courses that develop competence in the area of Human Resource Management. Coursework focuses on human behavior, vital management/leadership skills, and the rights and responsibilities of the employer and employee. This concentration of courses is helpful to students or professionals in preparing for such positions as manager, supervisor, team leader, foreperson, department head, or employee representative. It is also useful as a foundation for those who plan a career in the field of human resource management. Students may elect to take longer than three terms to complete the curriculum.

EMPLOYEE AND LABOR RELATIONS CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
ECO	1512	Microeconomics	3	0	3
LBR	1535	Introduction to Labor/Management Relations	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
			15	0	15
SECOND TERM					
LBR	1537	Negotiation and Dispute Resolution	3	0	3
LBR	1539	Introduction to Employment and Workplace Law 1	3	0	3
MGT	2966	Principles of Management 2	3	0	3
OT	XXXX	Computer Skills Elective	3	2	4
	XXXX	ELR Elective	3	0	3
			15	2	16
THIRD TERM					
LBR	1538	Case Studies in Labor Relations	3	0	3
LBR	1540	Introduction to Employment and Workplace Law 2	3	0	3
CULT	1647	Work and Society	3	0	3
MGT	1832	Human Resource Management	3	0	3
	XXXX	ELR Elective	3	0	3
			15	0	15
					46

ELR Elective: BUS 1824, BUS 1833, BUS 1834, MGT 2988, PSY 1502, SOC 1525, SPE 1020, SPE 1022, SPE 1027
Computer Skills Elective: OT 1850 or another OT course approved by advisor.

Human Services Certificate (HSC)

Advisor - Anthony DeSimone

The Human Services Certificate helps students develop skills and competencies needed to enter one of the helping professions and provides a foundation for those who plan careers related to social work, family services, criminal justice, community organizing, and other areas. This certificate program, combined with an Associate of Arts degree, is a starting point for students who plan to continue their education in a human services related field.

HUMAN SERVICES CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
SPE	1020	Public Speaking	3	0	3
PSY	1502	Human Relations-Applied Psychology	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
HUM	98XX	Internship - Humanities & Sciences	1	40	2
	XXXX	Computer Literacy Elective	2	2	3
			15	42	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
	12XX	Human Services Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
SOC	1523	Introduction to Sociology 2	3	0	3
SOC	1526	Sociology: Marriage and The Family	3	0	3
HUM	98XX	Internship - Humanities & Sciences	1	40	2
			16	40	17
THIRD TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
SOC	1272	Social Problems	3	0	3
ECO	1512	Microeconomics	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
HUM	98XX	Internship - Humanities & Sciences	1	40	2
	XXXX	Social Science Elective	3	0	3
			16	40	17
					51

Computer Literacy Elective: IT 51XX, IT 5XXX, OT 18XX
Human Services Elective: SOC 1270 or CRJ 1250
Social Science Elective: CRJ 1257, SOC 1271, SOC 1273, SOC 1528
Internship: HUM 9802, HUM 9803, or HUM 9804

Interpreter Training Program (ITP)

Program Chair - Dawn Cartwright

The Interpreter Training Program offers extensive coursework in American Sign Language (ASL) and Deaf studies. The learning environment combines classroom instruction, experiential and self-directed growth, and community activities. Students devote a great deal of time to study, practice, skill development, observation, and community involvement, as the skills needed to succeed in Interpreter Training cannot be mastered through classroom attendance alone. Graduates earn an Associate of Applied Science degree and may work as Interpreters, Sign Language Transliterators, or in other related jobs.

INTERPRETER TRAINING PROGRAM

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ITP	*1091	Intermediate American Sign Language 1	3	2	4
ENG	1001	English Composition 1	3	0	3
PSY	1503	Psychology of Deafness	3	0	3
SOC	1520	Orientation to Deafness	3	0	3
			12	2	13
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ITP	1092	Intermediate American Sign Language 2	3	2	4
PSY	1505	Introduction to Psychology 1	3	0	3
ITP	5460	Interpreting for the Deaf	3	0	3
ITP	5462	Community Resources for Deaf	3	0	3
			15	2	16
THIRD TERM					
SPE	1020	Public Speaking	3	0	3
ITP	1093	Intermediate American Sign Language 3	3	2	4
PSY	1506	Introduction to Psychology 2	3	0	3
ITP	XXXX	ITP Elective	3	0	3
			12	2	13
FOURTH TERM					
ENG	1003	English Composition 3	3	0	3
ITP	5461	Preparation for ITP Practicum	3	0	3
ITP	5464	Sign-to-Voice Interpreting 1	3	2	4
ITP	5475	Educational Interpreting 1	3	0	3
			12	2	13
FIFTH TERM					
ITP	1094	Advanced American Sign Language 1	3	2	4
MAT	1121	Business Mathematics 1	3	0	3
ITP	5465	Sign-to-Voice Interpreting 2	3	2	4
ITP	5470	Transliterating 1	4	0	4
			13	4	15
SIXTH TERM					
ITP	1095	Advanced American Sign Language 2	3	2	4
ITP	5463	Role of Interpreter	3	0	3
ITP	5466	Sign-to-Voice Interpreting 3	3	2	4
ITP	5480	ITP Practicum 1	2	10	3
			11	14	14
SEVENTH TERM					
ITP	1096	Advanced American Sign Language 3	3	2	4
ITP	5467	Sign-to-Voice Interpreting 4	3	2	4
ITP	5481	ITP Practicum 2	2	10	3
	XXXX	Computer Literacy Elective	2	2	3
			10	16	14
EIGHTH TERM					
ITP	5471	Medical/Technical/Legal Interpreting	4	0	4
ITP	5472	Specialized Interpreting	4	0	4
ITP	5482	ITP Practicum 3	2	10	3
			10	10	11
					109

*Beginning ASL 1, 2, and 3 (ITP 1086, ITP 1087, ITP 1088) or advisor approval of equivalent experience are prerequisites to Intermediate ASL 1.

ITP Electives: ITP 1089, ITP 5468, ITP 5478, ITP 5474, ITP 5479

Computer Literacy Elective: OT 1850, OT 1863, OT 3058, OT 3059, OT 3062, IT 5102, IT 5103, IT 5105

Deaf Studies Certificate (DSC)

Program Chair - Dawn Cartwright

The Deaf Studies Certificate enables students to learn about sign language and Deaf culture in order to be involved as an advocate or signer, but not as a paid professional interpreter.

DEAF STUDIES CERTIFICATE

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ITP	*1091	Intermediate American Sign Language 1	3	2	4
PSY	1503	Psychology of Deafness	3	0	3
SOC	1520	Orientation to Deafness	3	0	3
ITP	5460	Interpreting for the Deaf	3	0	3
			12	2	13
SECOND TERM					
ITP	1092	Intermediate American Sign Language 2	3	2	4
ITP	5462	Community Resources for Deaf	3	0	3
ITP	5463	Role of Interpreter	3	0	3
ITP	XXXX	ITP Elective	3	0	3
			12	2	13
THIRD TERM					
ITP	1093	Intermediate American Sign Language 3	3	2	4
ITP	5464	Sign-to-Voice Interpreting 1	3	2	4
ITP	XXXX	ITP Elective	3	0	3
			9	4	11
					37

*Beginning ASL 1, 2, 3 (ITP 1086, ITP 1087, ITP 1088) or advisor approval of equivalent experience are prerequisites to Intermediate ASL 1.

ITP Electives: ITP 1089, ITP 5468, ITP 5474, ITP 5475, ITP 5478, ITP 5479

Law Enforcement (ATSLE)

Advisor – Jan Hoeweler

The Law Enforcement program is an Associate of Technical Studies – Type B degree program. To enroll in this degree program, students must be currently enrolled in an accredited or approved Peace/Police Officer Training School or must present proof of certification from an approved Training School.

ASSOCIATE OF TECHNICAL STUDIES - LAW ENFORCEMENT

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CRJ	1299	Special Studies-Criminal Justice	45	0	45
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
			12	0	12

THIRD TERM					
ENG	1002	English Composition 2	3	0	3
SPE	102X	Speech Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
MGT	2967	Introduction to Management	3	0	3
			15	0	15
FOURTH TERM					
SPE	1024	Group Dynamics & Problem Solving	3	0	3
ENG	10XX	English Composition Elective	3	0	3
PSY	1507	Abnormal Psychology	3	0	3
PHI	1625	Ethics	3	0	3
	XXXX	Social Science Elective	3	0	3
			15	0	15
FIFTH TERM					
SPE	1027	Team Building and Group Facilitation	3	0	3
CRJ	1298	Workshops in Criminal Justice	0	0	0
	XXXX	Arts/Humanities Elective	3	0	3
	XXXX	Social Science Elective	3	0	3
	XXXX	Arts/Humanities Elective	3	0	3
			12	0	12
					95

To enroll in this program, a student must present proof of certification of OPOTA training.
Speech Elective: SPE 1020, SPE 1023
English Composition Elective: ENG 1003, ENG 1010
Social Science Elective: CRJ 1251, CRJ 1252, CRJ 1253, CRJ 1254, CRJ 1255, CRJ 1256, CRJ 1257, PSY 1509, PSY 1510, ECO 1513, SOC 1521, SOC 1523, SOC 1524, SOC 1272, LBR 1535, GEO 1551, HST 1568, Arts/Humanities Elective: PHI 1621, PHI 1630, PHI 1631, ART 1660, MUS 1665, THE 1670, LIT 1040, LIT 1045, LIT 1050, LIT 1051, LIT 1052, LIT 1053, LIT 1055, LIT 1056, LIT 1057

Information Technologies Division

Main Phone Number: (513) 569-1743

Cincinnati State's Information Technologies Division provides business, industry, and organizations that depend on information technology (IT) with skilled professionals and technicians to support their IT efforts. The Information Technologies Division includes degree and certificate programs that have been offered at Cincinnati State for many years, in addition to new degree programs that address emerging information technology areas.

The Information Technologies division offers nine Associate of Applied Science degrees, three Associate of Applied Business degrees, and four certificate programs. These programs encompass the four occupational cluster areas defined by the State of Ohio's plan "itWorks.Ohio." The Joint Council of the Ohio Board of Regents and the State Board of Education developed this comprehensive plan to keep Ohio-educated students in secondary schools, colleges, and universities on the leading edge of IT knowledge and skills.

The four IT occupational cluster areas and the corresponding Cincinnati State degree programs include:

- Information Services and Support. This area includes degree programs in Computer Information Systems, PC Support and Administration, and Database Management Systems Technology. A separate major in Database Administration is also available.
- Multimedia Information Design. This area includes degree programs in Audio/Video Production, Computer Graphics, Technical Communication, and Web Design. All four programs prepare students to create and produce digitally generated or computer-enhanced products used in business, education, entertainment, communication, and many other fields. The Multimedia Information Design area also offers certificate programs in Electronic Publishing and in Technical Communication.

  In addition to the other entrance requirements (described later in this section), students in the Multimedia Information Design programs must demonstrate keyboarding competency of a minimum 20 words per minute. Students who do not meet entrance competencies must enroll in skill-building courses.
- Network Systems. This area includes degree programs in Computer Network Engineering Technology and Network Administration. Students may select an emphasis in network hardware, network software, or network administration.
- Programming and Software Development. This area includes two degree programs. Business Computer Programming emphasizes designing, developing, testing, and maintaining computer software and systems. Software Engineering Technology includes studying computer operating systems, programming languages, and software development while preparing students for transfer to Bachelor's degree programs in Computer Science and related fields.

All Information Technologies Division students must complete the college orientation course CAR 9002, College Success Strategies, within the first 18 credit hours taken at Cincinnati State.

Entrance Competencies

In order to ensure a high degree of success in academic studies in information technologies, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Students entering programs in the Information Technologies Division must demonstrate competence with commonly used software applications and with basic Internet operations. Students may be asked to demonstrate these competencies through standardized skills assessment tests or by completing prerequisite courses, if necessary. Program advisors assist students in determining whether they meet minimum competencies.

Cooperative Education

Through the cooperative education program, the Information Technologies Division provides instruction that combines classroom learning with practical hands-on experience in business and industry environments.

Cooperative education is an integral part of IT programs, and degree-seeking students are required to participate in co-op work experiences. In a few highly competitive career areas students may have an opportunity to participate in unpaid internships to gain work experience.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

Associate's degree programs in the Information Technologies Division contain in their curriculums many of the required courses for the Cincinnati State transfer module. Students may schedule the additional courses needed to complete the transfer module at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that a Cincinnati State Associate of Applied Business or Associate of Applied Science degree, combined with a transfer module showing grades of "C" or higher, leads to preferential consideration at the receiving institution.

Audio/Video Production (AVP)

Program Chair - Pam Ecker
Co-op Coordinator - Andi Feld-Brockett
Advisor - Paul Grundy

Audio/Video Production is one of the degree programs in the Multimedia Information Design career area. Students seeking the Audio/Video Production degree prepare for careers in broadcast or cable television or other entertainment industries, Web or multimedia development companies, or media production departments. Students learn to operate and maintain digital audio and video equipment, use industry-standard software for digital audio and video editing, prepare video for Web, and apply basic skills for 2-dimensional and 3-dimensional illustration and animation software.

Currently a significant number of the courses required for the Audio/Video Production degree are scheduled between 8:00 a.m. and 5:00 p.m., Monday through Friday. Some of the required courses also are offered in the evening or on weekends. Students should consult with their advisor for current schedule information.

Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Audio or Video Technician, Production Assistant, Videographer, Editor, Sound Mixer, or Audio/Video Specialist.

AUDIO/VIDEO PRODUCTION

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1124	Business Algebra	4	0	4
ART	1692	Design 1	2	3	3
TC	5010	Visual Literacy	2	2	3
IT	5430	Accelerated Multimedia Concepts	2	3	3
			13	8	16
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ART	1685	Introduction to Photography	2	3	3
TC	5001	Introduction to Multimedia Information Design Careers	2	0	2
IT	5221	Video Production Basics: Premiere	2	3	3
IT	5441	Graphics Tools: Photoshop 1	2	3	3
			11	9	14
THIRD TERM					
CULT	1680	Introduction to Film Studies 1	2	3	3
TC	5035	Scriptwriting for Visual Media	2	3	3
IT	5222	Audio Recording/Editing Basics	3	4	5
IT	5224	Video Production/Editing: Avid	3	4	5
IT	5226	Gripping and Lighting Techniques	3	4	5
			13	18	21
FOURTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
IT	5223	Advanced Audio Production Techniques	3	4	5
IT	5453	Web Development 1: HTML	2	3	3
			11	7	14
SIXTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
SEVENTH TERM					
SPE	102X	Speech Elective	3	0	3
TC	5020	Usability Assessment	2	2	3
IT	543X	Multimedia Tools Elective	2	3	3
IT	5442	Multimedia Tools: Flash 1	2	3	3
			9	8	12
EIGHTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
NINTH TERM					
CULT	1646	Mass Media and Culture	3	0	3
IT	5225	Video Post-Production: After Effects	3	4	5
IT	5227	Video Production/Editing: Final Cut Pro	3	4	5
IT	544X	Graphics Tools (Vector) Elective	2	3	3
IT	5451	Animation Tools: Maya 1	3	4	5
			14	15	21
TENTH TERM					
IT	5228	Audio/Video Project	3	3	4
IT	5570	Multimedia Portfolio Production	2	0	2
			5	3	6
					110

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Students may be advised to complete IT 5410 and IT 5420 in lieu of IT 5430.
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Multimedia Tools Elective: IT 5431, IT 5432
Graphics Tools (Vector) Elective: IT 5443, IT 5445

Business Computer Programming (BCP)

Program Chair - Steve Yelton, P.E.
Co-op Coordinator - Ocie Hammond
Advisor - Mike Carroll

Business Computer Programming is one of the degree programs in the Programming and Software Development career area. Students prepare software applications for micro- and mid-range computers used in business environments. Students develop skill using industry-standard programming languages and gain knowledge of data communications, database management systems, and systems analysis. Students may choose courses in Internet programming, Visual C++, Visual Basic, Cobol, and RPG. Students use these skills in co-op employment.

Graduates earn an Associate of Applied Business degree. Job titles for graduates include Computer Operator, PC Programmer, Systems Specialist, Operation System Specialist, Software Application Specialist, and Help Desk Specialist.

BUSINESS COMPUTER PROGRAMMING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	11XX	Algebra Elective	4	0	4
IT	5201	Information Technology Concepts	2	3	3
IT	5206	Programming Logic and BASIC	4	6	6
BT	9200	Professional Practices	1	0	1
			11	9	14
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1111	Statistics 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
BUS	2925	Business Principles	3	0	3
IT	5231	Operating Systems: DOS/Windows 1	2	3	3
IT	5XXX	Programming Elective 1	2	3	3
			16	8	19
FOURTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
FIFTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
IT	5211	Data Communications 1	2	3	3
IT	5321	Database Programming & Administration1: SQL Server	2	3	3
IT	5XXX	Programming Elective 1	2	3	3
IT	5XXX	Programming Elective 2	2	3	3
	XXXX	Humanities/Social Science Elective	3	0	3
			17	12	21
SIXTH TERM					
MKT	2901	Principles of Marketing 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
IT	5207	Systems Analysis and Design	2	3	3
IT	5322	Database Programming & Administration 2: SQL Server	2	3	3
IT	5XXX	Programming Elective 1	2	3	3
IT	5XXX	Programming Elective 2	2	3	3
			11	12	15
EIGHTH TERM					
IT	5XXX	Programming Elective 2	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			3	43	5
NINTH TERM					
SPE	1020	Public Speaking	3	0	3
ECO	1512	Microeconomics	3	0	3
IT	5271	Java Programming 1	2	3	3
IT	5323	Database Programming & Administration 3: Oracle	2	3	3
IT	5XXX	Programming Elective 1	2	3	3
IT	5XXX	Programming Elective 2	2	3	3
			14	12	18
TENTH TERM					
LAW	1823	Business Law 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					109

Choose Programming Electives 1 and 2 from the following blocks. Students must complete two entire blocks to fulfill degree requirements. Total program credit hours depend on programming blocks chosen.

Programming Blocks:
- COBOL: IT 5251, IT 5252
- RPG: IT 5261, IT 5262
- Visual Basic: IT 5291, IT 5292, IT 5293, IT 5294
- Internet Programming: IT 5453, IT 5331, IT 5332, IT 5333
- C Programming: IT 5275, IT 5276, IT 5277, IT 5278

Humanities/Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR

Algebra Elective: MAT 1124, MAT 1151

Computer Graphics (CG)

Program Chair - Pam Ecker
Co-op Coordinator - Andi Feld-Brockett
Advisor - Jason Caudill

Computer Graphics is one of the degree programs in the Multimedia Information Design career area. The Computer Graphics program prepares students for employment opportunities that require aptitude in 2- and 3-dimensional art and design, traditional and computer-based. Students gain skill in digital creation of original art; 2-dimensional illustration; 3-dimensional modeling and animation; use of Web languages; and basic video shooting, digitizing, and post-processing.

Currently a significant number of the courses required for the Computer Graphics degree are scheduled between 8:00 a.m. and 5:00 p.m., Monday through Friday. Some of the required courses also are offered in the evening or on weekends. Students should consult with their advisor for current schedule information.

Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Graphic Designer, Texture Artist, Rotoscope Artist, Compositing Artist, and Web Graphics Designer.

COMPUTER GRAPHICS

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1124	Business Algebra	4	0	4
ART	1690	Drawing 1	2	2	3
TC	5001	Introduction to Multimedia Information Design Careers	2	0	2
TC	5010	Visual Literacy	2	2	3
IT	5430	Accelerated Multimedia Concepts	2	3	3
			15	7	18
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ART	1692	Design 1	2	3	3
TC	5020	Usability Assessment	2	2	3
IT	5441	Graphics Tools: Photoshop 1	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
			11	11	15
THIRD TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
FOURTH TERM					
ENG	1010	Technical Writing 1	3	0	3
CULT	1646	Mass Media and Culture	3	0	3
ART	1693	Design 2	2	3	3
IT	5443	Graphics Tools: Illustrator	2	3	3
IT	5444	Graphics Tools: Photoshop 2	2	3	3
MET	7110	AutoCAD 1 (Mechanical)	2	3	3
			14	12	18
FIFTH TERM					
MKT	2901	Principles of Marketing 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
SIXTH TERM					
SPE	102X	Speech Elective	3	0	3
IT	5221	Video Production Basics: Premiere	2	3	3
IT	5442	Multimedia Tools: Flash 1	2	3	3
IT	5451	Animation Tools: Maya 1	3	4	5
IT	5456	Desktop Publishing: QuarkXPress	2	3	3
			12	13	17
SEVENTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
EIGHTH TERM					
ART	169X	Advanced Art Elective	2	2	3
IT	5225	Video Post-Production: After Effects	3	4	5
IT	5432	Multimedia Tools: Director 1	2	3	3
IT	5452	Animation Tools: Maya 2	3	4	5
			10	13	16
NINTH TERM					
IT	5XXX	MID Elective	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			3	43	5
TENTH TERM					
IT	5570	Multimedia Portfolio Production	2	0	2
IT	5571	Computer Graphics Project	3	3	4
	XXXX	Humanities/Social Science Elective	3	0	3
			8	3	9
					107

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Students may be advised to complete IT 5410 and IT 5420 in lieu of IT 5430.

MID Elective: IT 5435, IT 5542, IT 5543, IT 5544

Speech Elective: SPE 1020, SPE 1022, SPE 1024

Art Elective: ART 1691, ART 1685, ART 1694

Humanities/Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR

Computer Information Systems Technology (CIS)

Program Chair - Clark Stull

Co-op Coordinator - Adam Waits

Computer Information Systems is one of the degree programs in the Information Services and Support career area. The Computer Information Systems program prepares students to operate a range of computers used in business and industry to support corporate information needs. Students gain knowledge of operating systems and programming languages and concepts and learn to organize computer-related personnel, equipment, and corporate resources to support business success.

Graduates earn an Associate of Applied Business degree. Job titles for graduates may include Computer Operator or Data Center Manager.

COMPUTER INFORMATION SYSTEMS TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1124	Business Algebra	4	0	4
BUS	2925	Business Principles	3	0	3
IT	5201	Information Technology Concepts	2	3	3
IT	5231	Operating Systems: DOS/Windows 1	2	3	3
BT	9200	Professional Practices	1	0	1
			12	6	14
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1111	Statistics 1	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
IT	5206	Programming Logic and BASIC	4	6	6
IT	5230	Introduction to Computer Operations: iSeries	2	3	3
			15	11	19
FOURTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
MGT	2989	Customer Service Systems	3	0	3
IT	5240	Advanced Facilities: iSeries	4	6	6
IT	5261	RPG 1	4	6	6
IT	5XXX	CIS Elective	2	3	3
			13	15	18
SIXTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5

SEVENTH TERM					
LAW	1823	Business Law 1	3	0	3
IT	5207	Systems Analysis and Design	2	3	3
IT	5211	Data Communications 1	2	3	3
IT	5233	Operating Systems: iSeries 1	2	3	3
IT	5311	Database Management Systems	2	3	3
			11	12	15
EIGHTH TERM					
ECO	1512	Microeconomics	3	0	3
IT	5351	CIS Design Project 1	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			6	43	8
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
IT	5234	Operating Systems: iSeries 2	2	3	3
IT	5352	CIS Design Project 2	2	3	3
IT	5XXX	CIS Elective	2	3	3
			12	9	15
TENTH TERM					
SPE	1020	Public Speaking	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					109

CIS Electives: IT 5241, IT 5251, IT 5261, IT 5271, IT 5275, IT 5291, IT 5312

Computer Network Engineering Technology (CNET)

Program Chair - Gary M. Webster, P.E.
Co-op Coordinator - Sue Dolan
Advisor - Jeff Vetter

Computer Network Engineering Technology is one of the degree programs in the Network Systems career area. This program prepares its graduates to successfully enter and pursue baccalaureate degrees; to enter and advance professionally through technical and mid-management positions in local industry; and to effectively design, troubleshoot, implement, maintain, and service local area networks.

Graduates earn an Associate of Applied Science degree. Job titles for CNET graduates may include Network Technician, Electronics Technician, Network Consultant, Hardware Engineering Technician, Technical Support Specialist, QA Technician, Software Technician, or Field Service Technician.

The Computer Network Engineering Technology program is accredited by TAC/ABET.

COMPUTER NETWORK ENGINEERING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
IT	5201	Information Technology Concepts	2	3	3
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
CPET	7728	Digital Combinational Logic	3	2	4
BT	9200	Professional Practices	1	0	1
			14	10	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
	XXXX	Humanities/Social Science Elective	3	0	3
			7	40	8
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
CPET	7738	Digital Sequential Logic	3	3	4
			15	9	18
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
IT	5151	Network Communications 1	2	3	3
EET	7730	Electronics 1	5	2	6
CPET	7748	Microprocessor Systems 1	3	3	4
			13	10	17
SIXTH TERM					
MAT	1154	Calculus 1	5	0	5
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			6	40	7
SEVENTH TERM					
ENG	1002	English Composition 2	3	0	3
SPE	102X	Speech Elective	3	0	3
IT	5152	Network Communications 2	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
CPET	7768	Microprocessor Systems 2	3	3	4
			13	9	16
EIGHTH TERM					
PHI	1625	Ethics	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
IT	5153	Network Communciations 3	2	3	3
	XXXX	Technical Elective	3	2	4
			11	7	14
TENTH TERM					
ECO	15XX	Economics Elective	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					114

Technical Elective: IT 5120, IT 5121, EET 7740, EET 7742.
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Economics Elective: ECO 1512, ECO 1513
Humanities/Social Science Elective: Any PSY, SOC, ECO, LBR, HST, GEO

Database Management Systems Technology (DBMS)

Program Chair - Don Youngpeter, P.E.
Co-op Coordinator - Kathy McClusky

Database Management Systems Technology is one of the degree programs in the Information Services and Support

career area. The Database Management Systems degree prepares students to design, program, and administer e-business and e-commerce systems on the Web.
Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Senior Database Systems Programmer/Analyst or Senior Information Technology Programmer/Analyst.

DATABASE MANAGEMENT SYSTEMS TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
IT	5201	Information Technology Concepts	2	3	3
IT	5291	Visual BASIC 1	2	3	3
BT	9200	Professional Practices	1	0	1
			10	8	13
SECOND TERM					
OT	3068	Database Management: Access 1	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			3	43	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
OT	3074	Database Management: Access 2	2	3	3
IT	5292	Visual BASIC 2	2	3	3
IT	5321	Database Programming & Administration1: SQL Server	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
			11	12	15
FOURTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MAT	1124	Business Algebra	4	0	4
OT	3036	Project Management Applications	2	3	3
IT	5293	Visual BASIC 3	2	3	3
IT	5322	Database Programming & Administration 2: SQL Server	2	3	3
IT	5331	Internet Programming: ASP	2	3	3
			15	12	19
SIXTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
SEVENTH TERM					
IT	5151	Network Communications 1	2	3	3
IT	5275	C++ Programming 1	3	3	4
IT	5294	Visual BASIC 4	2	3	3
IT	5323	Database Programming & Administration 3: Oracle	2	3	3
IT	5332	Internet Programming: JavaScript	2	3	3
IT	5361	DBMS Design Project 1	2	3	3
			13	18	19
EIGHTH TERM					
ECO	1512	Microeconomics	3	0	3
IT	5362	DBMS Design Project 2	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			6	43	8
NINTH TERM					
MAT	1111	Statistics 1	3	0	3
IT	5276	C++ Programming 2	3	3	4
IT	5324	Database Programming & Administration 4: Oracle	2	3	3
IT	5333	Internet Programming: XML	2	3	3
IT	5363	DBMS Design Project 3	2	3	3
			12	12	16
TENTH TERM					
SPE	1020	Public Speaking	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					110

Database Management Systems Technology – Database Administration Major (DBA)

Program Chair - Don Youngpeter, P.E.
Co-op Coordinator - Kathy McClusky

The Database Administration degree prepares students to design, program, and administer e-business and e-commerce systems on the Web.

Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Senior Database Administrator and Internet Database Administrator (eDBA).

DATABASE MANAGEMENT SYSTEMS TECHNOLOGY - ADMINISTRATION MAJOR

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
IT	5201	Information Technology Concepts	2	3	3
IT	5291	Visual BASIC 1	2	3	3
BT	9200	Professional Practices	1	0	1
			10	8	13
SECOND TERM					
OT	3068	Database Management: Access 1	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			3	43	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
ACC	2911	Principles of Accounting 1	3	2	4
OT	3074	Database Management: Access 2	2	3	3
IT	5321	Database Programming & Administration1: SQL Server	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
			12	11	16
FOURTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MAT	1124	Business Algebra	4	0	4
ACC	2912	Principles of Accounting 2	4	0	4
OT	3036	Project Management Applications	2	3	3
IT	5322	Database Programming & Administration 2: SQL Server	2	3	3
IT	5331	Internet Programming: ASP	2	3	3
			17	9	20

SIXTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
SEVENTH TERM					
ACC	2913	Principles of Accounting 3	4	0	4
IT	5151	Network Communications 1	2	3	3
IT	5323	Database Programming & Administration 3: Oracle	2	3	3
IT	5332	Internet Programming: JavaScript	2	3	3
IT	5361	DBMS Design Project 1	2	3	3
			12	12	16
EIGHTH TERM					
ECO	1512	Microeconomics	3	0	3
IT	5362	DBMS Design Project 2	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			6	43	8
NINTH TERM					
MAT	1111	Statistics 1	3	0	3
ACC	2922	Computerized Accounting Applications	2	2	3
IT	5324	Database Programming & Administration 4: Oracle	2	3	3
IT	5333	Internet Programming: XML	2	3	3
IT	5363	DBMS Design Project 3	2	3	3
			11	11	15
TENTH TERM					
SPE	1020	Public Speaking	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					108

Network Administration Technology (NETAD)

Program Chair - Gary M. Webster, P.E.
Co-op Coordinator - Sue Dolan
Advisor - Jeff Vetter

Network Administration Technology is one of the degree programs in the Network Systems career area. Network Administration prepares its graduates for careers in network systems analysis, planning, implementation, and administration. Students gain the necessary software skills to analyze network system needs and to install, operate, troubleshoot, and maintain local and wide area networks. Students obtain knowledge in basic network classifications and topologies, network wiring, server setup and configuration, network operating systems, communication standards for networks, network security, and network applications.

Graduates earn an Associate of Applied Business degree. Job titles for graduates may include Network Administrator, Network Specialist, Network Security Administrator, Network Operations Analyst, Communication Analyst, Network Technician, or Customer Service Coordinator.

NETWORK ADMINISTRATION TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Algebra Elective	4	0	4
IT	5201	Information Technology Concepts	2	3	3
IT	5231	Operating Systems: DOS/Windows 1	2	3	3
EET	7701	Electronic Fundamentals 1	3	2	4
BT	9200	Professional Practices	1	0	1
			15	8	18
SECOND TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
BUS	2925	Business Principles	3	0	3
IT	5206	Programming Logic and BASIC	4	6	6
IT	5211	Data Communications 1	2	3	3
EET	7707	Survey of Analog Devices	3	2	4
			15	11	19
FOURTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
FIFTH TERM					
MAT	1111	Statistics 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
IT	5121	LAN Administration: Windows 1	3	2	4
IT	5151	Network Communications 1	2	3	3
IT	5154	Network Security and Legal Issues	3	2	4
			17	7	20
SIXTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
ECO	15XX	Economics Elective	3	0	3
IT	5120	LAN Administration: Novell	3	2	4
IT	5122	LAN Administration: Windows 2	3	2	4
IT	XXXX	Database Elective	2	3	3
ACC	XXXX	Accounting Elective	3	2	4
			17	9	21
EIGHTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
NINTH TERM					
SPE	1020	Public Speaking	3	0	3
LAW	1823	Business Law 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
IT	5125	LAN Administration: Messaging	3	2	4
IT	5128	LAN Administration: NETAD Design Project	3	2	4
IT	XXXX	Technical Elective	2	3	3
	XXXX	Humanities/Social Science Elective	3	0	3
			20	7	23
TENTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
					111

Technical Elective: IT 5131, IT 5152, IT 5207, IT 5232
Algebra Elective: MAT 1124, MAT 1151
Economics Elective: ECO 1512, ECO 1513
Database Elective: IT 5321, OT 3068
Accounting Elective: ACC 2911, ACC 2924
Humanities/Social Science Elective: Any PHI, PSY, SOC, ECO, HST, GEO, LBR

PC Support and Administration (PCSA)

Program Chair - Don Youngpeter, P.E.
Co-op Coordinator - Adam Waits

PC Support and Administration is one of the degree programs in the Information Services and Support career area. PC Support and Administration students develop skills needed to install, set up, troubleshoot, and maintain hardware and software for microcomputers. Students gain knowledge of operating systems, data communications, and networking technologies, and technical support center management.

Graduates earn an Associate of Applied Science degree. Job titles for PCSA graduates may include PC Support Technician, Technical Support Representative, or PC System Coordinator.

PC SUPPORT AND ADMINISTRATION TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1171	Technical Mathematics 1	4	0	4
IT	5201	Information Technology Concepts	2	3	3
IT	5231	Operating Systems: DOS/Windows 1	2	3	3
EET	7701	Electronic Fundamentals 1	3	2	4
BT	9200	Professional Practices	1	0	1
			15	8	18
SECOND TERM					
EET	7779	Computer Repair: Basic	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			3	43	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1172	Technical Mathematics 2	4	0	4
IT	5206	Programming Logic and BASIC	4	6	6
EET	7702	Electronic Fundamentals 2	3	2	4
			14	8	17
FOURTH TERM					
EET	7780	Computer Repair: General Systems	2	3	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			3	43	5
FIFTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
IT	5131	Network Management/Help Desk	3	2	4
IT	5208	PC Software Support	3	2	4
IT	5211	Data Communications 1	2	3	3
EET	7781	Computer Repair: Advanced Systems	2	3	3
			15	12	20
SIXTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
SEVENTH TERM					
OT	3068	Database Management: Access 1	2	3	3
IT	5120	LAN Administration: Novell	3	2	4
IT	5212	Data Communications 2	3	2	4
IT	5453	Web Development 1: HTML	2	3	3
			10	10	14
EIGHTH TERM					
ECO	1512	Microeconomics	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
IT	5121	LAN Administration: Windows NT	3	2	4
IT	5207	Systems Analysis and Design	2	3	3
IT	5291	Visual BASIC 1	2	3	3
IT	5340	PCSA Design Project	2	3	3
			12	11	16
TENTH TERM					
SPE	1020	Public Speaking	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					110

Software Engineering Technology (SET)

Program Chair - Steve Yelton, P.E.
Co-op Coordinator - Ocie Hammond
Advisor - Mike Carroll

Software Engineering Technology is one of the degree programs in the Programming and Software Development career area. This program emphasizes skills needed to design, develop, implement, and maintain computer operating systems and software using industry-standard programming languages. Students who complete the program earn an Associate of Applied Science degree and are prepared to continue their education in Bachelor's degree programs in Computer Science or Computer Engineering. Students may choose courses in Internet programming, Visual C++, Java programming, Visual Basic, and computer hardware and electronics. Co-op work experience reinforces skills learned in the classroom.

Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Systems Analyst, Programmer/Analyst, Operating System Analyst, Software Designer, Software Applications Specialist, Test Specialist, or Software Applications Support Specialist.

SOFTWARE ENGINEERING TECHNOLOGY

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
IT	5201	Information Technology Concepts	2	3	3
IT	5291	Visual BASIC 1	2	3	3
EET	7701	Electronic Fundamentals 1	3	2	4
BT	9200	Professional Practices	1	0	1
			11	10	15
SECOND TERM					
MAT	1192	Algebra and Trigonometry 2	4	0	4
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			5	40	6
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
IT	5292	Visual BASIC 2	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
CPET	7728	Digital Combinational Logic	3	2	4
			13	10	17

FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
PHI	1625	Ethics	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			7	40	8
FIFTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
IT	5275	C++ Programming 1	3	3	4
IT	5293	Visual BASIC 3	2	3	3
IT	5321	Database Programming & Administration1: SQL Server	2	3	3
IT	5331	Internet Programming: ASP	2	3	3
			12	14	17
SIXTH TERM					
MAT	1154	Calculus 1	5	0	5
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			6	40	7
SEVENTH TERM					
SPE	102X	Speech Elective	3	0	3
IT	5276	C++ Programming 2	3	3	4
IT	5294	Visual BASIC 4	2	3	3
IT	5322	Database Programming & Administration 2: SQL Server	2	3	3
IT	5332	Internet Programming: JavaScript	2	3	3
			12	12	16
EIGHTH TERM					
IT	5277	Object Oriented Programming: C++	3	3	4
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	43	6
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MGT	2996	Project Management	2	2	3
IT	5271	Java Programming 1	2	3	3
IT	5278	VISUAL C++ Programming 1	3	3	4
IT	5295	Visual BASIC 5	2	3	3
			15	11	19
TENTH TERM					
ECO	15XX	Economics Elective	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
					116

Speech Elective: SPE 1020, SPE 1022, SPE 1024
Economics Elective: ECO 1512, ECO 1513

Technical Communication (TCT)

Program Chair - Pam Ecker
Co-op Coordinator - Andi Feld-Brockett

Technical Communication is one of the degree programs in the Multimedia Information Design career area. Technical Communication students prepare for a variety of assignments that emphasize using writing and editing skills to create technical, scientific, or specialized information products for a wide range of audiences. Students gain skill designing, developing, and producing information products for distribution in print as well as creating digital products such as Web sites and online help systems.

Technical Communication students are required to earn a minimum of 15 credits in a designated technical specialty area, comparable to a "minor" within the Technical Communication major. Students determine the technical specialty courses, which should relate to their employment goals, through consultation with the program chair.

Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Technical Writer or Editor, Multimedia Content Specialist, Technical Publication Specialist, Web Content Designer, or Project Manager.

TECHNICAL COMMUNICATION

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1124	Business Algebra	4	0	4
TC	5001	Introduction to Multimedia Information Design Careers	2	0	2
TC	5010	Visual Literacy	2	2	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
			13	4	15
SECOND TERM					
ENG	1018	Professional Writing Styles 1	2	2	3
SPE	102X	Speech Elective	3	0	3
CULT	1646	Mass Media and Culture	3	0	3
IT	5201	Information Technology Concepts	2	3	3
IT	5420	Digital Media Concepts	2	3	3
	XXXX	Desktop Publishing Elective	2	3	3
			14	11	18
THIRD TERM					
ENG	1017	Research and Composition	2	2	3
ENG	1019	Professional Writing Styles 2	2	2	3
TC	5020	Usability Assessment	2	2	3
IT	5453	Web Development 1: HTML	2	3	3
	XXXX	Graphics Tools Elective	2	3	3
	XXXX	Database Elective	2	3	3
			12	15	18
FOURTH TERM					
TC	5032	Developing Instructional Materials	3	2	4
TC	5041	Technical Editing Methods 1	2	2	3
	XXXX	Technical Specialty Elective	2	3	3
	XXXX	Humanities/Social Science Elective	3	0	3
	XXXX	Business Elective	3	0	3
			13	7	16
FIFTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
SIXTH TERM					
MKT	2901	Principles of Marketing 1	3	0	3
TC	5033	Developing Promotional Materials	3	2	4
TC	5042	Technical Editing Methods 2	2	2	3
	XXXX	Technical Specialty Elective	2	3	3
	XXXX	Humanities/Social Science Elective	3	0	3
			13	7	16
SEVENTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
EIGHTH TERM					
TC	5071	Technical Communication Project	3	3	4
	XXXX	Technical Specialty Elective	2	3	3
	XXXX	Technical Communication Elective	2	2	3
			7	8	10
NINTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
TENTH TERM					
TC	5089	Technical Communication Seminar: Portfolio Presentation	2	3	3
	XXXX	Technical Specialty Elective	2	3	3

XXXX	Technical Specialty Elective	2	3	3
		6	9	9
				108

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Students may be advised to take IT 5430 in lieu of IT 5410 and IT 5420
Composition Requirement: Students granted advanced standing may substitute another composition course. Recommended substitute: ENG 1003
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Humanities/Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR
Desktop Publishing Elective: IT 5116, IT 5456, GC 1422, GC 1423
Graphics Tools Elective: IT 5441, IT 5443, IT 5445
Database Elective: OT 3068, IT 5106, IT 5321
Business Elective: BUS 2925, BUS 2973, MGT 2967, MGT 2988, MKT 1844, MKT 1873, MKT 1878
Technical Communication Elective: TC 5022, TC 5034, TC 5035, TC 5037. Other courses may be substituted with program chair consent.
Technical Specialty Elective: Program chair consent required. The technical elective component must total no less than 15 credit hours.

Technical Communication Certificate (TCC)

Program Chair - Pam Ecker

The Technical Communication certificate is part of the Multimedia Information Design career area. The Certificate is for individuals already competent in technical fields who want to expand their communication skills and for professional communicators who want to enhance their technical expertise. Along with the core certificate courses, students must earn a minimum of 15 credits in a designated technical specialty area. Students determine the technical specialty courses, which should relate to their employment goals, through consultation with the program chair.

TECHNICAL COMMUNICATION CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
ENG	1018	Professional Writing Styles 1	2	2	3
ENG	1019	Professional Writing Styles 2	2	2	3
TC	5010	Visual Literacy	2	2	3
TC	5020	Usability Assessment	2	2	3
TC	5032	Developing Instructional Materials	3	2	4
TC	5033	Developing Promotional Materials	3	2	4
TC	5041	Technical Editing Methods 1	2	2	3
TC	5042	Technical Editing Methods 2	2	2	3
TC	5071	Technical Communication Project	3	3	4
TC	5089	Technical Communication Seminar: Portfolio Presentation	2	3	3
	XXXX	Technical Specialty	0	0	15
			23	22	48
					48

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Students lacking knowledge of current computer applications may be required to complete courses IT 5410 and IT 5420, or IT 5430.
Composition Requirement: Students whose test scores indicate need for additional preparation may be required to complete additional composition courses.
Technical Specialty Requirement: Program chair consent required. The technical specialty component must total no less than 15 credit hours.

Electronic Publishing Certificate (EPC)

Program Chair - Pam Ecker

The Electronic Publishing Certificate (formerly titled the Desktop Publishing Certificate) is part of the Multimedia Information Design career area. The Certificate is for individuals who want to develop skill using software applications that support communication and publishing-related fields. The certificate program helps individuals who want to add contemporary computer skills to their current knowledge in a business- or communication-related area, or to provide information for those who are considering starting a home-based desktop publishing business. The certificate may provide a foundation for an Associate's degree in a communication- or business-related field.

ELECTRONIC PUBLISHING CERTIFICATE

All certificate-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1018	Professional Writing Styles 1	2	2	3
TC	5010	Visual Literacy	2	2	3
IT	5201	Information Technology Concepts	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
			8	9	12
SECOND TERM					
OT	3064	Introduction to PowerPoint	2	3	3
IT	5420	Digital Media Concepts	2	3	3
IT	5441	Graphics Tools: Photoshop 1	2	3	3
IT	5456	Desktop Publishing: QuarkXPress	2	3	3
IT	XXXX	Database Elective	2	3	3
			10	15	15
THIRD TERM					
TC	5020	Usability Assessment	2	2	3
IT	5443	Graphics Tools: Illustrator	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
IT	XXXX	Desktop Publishing Elective	2	3	3
			8	11	12
FOURTH TERM					
TC	50XX	Technical Communication Elective	2	3	3
	XXXX	Business Skills Elective	2	2	3
IT	XXXX	Graphics Tools Elective	2	3	3
IT	XXXX	Computer Applications Elective	2	3	3
			8	11	12
					51

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum of 20 wpm
- Ability to use application software

Students may be advised to complete IT 5430 in lieu of IT 5410 and IT 5420.
Composition Requirement: Students whose test scores indicate need for additional preparation may be required to complete additional composition courses.
Database Elective: OT 3068, IT 5106, IT 5321
Desktop Publishing Elective: IT 5116, GC 1422, GC 1423
Technical Communication Elective: Program chair consent required. Recommended: TC 5032, TC 5033, TC 5034, TC 5035, TC 5037
Business Skills Elective: Program chair consent required. Must be a course in business concepts, not a computer applications course.

Graphics Tools Elective: Program chair consent required.
Recommended: IT 5442, IT 5445
Computer Applications Elective: Program chair consent required.

Web Design (WEB)

Program Chair - Pam Ecker
Co-op Coordinator - Andi Feld-Brockett
Advisors - David Hoctor, Colleen Meyer, CIW-CI

Web Design is one of the degree programs in the Multimedia Information Design career area. Web Design students prepare to create and deliver interactive content for Web, CD, DVD, and kiosk deployment as integral members of Web design and multimedia development teams in business, industry, public agencies, and many other work locations. Students develop proficiency using HTML and other industry-standard languages required for Web site development. They gain knowledge of diverse computer software used to prepare and integrate text, images, animation, video, and other content into effective Web-based products.

Currently a significant number of the courses required for the Web Design degree are scheduled between 8:00 a.m. and 5:00 p.m., Monday through Friday. Some of the required courses also are offered in the evening or on weekends. Students should consult with their advisor for current schedule information.

Graduates earn an Associate of Applied Science degree. Job titles for graduates may include Web Site Designer, Web Developer, Web Animator, Multimedia Designer, Multimedia Project Manager, User Interface Designer, Web Production Artist, Web Graphics Designer, Web Project Manager, or Web Content Designer.

WEB DESIGN

All degree-seeking students must complete the course CAR 9002 College Success Strategies as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1124	Business Algebra	4	0	4
ART	1692	Design 1	2	3	3
TC	5001	Introduction to Multimedia Information Design Careers	2	0	2
TC	5010	Visual Literacy	2	2	3
IT	5430	Accelerated Multimedia Concepts	2	3	3
			15	8	18
SECOND TERM					
ENG	1017	Research and Composition	2	2	3
ART	1690	Drawing 1	2	2	3
IT	5441	Graphics Tools: Photoshop 1	2	3	3
IT	5453	Web Development 1: HTML	2	3	3
			8	10	12
THIRD TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
FOURTH TERM					
ENG	1010	Technical Writing 1	3	0	3
CULT	1646	Mass Media and Culture	3	0	3
TC	5020	Usability Assessment	2	2	3
IT	5206	Programming Logic and BASIC	4	6	6
IT	5454	Web Development 2: JavaScript	2	3	3
			14	11	18
FIFTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
SIXTH TERM					
TC	5041	Technical Editing Methods 1	2	2	3
IT	5431	Multimedia Tools: Dreamweaver 1	2	3	3
IT	5442	Multimedia Tools: Flash 1	2	3	3
IT	544X	Graphics Tools Elective	2	3	3
IT	5455	Web Development 3: Advanced Topics	2	3	3
	XXXX	Humanities/Social Science Elective	3	0	3
			13	14	18
SEVENTH TERM					
SPE	102X	Speech Elective	3	0	3
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
			4	40	5
EIGHTH TERM					
MKT	2901	Principles of Marketing 1	3	0	3
TC	5033	Developing Promotional Materials	3	2	4
IT	5432	Multimedia Tools: Director 1	2	3	3
IT	5570	Multimedia Portfolio Production	2	0	2
	5XXX	Information Technologies Elective	2	3	3
	XXXX	Database Elective	2	3	3
			14	11	18
NINTH TERM					
IT	5457	Web Design Project	3	3	4
IT	5XXX	Programming Elective	2	3	3
IT	5XXX	Advanced Multimedia Elective	2	3	3
	XXXX	Humanities/Social Science Elective	3	0	3
			10	9	13
TENTH TERM					
IT	9500	Cooperative Education - Information Technologies (Alternating)	1	40	2
					108

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Students may be advised to complete IT 5410 and IT 5420 in lieu of IT 5430.
Speech Elective: SPE 1020, SPE 1022, SPE 1024
Humanities/Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR
Graphics Tools Elective: IT 5443, IT 5444, IT 5447
Information Technologies Elective: IT 5221, IT 5322, IT 5151, TC 5032, TC 5035
Database Elective: OT 3068, IT 5321
Advanced Multimedia Elective: IT 5434, IT 5435, IT 5436, IT 5458, IT 5542
Programming Elective: IT 5271, IT 5275, IT 5333

Sciences Division

Main Phone Number: (513) 569-1700

Sciences Division faculty are prepared for and dedicated to fulfilling the following Divisional goals:

- teaching the principles of physics, chemistry, and mathematics considered basic to successful studies in science-dependent fields such as engineering technologies, health technologies, science and health laboratory sciences, or technical business services.
- teaching the principles of physics, chemistry, and mathematics considered essential to successful science studies within liberal arts programs.
- providing in-depth instruction which prepares students for Bachelor's degree studies in scientific or mathe-

matical fields after obtaining an Associate of Science degree at Cincinnati State.

Most students who earn an Associate of Science degree continue their studies at a four-year college or university. Due to the Sciences Division's commitment to the integration of language and reading skills, mathematics, and the understanding of scientific principles to provide a comprehensive problem-solving approach to learning, these students are well prepared to further their studies.

The Sciences Division emphasizes laboratory experiences, particularly in the laboratory-based chemistry and physics departments. Through observation and manipulation of laboratory materials, students gain genuine understanding of physical laws, concepts, and hypotheses and have opportunities to learn to use their own ingenuity while investigating and reporting on scientific issues and phenomena.

Mathematics and Science Readiness

Recommendations for Cincinnati State students concerning enrollment in mathematics and science courses are determined according to the readiness of each student. Readiness is determined during the admissions process through assessment testing and advisor interviews. Students who need to enhance skills prior to enrolling in college-level courses are assisted in selecting appropriate Developmental Education courses described elsewhere in this catalog. As a result, opportunities for students to be successful in their mathematics and science studies are greatly enhanced.

Cooperative Education

The Sciences Division shares Cincinnati State's commitment to cooperative education as an integral part of the curriculum. Cooperative education allows students to apply concepts learned in the classroom with practical, hands-on experience in real (full- or part-time) on-site work environments. In some cases, degree-seeking students with prior work experience related to their post-baccalaureate career goals may be eligible to receive credit through the standard College procedures for granting Advanced Standing Credit. The program chair and cooperative education coordinator must approve all substitutions in advance.

For eligibility requirements, co-op registration policies, and other issues related to cooperative education, please refer to the "Cooperative Education" section of the catalog on pages 27 and 28.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

The Associate of Science degree contains all of the required courses for the transfer module. Students who transfer to an Ohio public university for baccalaureate degrees will find that an Associate of Science degree leads to preferential consideration at the receiving institution.

Associate of Individualized Study

In order to meet the particular career education needs of qualified students, Cincinnati State offers the Associate of Individualized Study (AIS) degree. This degree can be pursued by students whose career objectives cannot be met through one of the associate degree programs offered by the College.

To apply for acceptance into an AIS degree program, students should follow these steps:

1. Contact the Dean of Humanities and Sciences.
2. Complete an admissions application.
3. Have a copy of their high school transcript and college transcript, if applicable, sent directly to the College's Admission Records Office. Applicants who have a GED should submit a copy of the scores.
4. Take the college placement test, COMPASS.
5. Meet with an admissions counselor who will direct the student to the academic division which will be responsible for the AIS program.
6. Consult with the assigned academic advisor who will assist the student in planning the AIS curriculum.
7. Write a justification of the degree program, including a statement of career goals and an explanation of why another associate degree program would not be appropriate.

The program justification and curriculum must be sent to the Academic Policies and Curriculum Committee (APCC) for approval. The APCC may approve the request, suggest modifications in the curriculum, or deny the request. If the AIS program proposal is denied, the student may wish to apply to another academic program.

Associate of Technical Study

Associate of Technical Study: Type A Program

This program enables the student to receive college credit for qualified industry training and to choose courses from two or more existing Cincinnati State associate degree programs and thereby design a personalized curriculum. All ATS-Type A program curricula must be approved by the Academic Policies and Curriculum Committee.

For more information concerning the Associate of Technical Study-Type A program, contact the Dean of Humanities and Sciences.

Associate of Technical Study: Type B Program

This program helps the College to develop associate degree programs in partnership with professional organizations and helps business/industrial firms with staff development programs by equating their training activity to a block of college credit.

A College review committee will examine the training program offered by an organization in order to determine if it qualifies for inclusion. All ATS-Type B curricula must be approved by the Academic Policies and Curriculum Committee.

When implemented, each program accommodates students transferring from an educational program which lies outside the traditional collegial domain. The degree gives recognition to the training of the professionals while enabling them to experience the broadening and enriching components of a college education.

Corporate & Community Services

The Corporate & Community Services Division of Cincinnati State is committed to the delivery of lifelong learning opportunities that provide the community with increased access to the resources of the College in order to promote personal and professional enrichment, economic growth, and workforce development throughout the region.

Corporate & Community Services offers a variety of professional development programs, quality technical training and technology support, workforce education and community enrichment through customized certificate programs, individualized associate degrees, and traditional academic studies. The division is committed to:

- developing and maintaining strong, mutually beneficial partnerships with business, industry, government, non-profit agencies, the professions, and other educational institutions;
- serving clients using needs-based strategies;
- providing flexibility in the customization of training and technical assistance;
- delivering services in the workplace or at College facilities;
- providing efficient cost-effective and prompt services;
- providing results-driven learning services;
- utilizing a variety of instructional technologies that respond to the varied needs of clients;
- supporting the economic development of the Tri-State region.

Cincinnati State
Catalog 2003 — 2004

Course Descriptions

Business
Technologies Division

Information
Technologies Division

Humanities &
Sciences Divisions

Engineering
Technologies Division

Health
Technologies Division

Course Number Index

NOTE: MAC and MIS Department courses are now classified IT (Information Technologies) Department courses. TWE Department courses are now classified TC (Technical Communication) Department courses. Course equivalents are listed under the former department headings.

1601 ASM
1602 ASM
1602 CULT
1603 ASM
1604 ASM
1605 ASM
1606 ASM
1610 ASM
1611 ASM
1620 ASM
1620 PHI
1621 ASM
1621 PHI
1622 ASM
1625 PHI
1628 PHI
1630 PHI
1631 PHI
1645 CULT
1646 CULT
1647 CULT
1660 ART
1662 ART
1663 ART
1664 ART
1665 MUS
1666 MUS
1667 MUS
1670 THE
1671 THE
1678 THE
1680 CULT
1681 CULT
1685 ART
1690 ART
1691 ART
1692 ART
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1695 HNR
1696 HNR
1698 HUM
1699 HUM
1701 ASM
1703 ASM
1802 ASM
1804 ASM
1804 FIN
1805 ASM
1806 ASM
1807 ASM
1808 ASM
1809 ASM
1810 ASM
1810 MKT
1811 ASM
1812 ASM
1817 SCM
1818 SCM
1820 ASM
1822 ASM
1823 LAW
1824 LAW
1825 LAW
1827 LAW
1828 LAW
1829 LAW
1830 ASM
1830 LAW
1831 LAW
1832 ASM
1832 MGT
1833 MGT
1834 MGT
1842 ASM
1844 MKT
1845 MKT
1850 OT
1851 ACC
1852 OT
1861 OT
1862 OT
1863 OT
1864 OT
1873 MKT
1874 MKT
1875 LAW
1877 SCM
1878 MKT
1879 MKT
1880 SCM
1883 MKT
1890 ASM
1900 ASM
1999 BUS
2200 CHE
2202 CHE
2203 CHE
2220 PHY
2221 PHY
2222 PHY
2223 PHY
2224 PHY
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2232 CHE
2233 CHE
2236 CHE
2244 PHY
2245 PHY
2251 CHE
2252 CHE
2253 CHE
2264 PSC
2265 PSC
2267 PSC
2269 PSC
2270 PHY
2277 PSC
2281 CHE
2282 CHE
2283 CHE
2284 CHE
2285 CHE
2286 CHE
2291 PHY
2292 PHY
2293 PHY
2294 PHY
2295 PHY
2296 PHY
2297 PHY
2298 PHY
2299 CHE
2299 PSC
2520 ASM
2521 ASM
2522 ASM
2525 ASM
2526 ASM
2527 ASM
2528 ASM
2530 ASM
2531 ASM
2532 ASM
2535 ASM
2536 ASM
2540 ASM
2541 ASM
2542 ASM
2545 ASM
2550 ASM
2551 ASM
2555 ASM
2560 ASM
2565 ASM
2570 ASM
2801 HRM
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2822 CUL
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2827 CUL
2828 HRM
2829 CUL
2830 HRM
2831 CUL
2832 CUL
2833 CUL
2834 CUL
2835 CUL
2836 CUL
2840 HRM
2841 CUL
2842 CUL
2843 CUL
2900 ACC
2901 MKT
2902 MKT
2905 MGT
2906 MGT
2907 MGT
2908 MGT
2909 MKT
2910 MGT
2911 ACC
2912 ACC
2913 ACC
2914 ACC
2915 ACC
2917 ACC
2918 ACC
2919 ACC
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2921 ACC
2922 ACC
2923 MKT
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2937 SCM
2938 SCM
2939 SCM
2940 SCM
2941 ACC
2942 ACC
2943 ACC
2945 ACC
2946 ACC
2947 ACC
2951 RE
2953 RE
2954 RE
2956 RE

2959	RE	3032	OT	3520	LH	4023	BIO	4098	HLT	4163	HFT
2960	FIN	3035	OT	3523	LH	4050	PE	4099	HLT	4164	HFT
2961	FIN	3036	OT	3524	LH	4051	PE	4100	DT	4165	HFT
2965	MGT	3058	OT	3526	LH	4052	PE	4102	DT	4166	HFT
2966	MGT	3059	OT	3528	LH	4055	PE	4104	DT	4167	HFT
2967	MGT	3062	OT	3529	LH	4056	PE	4106	DT	4168	HFT
2969	FIN	3064	OT	3530	LH	4057	PE	4107	DT	4169	HFT
2970	MGT	3066	OT	3532	LH	4058	HFT	4109	DT	4199	HFT
2971	MGT	3068	OT	3533	LH	4060	HFT	4110	DT	4170	HFT
2972	MGT	3069	OT	3534	LH	4061	HLT	4111	DT	4171	HFT
2973	BUS	3070	OT	3535	LH	4062	PE	4112	DT	4172	HFT
2975	MGT	3071	OT	3536	LH	4063	PE	4113	DT	4173	HFT
2976	FIN	3073	OT	3537	LH	4064	PE	4114	DT	4174	HFT
2977	MGT	3074	OT	3538	LH	4065	PE	4115	DT	4175	HFT
2978	MGT	3075	OT	3539	LH	4066	PE	4116	DT	4176	HFT
2979	MGT	3076	OT	3540	LH	4067	PE	4117	DT	4177	HFT
2980	ITM	3080	OT	3544	LH	4068	PE	4118	DT	4178	HFT
2981	ITM	3092	OT	3546	LH	4069	PE	4119	DT	4180	HFT
2983	ITM	3094	BUS	3547	LH	4070	PE	4120	DT	4181	HFT
2986	MGT	3095	OT	3548	LH	4071	BIO	4122	DT	4182	HFT
2987	MGT	3096	OT	3599	LH	4072	BIO	4124	DT	4183	HFT
2988	MGT	3500	LH	3811	ITHT	4073	BIO	4125	DT	4185	HFT
2989	MGT	3501	LH	3813	ITHT	4074	BIO	4129	DT	4186	HFT
2990	MKT	3502	LH	4000	MCH	4075	BIO	4134	DT	4188	HFT
2996	MGT	3504	LH	4001	MCH	4076	PE	4135	DT	4194	DT
3001	OT	3505	LH	4002	MCH	4077	PE	4136	DT	4197	DT
3002	OT	3506	LH	4004	MCH	4078	PE	4137	DT	4198	DT
3003	OT	3507	LH	4008	MCH	4081	BIO	4138	DT	4199	DT
3006	OT	3508	LH	4009	BIO	4082	BIO	4139	DT	4200	MA
3007	OT	3509	LH	4011	BIO	4083	BIO	4140	DT	4201	MA
3016	OT	3510	LH	4014	BIO	4085	IMT	4153	HFT	4202	MA
3017	OT	3511	LH	4015	BIO	4086	IMT	4155	DT	4203	MA
3018	OT	3513	LH	4016	BIO	4087	IMT	4156	DT	4204	MA
3019	OT	3515	LH	4018	BIO	4088	IMT	4158	DT	4205	MA
3021	OT	3516	LH	4019	BIO	4089	IMT	4159	DT	4206	MA
3022	OT	3517	LH	4020	BIO	4093	BIO	4160	HFT	4207	MA
3023	OT	3518	LH	4021	BIO	4094	HLT	4161	HFT	4208	MA
3024	OT	3519	LH	4022	BIO	4095	BIO	4162	HFT	4209	MA

4211	MA	4364	ECE	4420	HIM	4585	ST	4649	DMS	4718	RT
4213	MA	4365	ECE	4421	HIM	4586	ST	4650	DMS	4719	RT
4214	MA	4366	ECE	4422	HIM	4590	ST	4651	OTA	4720	RT
4215	MA	4367	ECE	4423	HIM	4592	ST	4652	OTA	4723	RT
4224	MA	4368	ECE	4428	HIM	4593	ST	4653	OTA	4730	EMS
4245	MA	4369	ECE	4429	HIM	4594	ST	4654	DMS	4731	EMS
4294	MA	4370	ECE	4431	HIM	4598	ST	4655	DMS	4732	EMS
4298	MA	4371	ECE	4432	HIM	4599	ST	4660	OTA	4733	EMS
4299	MA	4372	ECE	4449	HIM	4600	OTA	4661	OTA	4734	EMS
4301	CLT	4373	ECE	4450	HIM	4610	OTA	4670	OTA	4735	EMS
4302	CLT	4374	ECE	4451	HIM	4611	OTA	4672	DMS	4736	EMS
4303	CLT	4375	ECE	4452	HIM	4612	OTA	4673	DMS	4737	EMS
4304	CLT	4376	ECE	4453	HIM	4613	OTA	4674	DMS	4738	EMS
4305	CLT	4378	ECE	4490	HIM	4614	OTA	4675	DMS	4751	EMS
4306	CLT	4379	ECE	4494	HIM	4620	OTA	4676	DMS	4752	EMS
4307	CLT	4381	ECE	4498	HIM	4621	OTA	4677	DMS	4760	EMS
4308	CLT	4382	ECE	4499	HIM	4622	OTA	4680	OTA	4761	EMS
4309	CLT	4383	ECE	4505	ST	4623	OTA	4681	OTA	4762	EMS
4310	CLT	4384	ECE	4506	ST	4624	OTA	4682	OTA	4763	EMS
4311	CLT	4385	ECE	4531	ST	4625	OTA	4683	DMS	4764	EMS
4312	CLT	4386	ECE	4532	ST	4631	OTA	4684	DMS	4765	EMS
4313	CLT	4387	ECE	4533	ST	4632	DMS	4685	DMS	4766	EMS
4314	CLT	4388	ECE	4534	ST	4633	OTA	4687	DMS	4767	EMS
4317	CLT	4389	ECE	4535	ST	4634	DMS	4698	OTA	4768	EMS
4321	CLT	4392	CLT	4538	ST	4635	OTA	4699	OTA	4769	EMS
4322	CLT	4393	CLT	4541	ST	4636	DMS	4701	RT	4770	EMS
4323	CLT	4394	CLT	4542	ST	4637	DMS	4702	RT	4771	EMS
4340	CLT	4398	CLT	4543	ST	4638	DMS	4703	RT	4772	EMS
4341	CLT	4399	CLT	4544	ST	4639	DMS	4704	RT	4773	FST
4342	CLT	4405	HIM	4551	ST	4640	DMS	4705	RT	4774	FST
4343	CLT	4406	HIM	4552	ST	4641	DMS	4706	RT	4775	FST
4350	CLT	4407	HIM	4553	ST	4642	DMS	4707	RT	4776	FST
4353	CLT	4409	HIM	4565	ST	4643	DMS	4711	RT	4777	FST
4359	ECE	4410	HIM	4566	ST	4644	DMS	4712	RT	4778	FST
4360	ECE	4411	HIM	4567	ST	4645	DMS	4713	RT	4779	FST
4361	ECE	4414	HIM	4580	ST	4646	DMS	4714	RT	4780	FST
4362	ECE	4415	HIM	4581	ST	4647	DMS	4715	RT	4782	EMS
4363	ECE	4417	HIM	4584	ST	4648	DMS	4716	RT	4783	FST

4784	FST	4851	IMT	4953	NUR	5128	IT	5261	IT	5433	IT
4785	FST	4852	IMT	4954	NUR	5130	IT	5262	IT	5434	IT
4786	FST	4855	IMT	4955	NUR	5131	IT	5271	IT	5435	IT
4787	FST	4856	IMT	4956	NUR	5151	IT	5272	IT	5436	IT
4788	FST	4857	IMT	4963	NUR	5152	IT	5275	IT	5441	IT
4789	FST	4858	IMT	4964	NUR	5153	IT	5276	IT	5442	IT
4790	FST	4859	IMT	4973	NUR	5154	IT	5277	IT	5443	IT
4791	FST	4870	MCH	4981	NUR	5199	IT	5278	IT	5444	IT
4792	FST	4871	MCH	4982	NUR	5201	IT	5291	IT	5445	IT
4793	FST	4880	MCH	4993	NUR	5202	IT	5292	IT	5446	IT
4794	RT	4881	MCH	4997	NUR	5204	IT	5293	IT	5447	IT
4795	RT	4882	MCH	4998	NUR	5205	IT	5294	IT	5451	IT
4797	EMS	4883	MCH	4999	NUR	5206	IT	5295	IT	5452	IT
4798	EMS	4885	MCH	4999	RT	5207	IT	5310	IT	5453	IT
4798	FST	4886	MCH	5001	TC	5208	IT	5311	IT	5454	IT
4799	EMS	4890	MCH	5010	TC	5211	IT	5312	IT	5455	IT
4799	FST	4892	IMT	5020	TC	5212	IT	5321	IT	5456	IT
4805	MCH	4893	IMT	5022	TC	5216	IT	5322	IT	5457	IT
4806	MCH	4894	IMT	5032	TC	5217	IT	5323	IT	5458	IT
4807	MCH	4895	IMT	5033	TC	5221	IT	5324	IT	5459	ITP
4810	MCH	4897	MCH	5034	TC	5222	IT	5331	IT	5460	ITP
4811	MCH	4898	MCH	5035	TC	5223	IT	5332	IT	5461	ITP
4812	MCH	4899	MCH	5037	TC	5224	IT	5333	IT	5462	ITP
4813	MCH	4920	NUR	5041	TC	5225	IT	5340	IT	5463	ITP
4814	MCH	4921	NUR	5042	TC	5226	IT	5351	IT	5464	ITP
4816	MCH	4922	NUR	5071	TC	5227	IT	5352	IT	5465	ITP
4817	MCH	4923	NUR	5089	TC	5228	IT	5353	IT	5466	ITP
4818	MCH	4924	NUR	5098	TC	5229	IT	5361	IT	5467	ITP
4819	MCH	4925	NUR	5099	TC	5230	IT	5362	IT	5468	ITP
4820	MCH	4926	NUR	5102	IT	5231	IT	5363	IT	5470	ITP
4821	MCH	4927	NUR	5103	IT	5232	IT	5371	IT	5471	ITP
4822	MCH	4931	NUR	5105	IT	5233	IT	5372	IT	5472	ITP
4825	MCH	4933	NUR	5106	IT	5234	IT	5373	IT	5474	ITP
4840	MCH	4937	NUR	5116	IT	5240	IT	5410	IT	5475	ITP
4841	MCH	4941	NUR	5120	IT	5241	IT	5420	IT	5476	ITP
4842	MCH	4943	NUR	5121	IT	5247	IT	5430	IT	5477	ITP
4846	MCH	4945	NUR	5122	IT	5251	IT	5431	IT	5478	ITP
4849	MCH	4946	NUR	5125	IT	5252	IT	5432	IT	5479	ITP

5480	ITP	6735	LOT	7029	MET	7340	MET	7670	EVET	7779	EET
5481	ITP	6736	LOT	7035	EET	7345	MET	7671	EVET	7780	EET
5482	ITP	6740	LOT	7036	EMT	7346	MET	7675	EVET	7781	EET
5498	ITP	6741	LOT	7099	ET	7351	MET	7676	EVET	7799	EET
5499	ITP	6742	LOT	7110	MET	7355	MET	7677	EVET	7825	IDT
5542	IT	6745	LOT	7111	MET	7501	EMT	7699	EVET	7850	IDT
5543	IT	6749	LOT	7120	MET	7525	EMT	7700	EET	7855	IDT
5544	IT	6750	LOT	7121	MET	7535	EMT	7701	EET	7870	IDT
5570	IT	6758	LOT	7122	MET	7536	EMT	7702	EET	7890	IDT
5571	IT	6768	LOT	7125	MET	7541	EMT	7703	EET	7901	CET
5598	IT	6799	LOT	7130	MET	7546	EMT	7705	CPET	7910	CET
5599	IT	6810	OPT	7132	MET	7552	EMT	7707	EET	7913	CET
6270	QCC	6812	OPT	7140	MET	7555	EMT	7710	EET	7914	CET
6272	QCC	6820	OPT	7141	MET	7600	EVET	7711	EET	7916	CET
6273	QCC	6830	OPT	7142	EMT	7601	EVET	7716	EET	7917	CET
6274	QCC	6831	OPT	7145	MET	7602	EVET	7720	EET	7918	CET
6275	QCC	6833	OPT	7146	EMT	7603	EVET	7721	EET	7920	CET
6276	QCC	6841	OPT	7148	MET	7604	EVET	7728	CPET	7921	CET
6277	QCC	6843	OPT	7150	MET	7605	EVET	7730	EET	7926	CET
6278	QCC	6845	OPT	7154	EMT	7607	EVET	7731	EMT	7927	CET
6279	QCC	6851	OPT	7155	MET	7608	EVET	7732	EMT	7928	CET
6298	QCC	6855	OPT	7157	EMT	7609	EVET	7733	EET	7930	CET
6299	QCC	6857	OPT	7158	MET	7610	EVET	7736	EET	7931	CET
6611	CMT	6867	OPT	7167	EMT	7611	EVET	7738	CPET	7934	CET
6619	CMT	6899	OPT	7181	EMT	7612	EVET	7739	BMT	7935	CET
6621	CMT	7001	EET	7182	EMT	7613	EVET	7740	EET	7936	CET
6630	CMT	7002	MET	7183	EMT	7614	EVET	7743	TET	7940	CET
6631	CMT	7003	EMT	7184	EMT	7616	EVET	7747	CPET	7941	CET
6641	CMT	7004	ET	7185	EMT	7617	EVET	7748	CPET	7942	CET
6649	CMT	7005	MET	7198	MET	7618	EVET	7749	BMT	7943	CET
6651	CMT	7006	EMT	7199	MET	7621	EVS	7750	EET	7944	CET
6698	CMT	7008	MET	7220	MET	7622	EVS	7758	EMT	7945	CET
6699	PSC	7015	EVET	7230	MET	7623	EVS	7759	BMT	7947	CET
6700	LOT	7024	CET	7240	MET	7640	EVET	7762	TET	7948	CET
6710	LOT	7025	CET	7250	MET	7643	EVET	7766	EET	7949	CET
6715	LOT	7026	CET	7310	MET	7644	EVET	7768	CPET	7950	CET
6720	LOT	7027	MET	7320	MET	7646	EVET	7771	EET	7951	CET
6730	LOT	7028	MET	7330	MET	7647	EVET	7772	TET	7953	CET

7954	CET	8171	AVT	9231	BUS	9802	HUM
7955	CET	8172	AVT	9232	BUS	9803	HUM
7956	CET	8180	AVT	9233	BUS	9804	HUM
7958	CET	8181	AVT	9234	BUS	9805	HUM
7959	CET	8182	AVT	9235	BUS	9806	HUM
7963	CET	8183	AVT	9240	ACC	9900	ECE
7964	CET	8185	AVT	9241	ASM	9901	ECE
7968	CET	8190	AVT	9242	BUS	9902	ECE
7969	CET	8191	AVT	9243	GC		
7981	CET	8199	AVT	9244	HOSP		
7982	CET	8200	AVT	9245	LH		
7990	CET	8201	AVT	9247	OT		
7991	CET	8202	AVT	9248	PBA		
7992	CET	8300	AVT	9249	RE		
7993	CET	8306	AVT	9250	CM		
7999	CET	8310	AVT	9251	CM		
8100	AVT	8311	AVT	9252	ITM		
8101	AVT	8320	AVT	9253	ITM		
8102	AVT	8321	AVT	9254	ECM		
8106	AVT	8330	AVT	9255	ECM		
8107	AVT	8331	AVT	9320	HLT		
8108	AVT	8500	ITE	9362	EMS		
8109	AVT	8700	ITE	9368	HFT		
8130	AVT	8900	ITE	9372	NUR		
8131	AVT	9002	CAR	9373	HIM		
8132	AVT	9014	CAR	9374	CLT		
8140	AVT	9015	CAR	9375	DT		
8142	AVT	9200	BT	9376	RT		
8143	AVT	9220	ACC	9377	MCH		
8150	AVT	9221	ASM	9378	HFT		
8151	AVT	9222	BUS	9386	RT		
8152	AVT	9223	GC	9387	MA		
8154	AVT	9224	HOSP	9388	MA		
8155	AVT	9225	LH	9400	ET		
8160	AVT	9227	OT	9401	ET		
8161	AVT	9228	PBA	9500	IT		
8162	AVT	9229	RE	9501	IT		
8170	AVT	9230	BUS	9801	HUM		

ACC Accounting

1851 Auditing **3-0-3**
A course on auditing techniques and procedures for manual and computer-based accounting. Topics include: review of internal control; preparing audit programs, flowcharts, and working papers and internal auditing.
Prerequisites: ACC 2913.

2900 Pre-Accounting **3-0-3**
A course on auditing techniques and procedures for manual and computer-based accounting. Topics include: review of internal control; preparing audit programs, flowcharts, and working papers and internal auditing.
Prerequisites: None.

2911 Principles of Accounting 1 **3-2-4**
A course on principles and practices of basic accounting. Topics include: journalizing, posting, adjusting accounts and preparing financial statements for both service and merchandising companies. Students complete a manual practice set.
Prerequisites: None.

2912 Principles of Accounting 2 **4-0-4**
A continuation of ACC 2911. Topics include: cash, bank reconciliations, accounts receivable, accounting for bad debts, inventory methods, long-term assets, depreciation methods, current liabilities, and payroll accounting.
Prerequisites: ACC 2911.

2913 Principles of Accounting 3 **4-0-4**
A continuation of ACC 2912. Topics include: partnership, corporations, earnings per share, retained earnings, dividends, bonds, investments, working capital, statements of cash flow, and analysis of financial statements.
Prerequisites: ACC 2912.

2914 Cost Accounting 1 **3-0-3**
An introduction to the principles and practices of cost accounting. Topics include: manufacturing costs, cost terminology, cost flows, and allocation of overhead costs and product costing using the job order costing system.
Prerequisites: ACC 2911.

2915 Cost Accounting 2 **3-0-3**
A continuation of ACC 2914. Topics include: the process costing system, lost units, joint products and by-products, standard costing and variance analysis, and an introduction to cost management systems.
Prerequisites: ACC 2914.

2917 Federal Taxation 1 **3-0-3**
A study of Federal income tax as it relates to the individual taxpayer. The course deals in general terms with the most common aspects of taxes as they relate to the individual and to business.
Prerequisites: None.

2918 Federal Taxation 2 **3-0-3**
A study of Federal income tax. Topics include: corporations, partnerships, S corporations, and property transactions.
Prerequisites: None.

2919 Intermediate Accounting 1 **3-0-3**
A continuation of ACC 2913. Topics include: preparation and analysis of all four financial statements and required disclosures; special problems in accounting for current assets such as cash, accounts, and notes receivable; and inventory.
Prerequisites: ACC 2913.

2920 Intermediate Accounting 2 **3-0-3**
A continuation of ACC 2919. Topics include: plant assets, investments, liabilities, contributed capital, and retained earnings.
Prerequisites: ACC 2919.

2921 Managerial Accounting 1 **3-0-3**
A course on the accounting concepts and procedures relevant to preparing reports used by management for planning, control, and decision making. Topics include: determining cost and revenue relationships for management such as cost-volume-profit analysis, managerial uses of quantitative techniques, budgeting, and financial statements.
Prerequisites: ACC 2913.

2922 Computerized Accounting Applications **2-2-3**
A course on applying processing typical business transactions using computerized accounting software. Topics include: integrated accounting applications such as general ledger, accounts receivable, accounts payable, payroll, fixed assets, and depreciation and inventory. Laboratory work uses software similar to programs used in business and industry.
Prerequisites: ACC 2913.

2924 Accounting for Non-Financial Managers **3-0-3**
A basic approach to accounting and finance so non-financial managers can participate in the organizational financial decision-making process. Topics include: understanding financial data from a user's perspective, budgeting, and problem-solving strategies to improve company finances.
Prerequisites: None.

2941 Managerial Accounting 2 **3-0-3**
A continuation of ACC 2921. Topics include: the use of financial information in formulating management decisions.
Prerequisites: ACC 2921.

2942 Fund Accounting for Nonprofit Organizations **3-0-3**
A course on principles and practices of accounting for nonprofit organizations. Topics include: transaction analysis, appropriations, encumbrances, budgeting, and financial reporting.
Prerequisites: ACC 2913.

2943 Intermediate Accounting 3 **3-0-3**
A continuation of ACC 2920. Topics include: provision for income taxes, pensions, post-retirement benefits, leases, accounting changes, and financial statement analysis.
Prerequisites: ACC 2920.

2945 Payroll Procedures 1-0-1
An in-depth course on payroll procedures. Topics include: payroll regulations, payroll tax returns (federal and state), timekeeping, and employee record keeping.
Prerequisites: ACC 2912 or equivalent.

2946 Computerized Income Tax Preparation 0-2-1
A hands-on course on federal individual and sole proprietorship income tax preparation using TurboTax software. Topics include: organizing income tax information and utilizing the tax-planning feature of the software.
Prerequisites: ACC 2917 or equivalent.

2947 Computerized Bookkeeping 0-2-1
A course on the practical application of processing business transactions using QuickBooks software. Topics include: system set-up, processing transactions, and generating financial reports.
Prerequisites: ACC 2911 or ACC 2924, OT 1850 or equivalent.

9220 Cooperative Education Accounting 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ACC program, 2.0 minimum GPA.

9240 Cooperative Education Accounting-Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ACC program, 2.0 minimum GPA.

ART Art

1660 Introduction to Art 3-0-3
An introduction to visual artistic expression in Western culture from ancient times to the present. Topics include: examining painting, sculpture, architecture, and other media for their style, function, and relationship to the historical and cultural developments of the period.
Prerequisites: None.

1662 Art of the Ancient World 3-0-3
A course on art history including prehistoric, early Christian, Byzantine, Near Eastern, and Islamic Art. Topics include: exploration of philosophical, cultural, and religious attitudes and their effects on artistic expression in pottery, painting, architecture, and sculpture.
Prerequisites: None.

1663 Art of the Medieval and Renaissance World 3-0-3
Art history including India, China and Japan before 1400, and European art from the Middle Ages to the Renaissance period. Topics include: exploration of philosophical, cultural, and religious attitudes and their effects on artistic expression in ceramics, paintings, architecture and sculpture. Field trip to museum required.
Prerequisites: None.

1664 Art of the Modern World 3-0-3
Art history including India, China and Japan after 1100, and European and American art from the colonial period through the twentieth century. Topics include: exploration of philosophical, cultural, and religious attitudes and their effects on artistic expression in ceramics, paintings, architecture and sculpture. Field trip to museum required.
Prerequisites: None.

1685 Introduction to Photography 2-3-3
A course on fundamentals of photography for personal and professional expression, using hand-held 35mm cameras. Topics include: camera techniques, exposure meters, lighting, and black-and-white print development. Students must provide their own camera, film, and some supplies.
Prerequisites: None.

1690 Drawing 1 2-2-3
A course on fundamental techniques of drawing in pencil and other media, emphasizing visual observation and realistic expression.
Prerequisites: None.

1691 Drawing 2 2-2-3
A course on fundamental techniques of drawing, emphasizing the human figure.
Prerequisites: ART 1690.

1692 Design 1 2-3-3
An introduction to basic elements and techniques of design including principles of two-dimensional organization.
Prerequisites: None.

1693 Design 2 2-3-3
A continuation of ART 1692. Topics include: advanced elements and techniques of design.
Prerequisites: ART 1692.

1694 Introduction to Sculpture 2-3-4
A course on various sculpture media beginning with clay. Topics include: fabrication techniques, and traditional methods of pinch, coil, and slab formations.
Prerequisites: None.

ASM Automotive Service Management

1004 Electronic Service Information Systems 1-1-1
An introductory course on electronic information systems and diagnostic tools. Topics include: using computer-based service information and specifications, locating manufacturers' electronically-transmitted service bulletins, using hand-held diagnostic computer interface units to locate system faults, and printing information for vehicle servicing.
Prerequisites: None.

1200 Automatic Transmission In-Car Diagnostics 1-1-1
A course on identifying, troubleshooting, and repairing

electronically controlled transaxle units.
Prerequisites: ASM 1601 and ASM 1804 or equivalent.

1501 Mechanical/Hydraulic Brake Fundamentals 1-1-1
An introductory course in the service of the basic braking system. Topics include the operation and service of the hydraulic and mechanical portions of the base brake system.
Prerequisites:

1503 Rear Wheel Anti-Lock Brake Systems 1-1-1
A course in the operation and service of rear wheel anti-lock brake systems. Topics include pracitical methods of testing the control system and trouble code diagnostics.
Prerequisites: ASM 1601 or ASM 2540.

1504 Four Wheel Anti-Lock Brake Systems 1-1-1
An introductory course in the operation, testing, and servicing of four wheel anti-lock brake systems.
Prerequisites: ASM 1601 or ASM 2540.

1601 Electrical Fundamentals 1 1-1-1
A course on basic electrical circuit operation. Topics include: identification of circuit types, characteristics of circuits, and use of meters and test equipment to perform basic electrical measurements.
Prerequisites: None.

1602 Electrical Fundamentals 2 1-1-1
A continuation of ASM 1601. Topics include use of wiring schematics and electrical test equipment to diagnose automotive electrical systems.
Prerequisites: ASM 1601.

1603 Electrical Fundamentals 3 1-1-1
An advanced level automotive electrical class. Topics include the testing and service of solid state and microprocessor controlled automotive systems.
Prerequisites: ASM 1601 and ASM 1602.

1604 Starting and Charging Systems Diagnosis 1-1-1
A course on operational theory and testing of the automotive battery, starter, and charging system components. Students use varied types of test equipment to locate and correct problems in these systems.
Prerequisites: ASM 2540 or equivalent.

1605 GM Body Control Computers 1-1-1
A course on technical information and diagnostic procedures for GM body control module systems.
Prerequisites: ASM 1601 or equivalent.

1606 Automotive Lab Scopes 1-1-1
A course on basic oscilloscope use, technical information, and diagnostic procedures. Topics include: setting up, operating, and using the oscilloscope in automotive diagnostics.
Prerequisites: ASM 1601 or equivalent.

1610 GM Supplemental Restraints 1-1-1
A course on air bag systems used on GM vehicles. Systems include DERM, SDM, SISM, and seat belt pretensioners. Topics include: hands-on troubleshooting for faults, reading and clearing DTCs, and proper component handling procedures.
Prerequisites: ASM 1601 or ASM 2540.

1611 ABS Electronic Brake Diagnosis 1 1-1-1
An introduction to diagnosing electronic antilock brake system components. Topics include: using scan tools to access ABS trouble codes, using the DVOM to locate and troubleshoot electrical failures in the ABS systems, and servicing and replacing field-serviceable parts of ABS systems.
Prerequisites: None.

1620 Bosch V Anti-lock Brake Systems 1-1-1
A course on the operation and service of the Bosch V anti-lock brake system. Topics include: electronic and hydraulic system testing and service.
Prerequisites: ASM 1601 or ASM 2540.

1621 Teves II Anti-Lock Brake Systems 1-1-1
A course on the operation and service of the Teves II anti-lock brake system. Topics include: electronic and hydraulic systems testing and service.
Prerequisites: ASM 1601 or ASM 2540.

1622 Teves IV Anti-Lock Brake System 1-1-1
A course on the operation and service of the Teves IV anti-lock brake system. Topics include electronic and hydraulic system testing and service.
Prerequisites: ASM 1601 or ASM 2540.

1701 Automotive Air Conditioning 1 1-1-1
An introduction to diagnosing electronic antilock brake system components. Topics include: using scan tools to access ABS trouble codes, using the DVOM to locate and troubleshoot electrical failures in the ABS systems, and servicing and replacing field-serviceable parts of ABS systems.
Prerequisites: None.

1703 Electronic Air Conditioning Controls 1-1-1
A course on the operation and service of automatic temperature control systems. Topics include: use of electronic diagnostic equipment and technical service bulletins.
Prerequisites: ASM 1601 or ASM 2540.

1802 Computer Command Carburetors 1-1-1
A course on the diagnosis of carburetor-caused drivability conditions. Topics include: the adjustments of E2M, E4M and E2S carburetors.
Prerequisites: ASM 1804 or equivalent.

1804 Electronic Engine Controls 1 1-1-1
An introduction to the theory and operation of computer-controlled automotive engine fuel and ignition systems. Topics include: basic automotive computer functions, closed loop fuel control systems, computer self tests and systems tests, and location and function of engine fuel and ignition components.
Prerequisites: ASM 2530 or equivalent.

1805 Electronic Engine Controls 2 1-1-1
A course on operating and testing various sensors that operate engine fuel and ignition systems. Topics include: sensor types and functions and testing, servicing, and replacing sensors.
Prerequisites: ASM 2530 or equivalent.

1806 Electronic Engine Controls 3 1-1-1
A course on operating and testing various outputs in engine fuel and ignition systems. Topics include: descriptions of computer outputs; testing and servicing relays, actuators, coils and solenoids; fuel injector testing and service; and testing and operating stepper motors.
Prerequisites: ASM 2530 or equivalent.

1807 Engine Performance Testing 1 1-1-1
An advanced course on diagnosing and repairing electronic ignition systems. Topics include: using DVOMs, scan tools, and oscilloscopes to locate and repair ignition system problems and troubleshooting problems including poor performance, poor gas mileage, and hard start/no start conditions.
Prerequisites: ASM 2531 or equivalent.

1808 Engine Performance Testing 2 1-1-1
A continuation of ASM 1807; covers diagnosing and repairing computer-controlled fuel injection systems. Topics include: using advanced diagnostic equipment such as scan tools and oscilloscopes to locate and repair performance and drivability problems related to electronic fuel control systems.
Prerequisites: ASM 2531 or equivalent.

1809 Engine Performance Testing 3 1-1-1
A continuation of ASM 1808; covers testing and repairing exhaust emissions problems. Topics include: using scan tools and exhaust gas analyzers to locate and repair mechanical or electronic problems that cause high vehicle exhaust emissions and On Board Diagnosis II service.
Prerequisites: ASM 2531 or equivalent.

1810 OBD II Diagnosis 1-1-1
A course on using scan tools and lab scopes to diagnose problems in OBD II compliant engine control systems.
Prerequisites: ASM 1804 or equivalent.

1811 Computer Command Carburetors 1-1-1
A diagnostic course on carburetor-caused drivability conditions. Students perform basic adjustments of E2M, E4M, and E2S carburetors.
Prerequisites: ASM 1804.

1812 Drivability and Emissions Diagnosis 1-1-1
A course on using scan tools and digital multimeters in diagnosis of emission related problems. Topics include: diagnosis of catalytic converters and secondary air injection systems.
Prerequisites: None.

1820 Ford EEC-V Electronic Engine Control Systems 1-1-1
A course on the function and service of the Ford EEC-V engine control system. Topics include: the testing and service of the various engine control systems.
Prerequisites: ASM 1806 or Equivalent.

1822 Ford OBD II Electronic Engine Control System 1-1-1
A course on the operation and comprehensive servicing of vehicles equipped with the Ford OBD II compliant EEC-V engine control system.
Prerequisites: None.

1830 Daimler Chrysler Electronic Engine Control Systems 1-1-1
A course on operating and repairing Chrysler electronic engine control systems. Course includes hands-on diagnostic experience.
Prerequisites: ASM 1810 and ASM 1806 or equivalent.

1832 Daimler Chrysler OBD II Electronic Engine Control Systems 1-1-1
A course on operating and servicing Chrysler vehicles equipped with OBD-II compliant control systems. Course includes hands-on diagnostic experience.
Prerequisites: ASM 1830 or equivalent.

1842 Honda OBD II Electronic Engine Control Systems 1-1-1
A course on the operation and servicing of Honda vehicles equipped with OBD-II compliant control systems. Topics include hands-on experience diagnosing these systems.
Prerequisites: ASM 1806 and ASM 1810 or equivalent.

1890 SPS Service Programming 1-1-1
A course on the equipment and procedures used in reprogramming vehicle controllers. Students gain hands-on experience in programming the latest GM vehicles.
Prerequisites: ASM 1004.

1900 ASE Test Preparation 1-0-1
A course for technicians preparing to take one or more of the ASE Automotive Certification exams. Topics include: job-related tasks for preparation, test-taking techniques, and various types of ASE test questions.
Prerequisites: None.

2520 Introduction to Automotive Technology 2-3-3
An orientation course that familiarizes students with safe and proper procedures while using various shop chemicals, tools, fasteners, and equipment. Topics include: ASE certification and customer concerns.
Prerequisites: None.

2521 Automotive Service Desk Operations 2-2-3
A course on the duties and responsibilities of an automotive service advisor. Topics include: customer interactions, working with technicians and other dealer departments, preparing labor and parts estimates, completing automotive repair orders, and using shop and administrative software packages.
Prerequisites: ENG 1010 or instructor consent.

2522 Fundamentals of Automotive Service Management 2-2-3
A course on automotive service manager duties and responsibilities. Topics include: applying management techniques to the automotive service environment, directing automotive service facility operation, determining overhead and equipment costs, and determining workforce needs and training.
Prerequisites: MGT 2967 or MGT 2965, MKT 2901, ASM 2521.

2525 Engine Fundamentals 1 2-3-3
A general course on conventional engine repairs. Topics include: various components and parts such as timing belts, camshafts, lifters, head gaskets, oil pumps, manifold valves, flywheels, and gasket materials.
Prerequisites: None.

2526 Engine Fundamentals 2 2-3-3
A continuation of ASM 2525. Topics include: total engine replacement versus engine replacement with short or long blocks as an alternative to engine overhaul. Students complete cooling system service during engine removal and replacement.
Prerequisites: ASM 2525.

2527 Engine Rebuild 2-3-3
A continuation of ASM 2526. Topics include: internal combustion engine cylinder block and head rebuilding procedures, hands-on engine disassembly, failure diagnosis, cleaning, measuring, machining, and assembly.
Prerequisites: ASM 2526.

2528 Outdoor Power Equipment Service and Repair 2-2-3
A course on maintaining, servicing, and repairing gasoline and diesel powered machinery including lawn, turf, and gardening type power equipment. Topics include: scheduled maintenance, and troubleshooting and repairing equipment. Students gain hands-on experience in inspecting, tearing down, and repairing various types of equipment.
Prerequisites: LH 3510 or ASM 2525 or instructor consent.

2530 Engine Performance 1 2-3-3
A course on engine mechanical testing procedures. Topics include: cylinder power balance, compression, and cylinder leakage testing and the theory, diagnosis, and repair of distributor-type ignition systems.
Prerequisites: ASM 2525, ASM 2540.

2531 Engine Performance 2 2-3-3
A continuation of ASM 2530. Topics include: the onset, theory, diagnosis, and repair of computer-controlled fuel, ignition and emission systems and hands-on trouble tree diagnosis and repair of these systems using computer-enhanced fault detection codes, stationary diagnostic equipment, and hand-held scanners.
Prerequisites: ASM 2530.

2532 Engine Performance 3 2-3-3
A continuation of ASM 2531. Topics include: fuel injection and emission control system failures and diagnosis, a systematic approach to diagnosing intermittent drivability complaints, distributorless ignition problems, and computer-controlled electronic failures.
Prerequisites: ASM 2531.

2535 Automatic Transmission 1 2-3-3
An introduction to basic automatic transmission testing and service procedures. Topics include: diagnosing unusual fluid usage, performing visual inspection, pressure testing, servicing filters, replacing external seals and bushings, checking condition and alignment of mounts, and removing and installing transmissions and transaxles.
Prerequisites: None.

2536 Automatic Transmission 2 2-3-3
A continuation of ASM 2535. Topics include: theory, operation, service, and overhaul of automatic transmissions and transaxles and diagnosis and overhaul of various manufacturers' products.
Prerequisites: ASM 2535.

2540 Automotive Electrical Diagnosis 1 2-3-3
An introduction to systematic diagnosis and repair of basic electrical circuits. Topics include: step-by-step testing procedures using equipment such as a test light, self powered test light and digital multimeter.
Prerequisites: None.

2541 Automotive Electrical Diagnosis 2 2-3-3
A continuation of ASM 2540. Topics include: the theory, diagnosis and repair of starting and charging systems. Students gain hands-on experience in wiring schematic interpretation associated with testing electric cooling fan circuits, warning light systems, and various electronic gauge systems.
Prerequisites: ASM 2540.

2542 Automotive Electrical Diagnosis 3 2-3-3
A course on advanced theory, diagnosis and service of automotive electrical systems. Topics include: printed circuits, driver information systems, cruise control systems, windshield wiper systems, heated glass, and electronic door lock mechanisms.
Prerequisites: ASM 2540.

2545 Advanced Electrical/Hydraulics/Safety 2-3-3
A course on advanced diagnosis and service of anti-lock braking systems, digital instrumentation circuits, motor driven accessory circuits, and supplemental restraint (air bag) systems.
Prerequisites: ASM 2540.
Corequisites: ASM 2555.

2550 Manual Transmission and Drive Line 1 2-3-3
A course on theory, diagnosis, and repair of manual transmissions and drive line components. Topics include: clutches, pressure plates, constant velocity joints, universal joints, drive shafts, seals, and gaskets.
Prerequisites: None.

2551 Manual Transmission and Drive Line 2 2-3-3
A course on the theory, diagnosis, and internal repair of manual transmissions and transaxles. Topics include: abnormal noise, hard shifting, jumping out of gear, gear ratios, overdrive components, and sealing methods.
Prerequisites: ASM 2550.

2555 Braking Systems 2-3-3
A course on operation, inspection, diagnosis, and repair of conventional braking systems. Topics include: live vehicle performance testing on the Hunter Brake Tester, disc and drum service, lathe machining operations, measuring procedures, power assisted units, combination valves, and basic anti-lock service.
Prerequisites: None.

2560 Suspension and Steering 2-3-3
A course on theory, operation, and service of rack and pinion units. Topics include: steering gear boxes, short-long arm suspension components, MacPherson strut units, independent rear suspension parts and other suspension and steering components, riding height measurements, caster, camber, toe, thrust line, set back, and four-wheel alignment procedures.
Prerequisites: None.

2565 Advanced Automotive Systems 2-3-3
A course on advanced theory, diagnosis and repair of automotive systems. Topics include: automatic heating and air conditioning systems, active suspension systems, electronic variable steering systems, and alternative fueled vehicles.
Prerequisites: ASM 2560.
Corequisites: ASM 2570.

2570 Air Conditioning & Heating 2-3-3
A course on theory, operation, diagnosis, and ozone-safe service of basic air conditioning and heating systems. Topics include: hands-on performance testing, pressure and leak testing, inspecting seals and valves, recycling refrigerant and diagnosing electrical and mechanical controls, compressors, clutches, pressure cut-off switches, and safety devices.
Prerequisites: None.

9221 Cooperative Education - Automotive Service Management 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ASM program, 2.0 minimum GPA.

9241 Cooperative Education Automotive - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ASM program, 2.0 minimum GPA.

AVT Aviation Maintenance Technology

8100 Aircraft Orientation 4-4-5
Topics include: weighing aircraft, performing complete weight-and-balance check, and recording data; starting, grounding, operating, moving, servicing, and securing aircraft; identifying typical ground operation hazards; and identifying and selecting fuels.
Prerequisites: Instructor consent.

8101 Materials & Processes 1 2-3-3
Topics include: identifying and selecting proper hand tools for particular applications; hand forming, laying out, and bending sheet metal; and performing precision measurements.
Prerequisites: Instructor consent.

8102 Aerodynamics & FAA Regulations 3-2-3
Students must demonstrate ability to read, comprehend, and apply information contained in FAA and manufacturers' aircraft maintenance specifications, data sheets, manuals, publications and related Federal Aviation Regulation, Airworthiness Directives, and Advisory Material.
Prerequisites: Instructor consent.

8106 Aircraft Drawings 2-2-2
Topics include: using aircraft drawings, symbols and system schematics; drawing sketches of repairs and alterations; and using blueprint information, graphs, and charts.
Prerequisites: AVT 8100.

8107 Materials & Processes 2 4-6-6
Topics include: fabricating and installing rigid and flexible fluid lines and fittings; identifying and selecting appropriate non-destructive testing methods; performing dye penetrant, eddy current, ultrasonic, and magnetic particle inspections; performing basic heat-testing processes; identifying and selecting aircraft hardware and materials; and inspecting and checking welds.
Prerequisites: Instructor consent, AVT 8101.

8108 Aircraft Electricity 3-2-3
Topics include: calculating and measuring capacitance and inductance; calculating and measuring electrical power; measuring voltage, current, resistance, and continuity; determining the relationship of voltage, current, and resistance in electrical circuits; reading and interpreting aircraft electrical circuit diagrams including solid state devices and logic functions; and inspecting and servicing batteries. Material covered in PHY 2221 is helpful in completing this course.
Prerequisites: Instructor consent.

8109 Cleaning & Corrosion Control 2-3-3
Topics include: identifying and selecting cleaning materials; inspecting, identifying, removing, and treating aircraft corrosion; and performing aircraft cleaning.
Prerequisites: Instructor consent.

8130 Airframe Structures 1 3-7-5
Topics include: servicing and repairing wood structures; identifying wood defects; inspecting wood structures; selecting and applying fabric and fiberglass covering materials; inspecting, testing, and repairing fabric and fiberglass; applying trim, letters, and touch-up paint; identifying and selecting aircraft finishing materials; applying finishing materials; inspecting finishes and identifying defects; inspecting bonded structures; and inspecting, testing, and repairing fiberglass, plastics, honeycomb, composite, and laminated primary and secondary structures.
Prerequisites: AVT 8102, AVT 8107.

8131 Welding Processes 1-4-2
Topics include: welding magnesium and titanium; soldering stainless steel; fabricating tubular structures; soldering, brazing, gas-welding, and arc-welding steel; and welding

aluminum and stainless steel.
Prerequisites: Instructor consent, AVT 8107.

8132 Aircraft Electrical & Generating Systems 4-6-6
Topics include: repairing and inspecting aircraft electrical system components; crimping and splicing wiring to manufacturer specifications; repairing pins and sockets of aircraft connectors; inspecting, troubleshooting, servicing, and repairing alternating and direct current electrical systems; inspecting, checking, and troubleshooting constant speed and integrated speed drive generators; installing, checking, and servicing airframe electrical wiring, controls, switches, indicators, and protective devices; and inspecting, checking, troubleshooting, and servicing landing gear position indicating and warning systems.
Prerequisites: Instructor consent, AVT 8102, AVT 8106, AVT 8108.

8140 Airframe Structures 2 3-7-5
Topics include: selecting, installing, and removing special fasteners for metallic, bonded, and composite structures; inspecting, checking, servicing, and repairing windows, doors, and interior furnishings; inspecting and repairing sheet metal structures; and installing conventional rivets.
Prerequisites: Instructor consent, AVT 8102, AVT 8107.

8142 Assembly & Rigging 3-7-5
Topics include: rigging rotary- and fixed-wing aircraft; checking alignment of structures; assembling aircraft components including flight control surfaces; balancing, rigging, and inspecting movable primary and secondary flight control surfaces; and jacking aircraft.
Prerequisites: Instructor consent, PHY 2222, AVT 8102, AVT 8107.

8143 Airframe Hydraulic & Pneumatic Systems 1-4-2
Topics include: repairing hydraulic and pneumatic power systems components; identifying and selecting hydraulic fluids; and inspecting, checking, servicing, troubleshooting, and repairing hydraulic and pneumatic power systems.
Prerequisites: Instructor consent, MAT 1191, PHY 2222, AVT 8107.

8150 Airframe Electronic and Instrument Systems 4-6-6
Topics include: inspecting, checking, servicing, troubleshooting, and repairing electronic flight instrument systems and mechanical and electrical heading, speed, altitude, temperature, pressure, and position indicating systems including the use of built-in test equipment; installing instruments and performing a static pressure system leak test; and inspecting, checking, and servicing navigation systems, including VHF passenger aircraft VOR, ILS, LORAN.
Prerequisites: Instructor consent, AVT 8132, AVT 8140.

8151 Landing Gear Systems 3-7-5
Topics include: inspecting, checking, servicing and repairing landing gear, retraction systems, shocks, struts, brakes, wheels, tires, and steering systems; and inspecting, checking, troubleshooting, and servicing landing gear position indicating and warning systems.
Prerequisites: Instructor consent, AVT 8143.

8152 Airframe Inspection 1-4-2
Topics include: performing airframe and powerplant conformity and airworthiness inspection.
Prerequisites: Instructor consent, MAT 1192, PHY 2223, AVT 8140, AVT 8142.

8154 Airframe Systems 4-6-6
Topics include: inspecting, checking, troubleshooting, and repairing the following systems and components: heating, cooling, air conditioning, pressurization, air cycle machines, oxygen, fuel dump, fuel system components, fluid quantity indicating pressure fueling systems, fluid pressure and temperature warning, airframe ice and rain control, fire detection and extinguishing, smoke and carbon monoxide detection systems; and performing fuel system management transfer and refueling.
Prerequisites: PHY 2222, AVT 8140.

8155 Airframe Comprehensive 2-1-2
A comprehensive study and review of all required material preparing students for the comprehensive examination. Students must demonstrate the proficiency required to be awarded the degree and be named a candidate for the Federal Aviation Agency written test.
Prerequisites: Instructor consent, all general and airframe courses.

8160 Powerplant Theory & Maintenance 1 5-5-7
An introduction to the design, manufacture, and overhaul of aircraft reciprocating engines. Topics include: overhaul and inspection of an opposed reciprocating engine.
Prerequisites: MAT 1191, PHY 2222, AVT 8102.

8161 Powerplant Lubrication 3-2-4
Topics include: identifying and selecting proper lubricants; inspecting, checking, servicing, troubleshooting, and repairing reciprocating and turbine engine lubrication systems; identifying and selecting propeller lubricants.
Prerequisites: Instructor consent, PHY 2221, AVT 8102, AVT 8106.
Corequisites: AVT 8160.

8162 Propellers 4-4-4
Topics include: inspecting, checking, servicing, and repairing propeller synchronizing and ice control systems and balance propellers; repairing propeller control system components; inspecting, checking, servicing, and repairing fixed pitch constant speed and feathering propellers and propeller governing systems; and installing and repairing propellers.
Prerequisites: Instructor consent, MAT 1191, PHY 2221, AVT 8109.
Corequisites: AVT 8161.

8170 Powerplant Theory & Maintenance 2 5-5-7
Topics include: inspecting and repairing a radial engine; installing, troubleshooting, and removing reciprocating and turbine engines; installing and troubleshooting auxiliary powerplants; and performing powerplant conformity and airworthiness inspections.
Prerequisites: AVT 8160.

8171 Powerplant Fuel Metering Systems 1 5-5-5
Topics include: inspecting, checking and servicing water injection systems; overhauling a carburetor; repairing fuel metering components; inspecting, checking, servicing, troubleshooting, and repairing reciprocating carburetor systems, induction manifolds, and reciprocating fuel injection systems; and troubleshooting and inspecting turbine fuel metering systems.
Prerequisites: Instructor consent, AVT 8100, AVT 8107.

8172 Ignition Systems 4-6-6
Topics include: overhauling magneto and ignition harnesses; repairing engine ignition system components; inspecting, checking, servicing, troubleshooting, and repairing powerplant ignition systems and turbine ignition and starting systems.
Prerequisites: Instructor consent, AVT 8108.

8180 Engine Systems & Inspection 5-5-5
Topics include: inspecting, checking, troubleshooting, servicing, and repairing engine induction, cooling, exhaust, and electrical systems and components.
Prerequisites: Instructor consent, AVT 8101, AVT 8108.

8181 Engine Inspection 4-4-5
Topics include: inspecting, checking, servicing, and repairing reciprocating and turbine engines and engine installations.
Prerequisites: None.

8182 Engine Instruments & Fire Protection 2-3-3
Topics include: inspecting, checking, servicing, troubleshooting, and repairing engine temperature, pressure, and RPM indicating systems; inspecting and repairing fire detection systems; and repairing engine electrical systems.
Prerequisites: Instructor consent, AVT 8108.

8183 Powerplant Theory & Maintenance 3 5-5-7
Topics include: overhauling turbine engines.
Prerequisites: PHY 2222, AVT 8170.

8185 Powerplant Comprehensive 2-1-2
A comprehensive study and review of all required material preparing students for the comprehensive examination. Students must demonstrate the proficiency required to be awarded the degree and be named a candidate for the Federal Aviation Agency written test.
Prerequisites: Instructor consent, all general and powerplant courses.

8190 Aviation Make-Up Var-Var-Var
An opportunity for students to make up FAA required time. Laboratory, written, or reading requirements or extra time on lab projects may be performed during this time.
Prerequisites: None.

8191 General Comprehensive 4-0-4
A course that improves student performance on the FAA general written, oral, and practical tests. Topics include: FARs, physics, electricity, and weight and balance.
Prerequisites: Program chair consent.

8199 Aviation Project Var-Var-Var
A variable combination of aviation lab projects and theory subjects offered to address particular needs of aviation students in atypical situations.
Prerequisites: Program chair consent.

8200 Avionics Orientation 3-2-4
An introduction to the repair of avionics equipment. Topics include: avionics repair procedures for air carriers and repair stations, publications, tools, and the build-up and marking of wire bundles.
Prerequisites: None.

8201 Avionics 1 3-2-4
Topics include: digital electronics with a direct application to aircraft systems including servos, a review of Boolean algebra, logic gates, ARNIC Codes, and troubleshooting aircraft digital systems.
Prerequisites: AVT 8154.

8202 Avionics 2 3-2-4
Topics include: amplifier theory, analog communications theories as they apply to aircraft navigation, communication, intercom, public address, and passenger entertainment systems.
Prerequisites: AVT 8150, AVT 8201.

8300 Preventive Maintenance 2-2-3
Pilots learn to identify, perform, and record maintenance and approve the return to service of their own aircraft. Topics include: changing engine oil; adjusting timing of ignition systems; cleaning, adjusting and installing spark plugs; and other basic aircraft maintenance tasks.
Prerequisites: None.

8306 Turbojet Engine Orientation 2-2-3
A technical elective for the pilot, avionics, and airframe certificate programs. Topics include: basic concepts of turbine engine theory, construction, and disassembly.
Prerequisites: None.

8310 Private Pilot Theory 3-0-3
Prepares students for the FAA Private Pilot Written Test. Topics include: Federal Aviation Regulations for pilots, navigation, weight and balance calculations, meteorology, basic aerodynamics, flight controls, and aircraft systems.
Prerequisites: None.

8311 Private Pilot Flight Lab 2-4-4
Prepares students for the Private Pilot Flight Test. Examples of flight maneuvers include: takeoffs, landings, climbs, turns, descents, slow flight stalls, traffic patterns, emergency procedures, and cross country navigation.
Prerequisites: None.
Corequisites: AVT 8310.

8320 Instrument Pilot Theory 3-0-3
Ground instruction for the FAA Instrument Pilot Written Test. Topics include: instruments and systems, IFR flight planning, radio aids to navigation, en route operations charts, approach and airport charts, meteorology, and instrument pilot privileges and limitations.
Prerequisites: AVT 8310, AVT 8311.

8321 Instrument Pilot Flight Lab 2-4-4
Prepares students for the Instrument Pilot Test. Examples of flight maneuvers include: ILS, VOR, and ADF approaches, en route procedures, holding patterns, and communication procedures.
Prerequisites: AVT 8310, AVT 8311.
Corequisites: AVT 8320.

8330 Commercial Pilot Theory 3-0-3
Prepares students for the FAA Commercial Pilot Written Test. Topics include: commercial pilot privileges and limitations, advanced flight maneuvers, meteorology, and complex airplane performance.
Prerequisites: AVT 8310, AVT 8311.

8331 Commercial Pilot Flight Lab 2-4-4
Prepares students for the Commercial Pilot Flight Test. Examples of flight maneuvers include: operation of complex airplanes and advanced flight maneuvers.
Prerequisites: AVT 8310, AVT 8311.
Corequisites: AVT 8330.

BIO Biology

4009 General Microbiology 3-3-4
An introduction to principles of immunology and control of microorganisms. Topics include: microbial cell structure, metabolism, growth requirements, and ecology.
Prerequisites: BIO 4014.

4011 Microbiology Principles and Techniques 2-6-4
An introduction to microbial growth and required techniques for clinical laboratory students. Topics include: bacteriological media and isolation techniques, staining, aerobic and anaerobic microbial growth, standardized antimicrobial susceptibility testing, parasitology and mycology techniques, and introduction to identifying microorganisms.
Prerequisites: BIO 4014.
Corequisites: CLT 4308 or instructor consent.

4014 Anatomy and Physiology 1 3-2-4
A course on structure and function of the human body. Topics include: anatomical terminology, physiological transport, cells, tissue, skin, and the skeletal and muscular systems. Laboratory includes dissection. High school biology and chemistry with a grade of C or higher within seven years can substitute for prerequisites.
Prerequisites: CHE 2200, BIO 4073.

4015 Anatomy and Physiology 2 3-2-4
A continuation of BIO 4014. Topics include: nervous system, special senses, endocrine system, blood, and the cardiovascular system. Laboratory includes dissection.
Prerequisites: BIO 4014.

4016 Anatomy and Physiology 3 3-2-4
A continuation of BIO 4015. Topics include: respiratory system, gastrointestinal system, metabolism, renal system, fluids and electrolytes, acid-base balance, reproduction, and immune system. Laboratory includes dissection.
Prerequisites: BIO 4015.

4018 Pharmacology 3-0-3
An introduction to clinical drug therapy, categories, and adverse reactions. Topics include: drug therapy; pharmacokinetics; pharmacodynamics; pharmacotherapeutics; adverse drug reactions and drug interactions; and principles, terminology, modes of administration, and mechanism of action of the major drug groups.
Prerequisites: BIO 4016.

4019 Cross Sectional Anatomy 2-2-3
An introduction to the sectional anatomy of major human structures. Topics include: anatomy of the head, neck, thorax, and abdominal-pelvic regions; and organ relationships in the axial, coronal, and sagittal planes.
Prerequisites: BIO 4016.

4020 Fundamentals of Pathophysiology 5-0-5
An introduction to basic disease processes. Topics include: necrosis, inflammation, repair, developmental abnormalities, neoplasia, immune disorders, infectious disease, and the pathogenesis of representative diseases in each category.
Prerequisites: BIO 4016 or equivalent or instructor consent.

4021 Fundamentals of Pharmacology 1 2-0-2
An examination of clinical drug therapy, categories, and adverse reactions. Topics include: terminology, immunizing agents, narcotics/non-narcotics, NSAIDs, antianxiety, sedatives/hypnotics, antineoplastics, corticosteroids, respiratory, cardiovascular, gastrointestinal, anticoagulants, thrombolytics, and antilipemic agents.
Prerequisites: BIO 4016.

4022 Fundamentals of Pharmacology 2 2-0-2
A continuation of BIO 4021. Topics include: antiinfectives and antimicrobial, endocrine, ophthalmic, antiparkinson, anticonvulsant, antidepressant, antipsychotic agents and autonomic nervous system drugs. Completion of BIO 4021 and BIO 4022 is equivalent to BIO 4018.
Prerequisites: BIO 4021.

4023 Immunology 3-0-3
A study of structure and function of the immune system. Topics include: antigen, antibody, lymphocytes, serology complement, immune disease and transplant reactions.
Prerequisites: BIO 4016, CHE 2236.

4071 Concepts of Biology 1 3-2-4
An introduction to basic biology principles from the molecular to the cellular level. Laboratory sessions reinforce lecture topics. For non-biology majors fulfilling a science requirement or for those who need to meet anatomy and physiology prerequisites.
Prerequisites: Acceptable college level reading scores on COMPASS test.

4072 Concepts of Biology 2 3-2-4
A continuation of BIO 4071. Topics include: the molecular biology of the gene, plant form and function, the animal kingdom, evolution, and ecology. Laboratory experiences include field trips to Krohn Conservatory and the Cincinnati Zoo.
Prerequisites: BIO 4071.

4073 Concepts of Biology 3 **3-2-4**
A continuation of BIO 4072. Topics include: the anatomy and physiology of animals, emphasizing human organ systems. Includes laboratory dissection of the fetal pig.
Prerequisites: BIO 4071 or advisor consent, acceptable college level reading scores on COMPASS test.

4074 Human Disease **3-0-3**
An overview of disease in the human body. Topics include: principles of disease and diseases of the various organ systems.
Prerequisites: BIO 4073 or instructor consent.

4075 Foundations of Exercise Science **3-2-4**
An introduction to the human body's response and adaptation to exercise and physical training. Laboratory experiences include testing and measurement related to exercise and fitness.
Prerequisites: BIO 4073.

4081 Biology 1 **3-4-5**
An introduction to basic biological principles. Topics include: the chemistry of life, cell structure, metabolism, and the molecular basis of reproduction and inheritance. Laboratory sessions emphasize experimental design and critical thinking. For Associate of Science or pre-professional students wishing to transfer as biology majors.
Prerequisites: High school biology with a grade of C or higher or BIO 4071.

4082 Biology 2 **3-4-5**
A continuation of BIO 4081. Topics include: major animal phyla and their taxonomic and evolutionary relationships and animal organ systems emphasizing comparative strategies. Laboratory sessions include animal dissections. For Associate of Science or pre-professional students wishing to transfer as biology majors.
Prerequisites: BIO 4081.

4083 Biology 3 **3-4-5**
A continuation of BIO 4082. Topics include: the major plant divisions within the evolutionary context of adaptation to terrestrial environments, classical genetics, and ecology. Laboratory sessions reinforce lecture topics. For Associate of Science or pre-professional students wishing to transfer as biology majors.
Prerequisites: BIO 4071 or advisor consent.

4093 Genetics **3-4-5**
A course that explores the mechanisms of heredity. Topics include: principles of classical, molecular, and population genetics. Laboratory sessions introduce experimental approaches used to investigate plant and animal heredity and the molecular aspects of gene function.
Prerequisites: BIO 4083.

4095 Environmental Science **3-4-5**
A course on the interrelationships between organisms and their natural environments. Topics include: individual, population, and community interactions. Laboratory sessions introduce techniques for the analysis of aquatic and terrestrial ecosystems.
Prerequisites: BIO 4083 or instructor consent.

BMT Biomedical Engineering Technology

7739 Introduction to Biomedical Information Systems and Technology **2-3-3**
A survey of the field of Biomedical Engineering Technology and the role of the BMET in the hospital. Topics include: organization of the hospital, regulations, professional certifications, registrations, ethics, and professionalism. Students use computers as biomedical department tools.
Prerequisites: None.
Corequisites: EET 7701 or EET 7710 and MAT 1161.

7749 Biomedical Instrumentation 1 **3-5-5**
A survey of the field of Biomedical Engineering Technology and the role of the BMET in the hospital. Topics include: organization of the hospital, regulations, professional certifications, registrations, ethics, and professionalism. Students use computers as biomedical department tools.
Prerequisites: BIO 4073, EET 7730, CPET 7738, BMT 7739.

7759 Biomedical Instrumentation 2 **3-5-5**
A continuation of BMT 7749; covers more complex, specialized medical devices. Topics include: advanced equipment malfunction isolation and test instrumentations; maintenance management such as records, stock level optimization, shop layout, forms, and technician duties; and biomedical equipment servicing ethics.
Prerequisites: BMT 7749.
Corequisites: MCH 4000.

BT Business

9200 Professional Practices **1-0-1**
A course that prepares students for the cooperative education interview process, heightens student awareness of work ethics, and provides skills that ensure professional success.
Prerequisites: None.

BUS Business

1999 Special Problems Seminar **Var-Var-Var**
Individual study and special projects pertaining to the particular technology that the student is enrolled in. Open to fourth and fifth term students by special arrangement with the Coordinator and Dean of Business Technologies.
Prerequisites: None.

2925 Business Principles **3-0-3**
A course on the nature of business. Topics include: forms of business ownership, entrepreneurship, principles in finance, global business, management, marketing, ethics, and union-management relations.
Prerequisites: None.

2973 Business Ethics **3-0-3**
An introduction to business ethics. Topics include: truth-in-advertising, whistleblowing, environmental protection, corporate disclosure, discrimination, finance and banking,

computer crime, and workers' rights.
Prerequisites: None.

3094 Workshops in Business Var-Var-Var
Consideration and study of selected issues and topics in the business technologies area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

9222 Cooperative Education Business Management/ Marketing Management 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to a business program, 2.0 minimum GPA.

9230 Cooperative Education Seminar 1 3-0-3
An alternative to participating in the cooperative education program. This course gives students an opportunity to enhance their employment options in their chosen field. Students must attain a grade of C or higher to pass this course.
Prerequisites: Co-op coordinator consent.

9231 Cooperative Education Seminar 2 3-0-3
An alternative to participating in the cooperative education program. This course gives students an opportunity to enhance their employment options in their chosen field. Students must attain a grade of C or higher to pass this course.
Prerequisites: Co-op coordinator consent.

9232 Cooperative Education Seminar 3 4-0-4
An alternative to participating in the cooperative education program. This course gives students an opportunity to enhance their employment options in their chosen field. Students must attain a grade of C or higher to pass this course.
Prerequisites: Co-op coordinator consent.

9233 Business Competencies 2-0-2
A capstone course that helps students develop business competencies and skill sets. Topics include: graduate job search, negotiations, customer service, professional ethics, public service, and cultural diversity. Students complete community service and a portfolio project. Students must earn a grade of C or higher to pass the course.
Prerequisites: BT 9200, all co-op credit hours required by program and/or co-op seminars or co-op coordinator consent.

9234 Business Competencies 1 1-0-1
A capstone course that helps students develop business competencies and skill sets. Topics include: graduate job search, negotiations, customer service, professional ethics, public service, and cultural diversity. Students complete community service and a portfolio project. Students must earn a grade of C or higher to pass the course.
Prerequisites: BT 9200, all co-op credit hours required by program and/or co-op seminars or co-op coordinator consent.

9235 Business Competencies 2 1-0-1
A capstone course that helps students develop business competencies and skill sets. Topics include: graduate job search, negotiations, customer service, professional ethics, public service, and cultural diversity. Students complete community service and a portfolio project. Students must earn a grade of C or higher to pass the course.
Prerequisites: BT 9200, all co-op credit hours required by program and/or co-op seminars or co-op coordinator consent.

9242 Cooperative Education Business/ Mkt. Mgt. - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to program, 2.0 minimum GPA.

CAR Career Development

9002 College Success Strategies 1-0-1
A course that introduces students to Cincinnati State, the College's resources, and its expectations for new students. Topics include: making a successful transition to college life, study skills and time management, library skills, advising and registration, academic financial planning, co-op/clinical opportunities, students' rights and responsibilities, and how to read a college catalog. This course earns college credit, but it does not fulfill general studies or core course requirements for degree or certificate programs. This course must be completed within the first 18 credit hours taken at Cincinnati State.
Prerequisites: None.

9014 College Study Skills 4-0-4
A comprehensive course for students who would like to get the most out of their studies. Topics include: developing positive attitudes toward good study habits and improving basic study skills such as note-taking, memory, preparing for examinations.
Prerequisites: None.

9015 Math Anxiety Study Skills 1-1-1
Math anxiety strategies for a nontraditional math program. Topics include: incorporating facets of self-awareness, self-improvement, and appropriate math study skills.
Prerequisites: None.

CET Civil Engineering Technology

7024 Architectural Drafting 3-4-4
An introduction to architectural drafting concepts. Topics include: preparing residential working drawings; architectural symbols, details, abbreviations and dimensioning methods; and an overview of building codes. Students investigate the four major building materials used in construction: steel, concrete, wood, and masonry.
Prerequisites: None.

7025 Site Drafting 2-3-3
An introduction to surveying drafting. Topics include: con-

tour maps from field notes, cross sections, grading plans, volume calculations, deed abstracts, boundary plats, and building permit drawings. Students should complete MAT 1171 prior to or concurrently with this course.
Prerequisites: CET 7024, CET 7910.

7026 Architectural Design 2-5-4
A continuation of CET 7024. Topics include: the detail and information required in a complete professional set of architectural working drawings and designing a set of architectural working drawings for a office building. Students use special CAD design software to facilitate the design process.
Prerequisites: CET 7024, CET 7927.

7901 CET Measurement Skills 1-2-2
A course on fundamental CET-related skills. Topics include: civil technician skills such as linear and angular dimensioning, soil density, material estimation, plotting, and mapping.
Prerequisites: MAT 1161.

7910 Surveying Measurements 3-2-4
An introduction to field measurement techniques. Topics include: units, field note format, instrument usage, taping, differential leveling, total station use including horizontal and vertical angles, bearing and azimuths, and construction layout including an introduction to GPS.
Prerequisites: None.
Corequisites: MAT 1171 or MAT 1191.

7913 Introduction to Civil Engineering Technologies 1-0-1
An introduction and orientation to the Civil Engineering Technology program and to the CET profession with an emphasis on cooperative education.
Prerequisites: None.

7914 Civil Computer Applications 1-2-2
An introduction to computer applications within the Civil Engineering Technology field. Students use word processing, spreadsheet, and presentation software as it relates to their career field.
Prerequisites: None.

7916 Construction Materials 3-0-3
An introduction to the fundamental uses and engineering properties of construction materials. Topics include: steel, concrete, wood, and asphalt.
Prerequisites: None.

7917 Properties of Concrete 2-2-3
A course on the behavior and characteristics of concrete and common testing procedures. Topics include: concrete properties, ACI mix design, and ASTM standards.
Prerequisites: None.

7918 Properties of Soil 2-2-3
A course on the behavior and characteristics of soil and standard testing procedures. Topics include: soil exploration, sampling, compaction, and strength.
Prerequisites: None.

7920 Surveying Calculations 2-3-3
A course on the problem-solving calculations central to all surveying topics. Topics include: traverse closure, area, and coordinate calculations. Includes both manual and computer solutions.
Prerequisites: CET 7910.

7921 Construction Surveying 2-3-3
A course on fundamental construction layout principles required for typical construction projects. Topics include: basic control networks, coordinate systems and coordinate geometry, alignment and grade for structures, roadway and utilities, data collector use, RTK GPS data acquisition, positioning, and mapping.
Prerequisites: CET 7910 and CET 7920 or instructor consent.

7926 Building Codes 1-3-2
An introduction to building code requirements. Topics include: the Ohio Basic Building, Mechanical, Electrical, and Plumbing codes as they apply to designing and constructing building projects.
Prerequisites: None.

7927 CAD 1 (CET) 2-3-3
A continuation of CET 7935. Topics include: CAD drawing, modifying and dimensioning commands as they apply to civil engineering drawings and other CAD techniques such as paper space, model space, blocks, and attributes.
Prerequisites: Admitted to the CET program or program chair consent, CET 7024, CET 7935.

7928 CAD 2 (CET) 1-6-3
A continuation of CET 7927. Topics include: isometric and three-dimensional drawing techniques, surfacing, menu customization, DXF files, and slide and script commands for presentations.
Prerequisites: CET 7927.

7930 Route Surveying 4-2-5
A course in the elements of road and right-of-way surveying. Topics include: calculation and layout of horizontal curves, vertical curves, spiral transition curves, super-elevation, and typical sections. Includes extensive use of coordinate calculations using CAD design software in practical applications.
Prerequisites: CET 7025, CET 7920.

7931 Light Construction 3-2-4
An introduction to residential and light commercial construction concepts, drawing upon the building code and other sources. Topics include: construction methods such as wood framing, brick veneer, lightweight steel, and masonry construction; structural member selection; footing design; and typical construction detailing.
Prerequisites: None.

7934 Statics (CET) 3-2-4
A course on the engineering analysis of forces as they are applied to structures. Topics include: force analysis and equilibrium of civil engineering structures, centroids, moment of inertia, and static friction.
Prerequisites: MAT 1191.

7935 Introduction to CAD (CET) 2-3-3
An introductory course in computer aided drafting. Topics include: fundamentals of CAD software and GUI interaction emphasizing draw, display, modify, plot, layer, utility and setting commands.
Prerequisites: Admitted to the CET program or program chair consent.
Corequisites: MAT 1171 or MAT 1191.

7936 HVAC Design Systems 3-2-4
A study of heating, ventilation, and air conditioning (HVAC) topics including: heat loss and heat gain design, distribution (ductwork design), equipment selection, an introduction to controls, the effect of electrical loads on HVAC, and air quality issues.
Prerequisites: MAT 1191, CET 7928, CET 7964, CET 7026.
Corequisites: CET 7963.

7940 Elements of Land Surveying 1 3-3-4
An advanced course in the elements of boundary surveys. Topics include: document research, deed descriptions, US public lands survey system, Ohio land subdivisions and legal aspects of land surveys.
Prerequisites: CET 7920.

7941 Computer Integrated Construction (CIC) 1-5-3
An introduction to three construction software packages. Students prepare estimates using Timberline's Precision Estimating Extended, create schedules using Primavera SureTrak Project Manager, and perform project controls with web-based Meridian ProjectTalk.
Prerequisites: None.
Corequisites: CET 7942, CET 7943.

7942 Construction Management 1 2-3-3
An examination and comparison of project delivery systems. Topics include: advantages and disadvantages of the services of each system. Students learn to manually draw and calculate CPM schedules and create schedules for various projects.
Prerequisites: None.

7943 Construction Estimating 2-3-3
A course on construction estimating. Topics include: quantity takeoff, types of estimates, bidding procedures, types of contracts, and selecting the contractor. Students perform a detailed manual estimate from a set of working drawings.
Prerequisites: None.

7944 Strength of Materials (CET) 3-2-4
A course on the behavior and ability of engineering materials to resist forces. Topics include: Hooke's Law, temperature effects, connection analysis, beam mechanics, shear and moment diagrams, and combined stress.
Prerequisites: CET 7934.

7945 Cost Engineering 2-3-3
A course on analyzing construction economic factors through determining cost, schedule, and productivity. Topics include: formulating and calculating unit prices and unit costs, crew mix, productivity rates, feasibility studies, buy versus rent scenarios, project cash flow, cost indices, budget status reports, true profit, and value engineering studies.
Prerequisites: None.
Corequisites: CET 7942, CET 7943.

7947 Drainage Control Systems 3-2-4
An introductory course on designing drainage systems for storm runoff removal. Topics include: analyzing hydrologic problems by the Rational Method, hydrology, detention systems, storm sewers, open channels, culverts, and erosion control principles emphasizing practical application.
Prerequisites: MAT 1191.

7948 Subdivision Design 1 2-3-3
An introduction to residential subdivision design. Topics include: general zoning and subdivision regulations such as lot, street, and easement design. Labs use CAD design software.
Prerequisites: CET 7025, CET 7930.
Corequisites: CET 7947

7949 Introduction to Geographic Information Systems 3-2-4
A course on the basic concepts of geographic information systems. Topics include: GIS terminology, data acquisition, and applications. Students use IDRIS and ESRI software in lab.
Prerequisites: CET 7935, CET 7920.
Corequisites: CET 7940.

7950 Surveying Field Project 1-6-3
Specialized project utilizing fundamental theories and standard practices involved in surveying. Topics include: courthouse research, field reconnaissance and measurement, resolution, computer mapping, platting and legal description writing.
Prerequisites: CET 7930, CET 7940.
Corequisites: CET 7958.

7951 Heavy Construction 3-2-4
A course on heavy construction: large commercial buildings, industrial facilities, and highways. Topics include: construction techniques involving heavy timbers, structural steel, reinforced concrete and combinations thereof; and commercial construction from site work and shoring to curtain walls; glazing; and interior finishes.
Prerequisites: None.

7953 Construction Management 2 2-4-4
The capstone course for the construction management major. Students draw upon and integrate knowledge from previous courses into a detailed oral and written construction management project proposal. Discussion topics include: construction safety, construction law, and ethics in the construction industry.
Prerequisites: CET 7941, CET 7942, CET 7943.

7954 Reinforced Concrete Design 3-2-4
A course on the theory and design process for common reinforced concrete members. Topics include: designing flexural and shear reinforcing in beams, designing columns using the ACI ultimate strength design method, standard testing procedures, and the properties of concrete

as a structural material.
Prerequisites: CET 7934, CET 7944, MAT 1192.

7955 Building Construction 3-2-4
An exploration of commercial construction methods and materials. Topics include: steel and concrete framing techniques, building skin and roof enclosure issues, and common interference issues that arise during construction. Lab includes properties of soil as a building material, soil classification, compaction, and other laboratory tests.
Prerequisites: CET 7934, CET 7944.

7956 Structural Steel Design 3-2-4
A course covering the theory and design process for common steel members. Topics include: tension member design, column behavior and design, and simple beam design. All design conforms to LRFD per current AISC specifications. Labs utilize structural modeling and analysis software.
Prerequisites: CET 7934, CET 7944.

7958 GIS/GPS Control Surveying 1-6-3
Introduction to control surveying. Topics include: basic geodesy, state plane coordinate calculations, vertical control, satellite positioning and network adjustment. Students observe and adjust a horizontal control network with total stations and GPS equipment.
Prerequisites: CET 7927, CET 7930, MAT 1152.
Corequisites: CET 7950.

7959 Subdivision Design 2 2-3-3
A continuation of CET 7948. Topics include: road profiles, cross-sections, sanitary and storm sewer systems, potable water systems, final grading plans, earthwork calculations, and final record plats. All plans use CAD design software for drawing and design.
Prerequisites: CET 7930, CET 7947, CET 7948.

7963 Electrical Design Systems 3-2-4
A study of electrical systems in buildings. Topics include: introduction to electrical theory emphasizing design applications, power distribution (both single and three phase), simple single-lines, equipment selection, lighting protection, safety issues, and effect of electrical loads on HVAC calculations.
Prerequisites: MAT 1191, CET 7026, CET 7928, CET 7968.
Corequisites: CET 7936.

7964 Mechanical Systems 2-3-3
A study of various mechanical systems utilized in buildings. Topics include: water and waste systems (plumbing isometrics), fire protection, acoustics, mechanical devices such as chillers and air dryers, building management systems, and the characteristics of air as an introduction to HVAC.
Prerequisites: MAT 1191, CET 7026.
Corequisites: CET 7928, CET 7968.

7968 Lighting Systems 2-3-3
A course on light sources and lighting design concepts. Topics include: illumination, foot-candles, and surface reflectance, and how these relate to room lighting; lighting calculations; appropriate luminaire selection; cost estimating; and outdoor lighting. Course work includes technical writing and a professional presentation.
Prerequisites: MAT 1191, CET 7026.
Corequisites: CET 7928, CET 7964.

7969 Building Systems Design 3-5-5
Students perform a building design integrating all architectural, mechanical, electrical, plumbing, and acoustical systems into a predetermined space. Topics include: zoning, building codes, ADA requirements, pipe sizing, equipment selection, power distribution, lighting design, and water and waste systems.
Prerequisites: CET 7964, CET 7968.
Corequisites: CET 7936, CET 7963.

7981 Geographical Information Systems 2 3-2-4
A continuation of CET 7949. Students build on basic concepts of spatial data and explore advanced concepts of data creation, manipulation, query, analysis, and map presentation using state-of-the art software.
Prerequisites: CET 7949.

7982 Global Positioning Systems 2 2-4-3
An overview of GPS surveying and related issues. Topics include: mission planning, GPS observation, and data processing. Students investigate both static positioning and real-time kinematic positioning. Includes extensive fieldwork and using software in class.
Prerequisites: CET 7950, CET 7958.

7990 Advanced Survey Calculations 3-2-4
An advanced course on survey calculations. Topics include: coordinate geometry review, advanced coordinate geometry methods, least squares adjustment, error theory, geodetic surveying, state plane coordinates, and photogrammetry.
Prerequisites: CET 7910, CET 7920.

7991 Elements of Land Surveying 2 3-3-4
A continuation of CET 7940. Topics include: legal descriptions, easements, riparian rights, ALTA surveys, USPLS surveys, and state-specific surveying laws in Ohio, Kentucky, and Indiana.
Prerequisites: CET 7940.

7992 Elements of Land Surveying 3 3-2-4
An advanced course on boundary surveying. Topics include: U.S. Public Land Survey System and colonial surveying methods, legal descriptions, and plat preparation. Students work in state plane coordinates. Includes actual case studies and lab exercises.
Prerequisites: CET 7981.

7993 Surveying Laws and Ethics 3-0-3
A course on state-specific surveying laws from Ohio, Kentucky, and Indiana. Topics include: key historic cases relating to boundary locations and ethics specific to the surveying profession.
Prerequisites: CET 7940.

7999 Special Problems Seminar - Civil Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is

enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College, or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair.
Prerequisites: Program chair consent.

CHE Chemistry

2200 Introductory Chemistry Accelerated 4-2-5
An introductory chemistry course for students with no previous experience in chemistry. Topics include: properties, structure, and chemical classification of matter; use of symbols, formulas and equations; chemical bonding; radioactivity; properties of acids, bases, salts, and solutions; and naming acids and bases.
Prerequisites: Acceptable score on chemistry placement test.

2202 Introductory Chemistry 1 4-2-5
An introductory chemistry course. Topics include: metric system properties, structure, formulas, bonding, equation writing and balancing, and stoichiometry. The course involves lectures with laboratory activities.
Prerequisites: Previous math experience equivalent to MAT 1105 or MAT 1161.

2203 Introductory Chemistry 2 4-2-5
A continuation of CHE 2202. Topics include: gas laws, solution chemistry, liquid and solid states, acids, bases, salts, chemical kinetics, and chemical equilibrium. The course involves lectures with laboratory activities.
Prerequisites: CHE 2202.

2231 Fundamentals of General Chemistry 3-3-4
A course in college level general chemistry. Topics include: structure and properties of matter, changes in matter, chemical bonding, chemical reactions, and equilibrium.
Prerequisites: High school chemistry or CHE 2200 within 3 years.

2232 Fundamentals of Organic Chemistry 3-3-4
A course in college level organic chemistry as a foundation for biochemistry. Topics include: carbon bonding, saturated and unsaturated aromatic hydrocarbons, alcohols, phenols; aldehydes, ketones, acids, and amines.
Prerequisites: High school chemistry or CHE 2200 within 3 years.

2233 Fundamentals of Biochemistry 3-3-4
A course in college level biochemistry. Topics include: carbohydrates, amino acids, proteins, lipids, vitamins, enzymes, and metabolism of body fluids.
Prerequisites: CHE 2232 or equivalent.

2236 Physiological Chemistry 3-3-4
An introduction to physiological chemistry for the health professional. Topics include: basic organic concepts such as types of organic compounds, functional groups, and basic organic reactions; carbohydrates; proteins; lipids; nucleic acids; and metabolic cycles. It is strongly recommended that students take CHE 2231 before this course.
Prerequisites: High school chemistry or CHE 2200 within 3 years.

2251 Freshman Chemistry 1 4-3-5
The first of a three-term sequence in general chemistry. Lecture topics include: measurement systems, quantitative aspects of compounds and mixtures, chemical reactions and their quantitative relationships, atomic theory, periodic table and chemical bonding. Laboratory techniques include: noninstrumental separation techniques, gravimetic analysis, solution preparation, and visible spectrophotometric analysis.
Prerequisites: High school chemistry or equivalent within 3 years.

2252 Freshman Chemistry 2 4-3-5
A continuation of CHE 2251. Topics include: kinetic molecular theory of gases, liquids, and solids; solution chemistry; kinetics; equilibrium; and acid-base equilibrium. Analytical lab techniques are taught, including: solution and sample preparation, kinetics experiments, and acid-base titrations.
Prerequisites: CHE 2251.

2253 Freshman Chemistry 3 4-3-5
A continuation of CHE 2252. Topics include: solubility equilibrium, thermochemistry and thermodynamics, electrochemistry, nuclear chemistry, and basic descriptive chemistry. Laboratory experiments include analysis and oxidation-reduction and complexometric titrations, potentiometry and basic organic separation and purification techniques. Other laboratory exercises may be included.
Prerequisites: CHE 2252.

2281 Organic Chemistry 1 3-0-3
A course on principles of carbon chemistry. Topics include: bonding, structure, mechanisms, properties, reactions, and synthesis; and aliphatic and aromatic hydrocarbons.
Prerequisites: CMT 6631 or CHE 2253.
Corequisites: CHE 2284.

2282 Organic Chemistry 2 3-0-3
A continuation of CHE 2281. Topics include: alcohols, alkyl halides, ethers, thiois, aldehydes, and ketones; simple synthesis and analysis; and determination of purity.
Prerequisites: CHE 2281, CHE 2284.
Corequisites: CHE 2285.

2283 Organic Chemistry 3 3-0-3
A continuation of CHE 2282. Topics include: organic acids and their derivatives and amines; and stereochemistry, spectroscopy, and complex mechanisms.
Prerequisites: CHE 2282, CHE 2285.
Corequisites: CHE 2286

2284 Organic Chemistry Laboratory 1 0-4-2
A laboratory course that accompanies CHE 2281. Laboratory experiences include general organic laboratory techniques, especially those of purification of organic compounds.

Prerequisites: CMT 6631 or CHE 2253 or advisor consent.
Corequisites: CHE 2281.

2285 Organic Chemistry Laboratory 2 0-4-2
A laboratory course that accompanies CHE 2282. Laboratory experiences include: simple synthesis and analysis, determination of purity, and classical and instrumental techniques.
Prerequisites: CHE 2281, CHE 2284.
Corequisites: CHE 2282.

2286 Organic Chemistry Laboratory 3 0-4-2
A laboratory course that accompanies CHE 2283. Laboratory topics include: multi-step synthesis, spectrophotometic analysis, and determination of unknowns.
Prerequisites: CHE 2282, CHE 2285.
Corequisites: CHE 2283.

2299 Special Topics in Chemistry Var-Var-Var
An independent academic pursuit related to the student's field of study, mutually agreed upon by the student and supervising faculty member. The Dean of Humanities and Sciences must approve the plan of study prior to registration.
Prerequisites: None.

CLT Clinical Laboratory Technology

4301 Introduction to the Clinical Laboratory 2-3-3
An introduction to clinical laboratory issues and procedures. Topics include: clinical laboratory departments, personnel, professionalism, safety, universal precautions, basic equipment, preparing reagents and specimens for analysis, waived tests, quality control, reporting test results, and laboratory information systems.
Prerequisites: Acceptance into tech courses CLT or Clinical Assistant Program.

4302 Basic Hematology and Hemostasis 2-6-4
A course on the theory and practice of basic hematology and coagulation. Topics include: frequently performed diagnostic tests such as cell counts, examination of blood smears, platelet and reticulocyte counts, prothrombin times and partial thromboplastin times.
Prerequisites: CLT 4321, CLT 4392, CLT 4393.

4303 Basic Urinalysis/Body Fluids 2-3-3
A course on the physiological concepts of the formation of urine as well as its physical, chemical, and microscopic examination in the clinical laboratory. Topics include: normal renal function, pathological conditions, laboratory principles and procedures, and other body fluids of clinical significance.
Prerequisites: CLT 4301.

4304 Clinical Chemistry 3-6-5
A course on the principles and procedures used in chemical analysis of clinical specimens. Topics include: theory and procedures of routine manual and automated chemical laboratory analyses, and quality control.
Prerequisites: CHE 2231, CHE 2236, CLT 4301.
Corequisites: CLT 4317.

4305 Immunohematology 3-6-5
A study of blood banking theory and procedures. Topics include: inheritance of blood group determinants, donor procedures, routine ABO grouping and Rh typing, antibody screening and identification, and compatibility testing.
Prerequisites: CLT 4023, CLT 4301.

4306 Clinical Microbiology 3-6-5
An advanced course on identifying microorganisms that affect human health. Topics include: specimen types; direct gram stains; and clinical significance and identification of various bacteria, parasites, fungi, and mycobacteria.
Prerequisites: BIO 4011 or equivalent.

4307 Hematology & Hemostasis 2 2-3-3
A continuation of CLT 4302. Topics include: abnormal hematology and hemostasis, including morphological, laboratory, and clinical features of anemias, leukemias, and other blood cell disorders; and common coagulopathies.
Prerequisites: CLT 4302.

4308 Immunochemistry 2-3-3
A course in the principles and techniques of immunochemical analysis used in clinical laboratories. Topics include: immunoelectrophoresis, enzyme-linked immunosorbent assay, serological testing, and special chemical analysis of body fluids.
Prerequisites: BIO 4023, CLT 4304.

4309 Clinical Laboratory Seminar 0-3-1
A review course to prepare CLT students for the certification exam. Topics include: review of theory and practice of laboratory procedures in all laboratory areas, including discussion of current developments in clinical laboratory science. Includes a registry-type comprehensive exam.
Prerequisites: Completion of all CLT courses.

4310 Clinical Mycology/Parasitology 1-0-1
A study of basic technology in clinical mycology and parasitology. Topics include: specimen collection and processing, principles of identification, and recognition of common fungi and parasites.
Prerequisites: BIO 4009.

4311 Clinical Applications 1 - Hematology and Coagulation 0-6-2
On-campus laboratory practice in routine hematology and coagulation. Topics include: workload organization, computer skills, record keeping, quality control, professional behavior and routine instrumentation maintenance and troubleshooting.
Prerequisites: CLT 4302.

4312 Clinical Applications 2 - Clinical Chemistry and Urinalysis 0-6-2
On-campus laboratory practice in performance of routine manual and automated procedures in clinical chemistry and urinalysis. Topics include: workload organization, computer skills, record keeping, quality control, professional behavior and routine instrumentation maintenance and troubleshooting.
Prerequisites: CLT 4303, CLT 4304.

4313 Clinical Applications 3 - Blood Bank Serology 0-6-2
On-campus laboratory practice in routine blood banking and serology. Topics include: workload organization, record keeping and quality control.
Prerequisites: CLT 4305.

4314 Clinical Applications 4 - Clinical Microbiology 0-6-2
On-campus laboratory experience in routine clinical microbiology procedures. Topics include: workload organization, record keeping, and quality control.
Prerequisites: CLT 4306, CLT 4310.

4317 Instrumentation for the Clinical Laboratory 1-3-2
An introduction to principles of basic instrumentation in hematology, hemostasis, and clinical chemistry. Topics include: set-up, operation, computer-instrument interfaces, routine maintenance, and quality assurance procedures for spectrophotometers, particle counters, electrodes, chromatographs, and automated discrete analyzers.
Prerequisites: CLT 4301.

4321 Introduction to Clinical Laboratory Science 1-0-1
A course on the Clinical Laboratory Science profession. Topics include: roles and responsibilities of Clinical Laboratory personnel, certification and accreditation, professionalism, related terminology, and quality assurance.
Prerequisites: None.

4322 Physical and Chemical Urinalysis 1-2-2
A course on the physiology of urine formation and the physical and chemical analysis of the urine in the clinical laboratory. Topics include: normal renal function, pathological conditions and practice in manual and automated laboratory procedures.
Prerequisites: CLT 4321, CLT 4392, CLT 4393.

4323 Analysis of Urine Sediment and Body Fluids 1-2-2
A course on the microscopic evaluation of urine sediment and of body fluids other than urine. Topics include: identification and significance of formed elements, correlation with other tests, evaluation of other body fluids and clinical significance.
Prerequisites: CLT 4321, CLT 4392, CLT 4393.
Corequisites: CLT 4322.

4340 Introduction to Phlebotomy Techniques 0-3-1
An introductory course on phlebotomy techniques. Topics include: related anatomy, collection equipment and techniques, age-related collection techniques, specimen quality criteria, professionalism, and communication. Students practice phlebotomy techniques with training arms.
Prerequisites: CLT 4321, CLT 4392.

4341 Phlebotomy Practicum 0-8-1
Off-campus experience and practice of phlebotomy techniques in a health care facility. Emphasizes phlebotomy skill development, patient communication, and professionalism.
Prerequisites: DE 0024, CHE 2203, BIO 4073, CLT 4390, CLT 4392.
Corequisites: CLT 4340.

4342 Clinical Specimens and Laboratory Information 0-1-1
An introductory course on handling clinical specimens and laboratory information. Topics include: specimen collection, identification, transport and suitability, laboratory information systems, and reports.
Prerequisites: CLT 4321, CLT 4292, CLT 4393.

4343 Specimen Processing in the Clinical Laboratory 0-3-1
An introductory course on preparing clinical specimens for analysis. Topics include: preparing blood and body fluids for automated testing, processing microbiological specimens using aseptic technique, and preparing and staining smears.
Prerequisites: CLT 4321, CLT 4392, CLT 4393.
Corequisites: CLT 4342.

4350 Orientation to the Clinical Lab 0-8-1
An introductory course on the clinical laboratory setting. Topics include: skill development, problem solving, patient care and communication, and professionalism. Students perform phlebotomy under the supervision of a qualified phlebotomist.
Prerequisites: CLT 4321, CLT 4392, CLT 4340.

4353 Clinical Laboratory Practice 1-40-6
Students apply theories and procedures in hematology, urinalysis, and clinical chemistry in a local clinical laboratory.
Prerequisites: CLT 4311, CLT 4312, CLT 4350.

4392 Safety and Standard Precautions for Health Care Personnel 0-1-1
A basic course on safety and standard precautions for students pursuing a career in health care. Topics include: safe handling of physical, chemical, and biological hazards with emphasis on bloodborne pathogens and infection control techniques.
Prerequisites: None.

4393 Point-of-Care Laboratory Testing 1-3-2
An introductory course on laboratory tests designated as waived tests by the Clinical Laboratory Improvement Act (CLIA). Topics include: testing protocols, reagent preparation, quality control, and related laboratory equipment. Students perform representative waived tests.
Prerequisites: DE 0024, CHE 2203, BIO 4073.
Corequisites: CLT 4392.

4394 Interpretation of Laboratory Value 3-0-3
A course on interpreting laboratory reports for practitioners and students in other health professions. Topics include: sample collection and analysis, and reporting and interpreting results for many of the clinical laboratory tests.
Prerequisites: None.

4398 Special Studies - CLT Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4399 Special Studies - Clinical Laboratory Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: None.

9374 Parallel Cooperative Education - Clinical Laboratory Technology 1-20-1
The Clinical Laboratory Technology student participates in a part-time paid field learning experience. This experience provides an opportunity to apply knowledge and skills acquired in class. The student must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: CLT 4353, 2.0 minimum GPA.

CM Cemetery Management

9250 Cooperative Education Cemetery Management 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree programs. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the CM program, 2.0 minimum GPA.

9251 Cooperative Education Cemetery Management-Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the CM program, 2.0 minimum GPA.

CMT Chemical Technology

6611 Chemistry 1 and Quantitative Analysis 4-4-6
A general chemistry course emphasizing chemical analysis techniques. Topics include: measurement systems, quantitative aspects of compounds and mixtures, chemical reactions and their quantitative relationships, atomic theory, periodic table, chemical bonding, noninstrumental separation techniques, gravimetric analysis, solution preparation and visible spectrophotometric analysis.
Prerequisites: High school chemistry or equivalent within 3 years.
Corequisites: MAT 1191.

6619 Computer Analysis of Laboratory Data 3-0-3
A course on the application of software as a laboratory tool for technicians. Emphasizes Excel as the data analysis package and use of Internet as a scientific literature research tool.
Prerequisites: None.

6621 Chemistry 2 and Quantitative Analysis 4-4-6
A continuation of CMT 6611. Topics include: kinetic molecular theory of gases, liquids and solids; solution chemistry; kinetics; equilibrium; acid-base equilibrium; solution and sample preparation; kinetics; experiments and acid-base titrations.
Prerequisites: CMT 6611.

6630 Chemical Process Technology 3-0-3
An introduction to the chemical process industry. Topics include: safety and environmental awareness, quality control, basic process principles, and industrial equipment.
Prerequisites: CMT 6611, CMT 6621.

6631 Chemistry 3 & Quantitative Analysis 4-4-6
A continuation of CMT 6621. Topics include: solubility equilibrium, thermochemistry and thermodynamics, electrochemistry, nuclear chemistry, basic descriptive chemistry, oxidation-reduction and complexometric titrations, potentiometry, basic organic separation and purification techniques.
Prerequisites: CMT 6621.

6641 Instrumental Chemical Analysis 1 3-3-4
A course on the instrumental aspects of chemical analysis of inorganic and organic compounds. Topics include: specific ion analysis using selective electrodes, potentiometric titrations, gas chromatography, visible and UV spectrophotometry, infrared spectrophotometry, high performance liquid chromatography and atomic absorption spectroscopy.
Prerequisites: CHE 2232, CMT 6631.

6649 Chemical Technology Capstone 2-3-3
A project-oriented course in which students develop an experimental procedure, perform testing, apply statistical techniques and incorporate the data into a formal report. The project pertains to the student's technical specialty area.
Prerequisites: CMT 6651.

6651 Instrumental Chemical Analysis 2 2-3-3
A continuation of CMT 6641. Topics include: mass spectroscopy and other hyphenated techniques to be covered off campus with hands-on experience.
Prerequisites: CMT 6641.

6698 Special Problems Seminar - CMT Var-Var-Var
Study of selected topics in scientific laboratory designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

CPET Computer Engineering Technology

7705 Survey of Digital Systems 3-2-4
A study of digital combinational logic systems. Topics include: number systems, codes, review of Boolean algebra, logic families, logic simplification methods and implementation of logic equations using NAND and NOR gates, flip-flops, programmable logic arrays, and microprocomputer systems.
Prerequisites: None.
Corequisites: EET 7701.

7728 Digital Combinational Logic 3-2-4
Topics include: number systems, codes, a review of Boolean algebra, logic families, logic simplification methods, and implementation of logic equations using NAND and NOR gates and flip-flops.
Prerequisites: None.
Corequisites: MAT 1191 or MAT 1172, EET 7710 or EET 7702.

7738 Digital Sequential Logic 3-3-4
Topics include: edge-triggered circuitry, J-K flip-flops, sync and async counters, shift registers, clock circuits, monostable theory, encoders, decoders, multiplexing (time base) displays, and circuit design techniques using MSI ICs.
Prerequisites: CPET 7728.
Corequisites: EET 7720 or EET 7703.

7747 Computer Instrumentation 4-2-5
An introduction to transducers. Topics include: creating data acquisition systems by applying analog-to-digital techniques to sensors, types of sensor-computer integration for creating intelligent stand-alone sensors and techniques for manipulating data. Students construct sensor-computer interfaces and write software to acquire sensor data.
Prerequisites: CPET 7748.

7748 Microprocessor Systems 1 3-3-4
A course on microprocessor hardware and software for the Motorola 68HC12 family of devices. Topics include: basic microprocessor hardware, number systems, software architecture, the 68HC12 instruction set, addressing modes, subroutines, serial and parallel ports, and simple serial data transmission.
Prerequisites: CPET 7728.

7768 Microprocessor Systems 2 3-3-4
A continuation of CPET 7748. Topics include: a study of microprocessor systems signals and timing; memory and I/O expansion techniques; interrupts; event processing; and micro application including keyboard input, display output, analog-to-digital input and digital-to-analog output.
Prerequisites: CPET 7738, CPET 7748.

CRJ Criminal Justice

1250 Introduction to Criminal Justice 3-0-3
An overview of the American criminal justice system, its development and elements. Topics include: police, court, corrections, constitutional issues, citizen participation, and current practice.
Prerequisites: SOC 1521.

1251 Introduction to Policing and Law Enforcement 3-0-3
An overview of structure and practices of policing in the US. Topics include: the relationship of police agencies to other aspects of the justice system, effects of technology, diversity, drug enforcement, cynicism, corruption, reform, and community relations.
Prerequisites: CRJ 1250.

1252 Introduction to Corrections 3-0-3
An introduction to the history, principles, and practices of the corrections system. Topics include: an overview of the major components of incarceration, parole, and probation; developing practices; the operations of jails and prisons; and alternatives to incarceration including community-based programs.
Prerequisites: CRJ 1250.

1253 Criminal Courts & Procedures 1 3-0-3
An overview of the American legal system from a criminal justice perspective. Topics include: the basic procedures and applications of criminal law through the US Constitution, Bill of Rights, and recent case law.
Prerequisites: CRJ 1250.

1254 Criminal Courts & Procedures 2 3-0-3
An overview of the American legal system from a criminal justice perspective. Topics include: applying the knowledge and skills from CRJ 1253 with emphasis on case law and court procedures.
Prerequisites: CRJ 1253.

1255 Criminal Law 3-0-3
An overview of the American legal system from a criminal justice perspective including the basic elements of criminal law as defined by the Ohio Revised Code.
Prerequisites: CRJ 1254.

1256 Criminal Investigation Skills 3-0-3
An overview of basic investigation skills. Topics include: criminalistics, forensics, evidence types, procedures for handling, and admissibility.
Prerequisites: CRJ 1250.

1257 Juvenile Delinquency 3-0-3
A comprehensive study of juvenile delinquency and the juvenile court system.
Prerequisites: SOC 1521.

1298 Workshops in Criminal Justice Var-Var-Var
Study of selected topics in criminal justice designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

1299 Special Studies-Criminal Justice Var-Var-Var
Individual study and special projects pertaining to the student's area of concentration. This course is open to students wishing advanced standing or independent study. Students arrange this course with the advisor; requires consent of the Dean of Humanities and Sciences.
Prerequisites: None.

CUL Culinary Arts

2819 Garde Manger Theory 2-0-2
A course on setting up a garde manger kitchen and the dishes needed to present a grand buffet. Students plan and design a buffet menu for a grand event from planning to the event operational stage.
Prerequisites: CUL 2823, CUL 2827.
Corequisites: CUL 2824.

2822 Principles & Methods of Cooking 1 0-9-3
A course on fundamental cooking skills and competencies. Topics include: basic cooking methods and identifying and operating kitchen equipment in a safe and sanitary manner.
Prerequisites: None.
Corequisites: CUL 2831.

2823 Principles & Methods of Cooking 2 0-9-3
A continuation of CUL 2823. Topics include: knife skills, advanced classical sauces and soups, hot and cold salad combinations, light entree selections, hot and cold breakfast menu items, and a review of cooking methods utilizing meat, fish, and poultry.
Prerequisites: CUL 2822.

2824 Garde Manger 0-9-3
An introduction to the contemporary practice of garde manger. Topics include: concepts of the cold kitchen such as cold entrees, pates, terrines, vegetable design, and platter and buffet presentation.
Prerequisites: CUL 2823, CUL 2827.
Corequisites: CUL 2819.

2825 Pastry & Confectionery 4-6-6
Topics include: classical dessert-making, pastry and confectionery for the hotel and restaurant industry, dessert menu planning, correct orientation and familiarity with the patisserie environment, and basic pastry preparations.
Prerequisites: CUL 2824.

2826 Restaurant and Banquet Cooking 0-9-3
A capstone course in which students develop and prepare menus and refine skills to meet the standards required as a certified cook. Students must earn a minimum score of 65% on the London City and Guilds Institute comprehensive exam.
Prerequisites: CUL 2843.

2827 Butchery and Fish Mongering 1-5-3
A course on basic butchery and fish fabrication. Topics include: breaking down various meats from the whole carcass to fabricated cuts; cleaning, scaling, and filleting fish and shellfish; and cooking and presenting the various species of fish and shellfish.
Prerequisites: CUL 2822, CUL 2831.

2829 International Cuisine 0-9-3
A course on producing international menus emphasizing practical baking, roasting, frying, stir-frying, sauteing, steaming, braising, and stewing skills.
Prerequisites: CUL 2824.

2831 Theory of Cooking 1 3-0-3
An introduction to cooking theory using lecture, industry models, and discussion. Topics include: history of modern food service; standard cooking equipment; and principles and methods of stock, sauce, soup, fish, shellfish, meat, vegetable, starch, and breakfast cookery.
Prerequisites: None.
Corequisites: CUL 2822 or CUL 2836.

2832 Preparation and Cooking 2-3-3
A cooking lab emphasizing cold food preparation, breakfast and lunch cookery, plate design, and buffet presentation.
Prerequisites: None.

2833 Basic Baking 2-3-3
Topics include: formulating baking recipes and measuring and selecting ingredients for baking formulas; and preparing various basic pastry, yeast, and cake items and their application to the hotel and restaurant industry.
Prerequisites: None.

2834 Advanced Baking 2-3-3
Topics include: preparing flour confectionery desserts and cold preparations suitable for the hotel and restaurant industry; assembling and decorating various types of cakes and gateau; and making cookies, petit fours, and small confectionery items.
Prerequisites: None.

2835 Production Cooking 3-3-4
The culminating food preparation course for the Culinary Certificate student. Through laboratory experience, students work in the various stations in a commercial kitchen and assist in planning, organizing, and implementing catered service, banquet service, and cafeteria service.
Prerequisites: CUL 2822, CUL 2832, CUL 2833, CUL 2834.

2836 Cooking Skills and Methods 2-6-4
A hands-on course for Culinary Arts certificate students. Topics include: kitchen skills development; principles and methods of cookery; and soup, sauce, starch, vegetable, and meat cookery.
Prerequisites: None.
Corequisites: CUL 2831.

2841 Baking Theory for Restaurants 2-0-2
A course on the components of basic flour confectionery production. Topics include: basic principles; ingredients; quick bread formulas; basic sauces, puff pastry, pies, and tarts; and differentiating between recipe development and formulation.
Prerequisites: None.
Corequisites: CUL 2842.

2842 Baking for Restaurants 1 0-5-2
An introduction to the baking and pastry environment. Topics include: identifying raw bakery product; using mixing machines, ovens, and hand equipment; and producing flour confectionery items.
Prerequisites: None.
Corequisites: CUL 2841.

2843 Baking for Restaurants 2 0-5-2
A continuation of CUL 2842. Topics include: preparing simple and complex desserts for daily menus, restaurants, banquets, and catering businesses; displaying desserts; and dessert costs.
Prerequisites: CUL 2841, CUL 2842.

CULT Culture Studies

1602 Issues in Human Diversity 3-0-3
An expansion of the principles of applied social psycholo-

gy to the broader scope of human society. Topics include: bias assumptions; stereotypes; the concept of a fair, just and civil workplace; and legal ramifications. Students participate in structured activities and focused discussion groups.
Prerequisites: PSY 1502.

1645 Technology and Culture 3-0-3
Study and discussion of the impact and consequences of various applications of science and technology, both historical and current, on individuals and cultures.
Prerequisites: 6 credits of English composition.

1646 Mass Media and Culture 3-0-3
Study and discussion of the role and function of mass media (newspapers, magazines, film, radio, TV, and computer multimedia) in today's society, including assessment of historical, business, and cultural perspectives and implications.
Prerequisites: 6 credits of English composition.

1647 Work and Society 3-0-3
A course on issues regarding the changing aspects of work today. Topics include: the significance and meaning of work to individuals, organizations, and cultures through examination of materials drawn from literary, economic, sociological, political, and other cultural perspectives.
Prerequisites: 6 credits of English composition.

1680 Introduction to Film Studies 1 2-3-3
A course on film as an expressive art and a cultural artifact, emphasizing American film from its inception to the 1950s. Topics include: developing critical awareness as an audience member; film history, genres and themes; directing and acting styles and technical elements of filmmaking. Students must view required films and complete regular written assignments.
Prerequisites: 6 credits of English composition or instructor consent.

1681 Introduction to Film Studies 2 2-3-3
A continuation of CULT 1680, emphasizing American film from the 1950s to the present. Topics include: developing critical awareness as an audience member; film history, genres and themes; directing and acting styles; and technical elements of filmmaking. Students must view required films and complete regular written assignments.
Prerequisites: CULT 1680.

DE Developmental Education

0003 Basic Writing 1 4-0-4
A course on sentence development and preparation for college level writing.
Prerequisites: None.

0004 Basic Writing 2 4-0-4
A continuation of DE 0003. Topics include: sentence development, paragraph writing, and an introduction to essay writing.
Prerequisites: Successful completion of DE 0003 or appropriate COMPASS score.

0005 Basic Writing 3 4-0-4
A continuation of DE 0004, emphasizing essay development.
Prerequisites: Successful completion of DE 0004 or appropriate COMPASS score.

0010 College Reading 1 4-0-4
A course on reading skills and strategies needed to comprehend college-level textbooks. Topics include: previewing, recognizing main ideas, developing vocabulary, increasing comprehension, and thinking critically.
Prerequisites: None.

0011 College Reading 2 4-0-4
A continuation of DE 0010. Topics include: previewing, developing vocabulary, increasing comprehension, synthesizing information, and thinking critically.
Prerequisites: DE 0010 or appropriate COMPASS score.

0018 Integrated College Prep Skills Var-Var-Var
Integrated instruction in college preparatory reading, writing, and basic mathematics fundamentals. Students participate in a collaborative learning community that prepares them for the next level of coursework through group activities and problem-based instruction.
Prerequisites: DE 0010 or appropriate COMPASS score, advisor consent.

0020 Basic Mathematics 1 4-0-4
A review of basic mathematics. Topics include: whole numbers and related operations, primes, composites, factoring, common fractions, decimals, and percents. Available in computer or lecture format.
Prerequisites: None.

0024 Basic Algebra 1 4-0-4
A foundation in basic algebra. Topics include: signed numbers; graphing; graphic, symbolic, and tabular representations of algebra situations; and solving equations with tables, graphs, and symbolically. Available in self-paced or lecture format.
Prerequisites: Successful completion of DE 0020 or appropriate COMPASS score.

0025 Basic Algebra 2 4-0-4
A continuation of DE 0024. Topics include: rates, ratios, and proportional reasoning; polynomial expression; solving systems of equations; and solving quadratic equations. Available in self-paced or lecture format.
Prerequisites: DE 0024.

DMS Diagnostic Medical Sonography

4632 Principles of Diagnostic Medical Sonography 1-0-1
An introductory course on various aspects of sonography in health care. Topics include: terminology, professional affiliations, departmental function, relationship to other imaging modalities, and professional qualities.
Prerequisites: Admitted to the DMS Abdominal/Obstetrics-Gynecology program, DMS Cardiovascular program or program chair consent.

4634 Principles of Abdominal/OB/GYN Sonography 1-4-2
An introductory course on the sonography clinical setting. Topics include: observing concepts and techniques related to sonographic imaging and patient care. Students perform selected procedures under the direct supervision of a qualified sonographer or physician in a variety of health care facilities.
Prerequisites: Admitted to the DMS Abdominal/Obstetric-Gynecologic Program or program chair consent.

4636 Principles of Cardiovascular Sonography 1-4-2
An introductory course on the sonography clinical setting. Topics include: observing the application of concepts in sonographic imaging techniques and patient care. Students perform selected procedures under the direct supervision of a qualified sonographer or physician in a health care facility.
Prerequisites: Admitted to the Cardiovascular DMS program.

4637 Sonographic Physics and Instrumentation 1 3-0-3
A course on the theoretical and practical aspects of ultrasound physics and instrumentation. Topics include: characteristics of sound energy; using ultrasound in imaging; waveforms, propagation, velocity, wavelength, acoustic impedance, reflection, and other types of interaction with tissue.
Prerequisites: Admitted to the DMS program or program chair consent.
Corequisites: DMS Abdominal/Obstetrics-Gynecology emphasis: DMS 4672, DMS 4676, DMS 4677. DMS Cardiovascular emphasis: DMS 4641, DMS 4645, DMS 4648.

4638 Sonographic Physics and Instrumentation 2 3-0-3
A continuation of DMS 4637. Topics include: integrating knowledge of physics with instrumentation theory and applications, advanced signal processing, complex instrumentation, recording devices, biological effects, hemodynamics, Doppler principles, quality control methods, and the production of high quality diagnostic images.
Prerequisites: DMS 4637.
Corequisites: DMS Abdominal/Obstetric-Gynecology emphasis: DMS 4673, DMS 4678, DMS 4679.
DMS Cardiovascular emphasis: DMS 4642, DMS 4646, DMS 4647.

4639 Sonographic Physics and Instrumentation 3 3-0-3
A continuation of DMS 4638. Topics include: review of the hemodynamics of arterial and venous blood flow, demonstration of the effects of underlying hemodynamics on the appearance of spectral wave forms, and color Doppler display.
Prerequisites: DMS 4638.
Corequisites: DMS Abdominal/Obstetric-Gynecology emphasis: DMS, 4640, DMS 4674, DMS 4685.
DMS Cardiovascular emphasis: DMS 4640, DMS 4643, DMS 4647.

4640 Sonography Department Administration 2-0-2
A course on managing sonography laboratory departments. Topics include: physical facilities, administrative policies and procedures, laboratory accreditation, budgets, safety, government regulations, education, and research.
Prerequisites: Admitted to the DMS program or program chair consent.
Corequisites: DMS Abdominal/Obstetric-Gynecology emphasis: DMS 4639, DMS 4674, DMS 4685.
DMS Cardiovascular emphasis: DMS 4634, DMS 4639, DMS 4647.

4641 Cardiovascular Clinical 1 0-24-3
Supervised off-campus experience and practice of cardiovascular diagnostic ultrasound procedures in hospitals, clinics, and private physician offices. Students gain experience with equipment operations, multiple sonographic examinations, and related clinical correlation.
Prerequisites: None.
Corequisites: DMS 4637, DMS 4645, DMS 4648.

4642 Cardiovascular Clinical 2 0-24-3
Supervised off-campus experience and practice of diagnostic cardiovascular ultrasound procedures in hospitals, clinics, and private physician offices. Students build on previous clinical experiences in ultrasound scanning skills and techniques.
Prerequisites: DMS 4641.
Corequisites: DMS 4638, DMS 4646, DMS 4649.

4643 Cardiovascular Clinical 3 0-24-3
Supervised off-campus experience and practice of diagnostic cardiovascular ultrasound procedures in hospitals, clinics, and private physician offices. Students build on previous clinical experiences in ultrasound scanning skills and techniques and are evaluated for final competencies.
Prerequisites: DMS 4642.
Corequisites: DMS 4639, DMS 4640, DMS 4647.

4644 Cardiovascular Clinical 4 0-36-5
Supervised off-campus experience and practice of diagnostic cardiovascular ultrasound procedures in hospitals, clinics, and private physician offices. Students build on previous clinical experiences in ultrasound scanning skills and techniques and are evaluated for final competencies.
Prerequisites: DMS 4643.
Corequisites: DMS 4650.

4645 Echocardiography 1 2-2-3
A course on scanning techniques, scan protocols and procedures within the laboratory setting. Topics include: anatomy, physiology and pathological conditions of the adult heart; and visualization of real-time 2-D imaging, Doppler, and M-mode echocardiography.
Prerequisites: Admitted to the DMS cardiovascular program or DMS program chair consent.
Corequisites: DMS 4637, DMS 4641, DMS 4648.

4646 Echocardiography 2 2-2-3
A continuation of DMS 4645. Topics include: cardiovascular pathophysiology, quantitative measurements and the application of 2-D, M-mode and Doppler imaging.
Prerequisites: DMS 4645.
Corequisites: DMS 4638, DMS 4642, DMS 4649.

4647 Echocardiography 3 3-0-3
A continuation of DMS 4646, covering advanced echocardiography procedures and introducing pediatric echocar-

diography. Topics include: stress, transesophageal, intraoperative, and contrast echocardiography; echo-guided procedures; and other diagnostic cardiac procedures.
Prerequisites: DMS 4646.
Corequisites: DMS 4639, DMS 4640, DMS 4643.

4648 Vascular Sonography 1 2-2-3
A course on fundamental theory and skills for evaluating vascular disease using noninvasive techniques. Topics include: instrumentation and vascular anatomy, physiology, pathology and hemodynamics. Students also learn testing procedures for cerebrovascular, peripheral, arterial and venous circulation.
Prerequisites: Admitted to the Cardiovascular DMS program or program chair consent.
Corequisites: DMS 4637, DMS 4641, DMS 4645.

4649 Vascular Sonography 2 2-2-3
A continuation of DMS 4648. Topics include: cerebrovascular, peripheral, arterial and venous pathophysiology; quantitative measures and the application of real-time sonographic imaging, Doppler imaging and spectral analysis and physiologic testing.
Prerequisites: DMS 4648.
Corequisites: DMS 4638, DMS 4642, DMS 4646.

4650 Cardiovascular Seminar 2-0-2
A course that correlates sonographic concepts and clinical applications in cardiovascular sonography, provides preparation for the ARDMS examination and facilitates transition from student to entry-level cardiovascular sonographer.
Prerequisites: Program chair consent.
Corequisites: DMS 4644.

4654 Vascular Sonography 3 2-0-2
A continuation of DMS 4649. Topics include: transcranial Doppler, interventional vascular procedures, and other diagnostic vascular procedures.
Prerequisites: DMS 4649.
Corequisites: DMS 4644.

4655 Cardiovascular Clinical 5 0-24-3
Supervised off-campus experience and practice of diagnostic cardiovascular ultrasound procedures in hospitals, clinics, and private physician offices. Students build on previous clinical experiences in ultrasound scanning skills and techniques and are evaluated for final competencies.
Prerequisites: DMS 4644.
Corequisites: DMS 4650.

4672 Clinical Sonography 1 0-24-3
Supervised off-campus experience and practice of diagnostic cardiovascular ultrasound procedures in hospitals, clinics, and private physician offices. Students build on previous clinical experiences, further developing ultrasound scanning skills and techniques. Students are evaluated for final competencies.
Prerequisites: Admitted to the DMS Abdominal/Obstetric-Gynecology program or program chair consent.
Corequisites: DMS 4637, DMS 4676, DMS 4683.

4673 Clinical Sonography 2 0-24-3
A continuation of DMS 4672. Students continue to develop ultrasound scanning skills and techniques by performing abdominal, small parts, and OB/GYN diagnostic ultrasound procedures in an off-campus health care facility.
Prerequisites: DMS 4672.
Corequisites: DMS 4738, DMS 4677, DMS 4684.

4674 Clinical Sonography 3 0-24-3
A continuation of DMS 4673. Students continue to develop ultrasound scanning skills and techniques by performing abdominal, small parts, and OB/GYN diagnostic ultrasound procedures in an off-campus health care facility. Students are evaluated for competencies.
Prerequisites: DMS 4673.
Corequisites: DMS 4639, DMS 4640, DMS 4685.

4675 Clinical Sonography 4 0-36-5
A continuation of DMS 4674. Students continue to develop ultrasound scanning skills and techniques by performing abdominal, small parts, and OB/GYN diagnostic ultrasound procedures in an off-campus health care facility. Students are evaluated for competencies.
Prerequisites: DMS 4674.
Corequisites: DMS 4687.

4676 Abdominal Sonography 3-2-4
An introduction to abdominal sonography. Topics include: interpreting clinical tests, related clinical signs and symptoms and normal and abnormal sonographic patterns. Includes laboratory experience with scanning techniques and protocols relative to abdominal structures and physiology.
Prerequisites: Admitted to the DMS Abdominal/Obstetric-Gynecology program or program chair consent.
Corequisites: DMS 4637, DMS 4672, DMS 4683.

4677 Superficial Small Parts Sonography 2-2-3
A course on superficial small parts sonography. Topics include: presenting basic small parts anatomy, scanning techniques, and protocols for identifying normal and abnormal sonographic patterns in the breast, thyroid, scrotum, popliteal fossa, prostate, eye, and musculoskeletal system.
Prerequisites: Admitted to the DMS Abdominal-Obstetrics/Gynecology program or program chair consent.
Corequisites: DMS 4638, DMS 4673, DMS 4684.

4683 Gynecological Sonography 2-2-3
An introduction to gynecological sonography. Topics include: interpreting clinical tests, related clinical signs and symptoms, and normal and abnormal sonographic patterns.
Prerequisites: Admitted to the DMS Abdominal/Obstetrics-Gynecology program or program chair consent.
Corequisites: DMS 4637, DMS 4672, DMS 4676.

4684 Obstetrical Sonography 1 3-2-4
A course on obstetrical ultrasound in the second and third trimesters. Topics include: abnormal etiology and diagnostic techniques related to fetal development, obstetrical scanning techniques and protocols, and detecting abnormalities, pathologies and other deviations from normal development.
Prerequisites: DMS 4683.
Corequisites: DMS 4638, DMS 4673, DMS 4677.

4685 Obstetrical Sonography 2 **3-2-4**
A continuation of DMS 4684. Topics include: abnormal etiology and diagnostic techniques related to fetal development, obstetrical scanning techniques and protocols, and detecting abnormalities, pathologies and other deviations from normal development.
Prerequisites: DMS 4684.
Corequisites: DMS 4639, DMS 4640, DMS 4674.

4687 Sonography Seminar **2-0-2**
A course that provides correlation between previously learned sonographic concepts and clinical applications in general sonography. Topics include: student transition to an entry-level general sonography position and preparation for the ARDMS examination.
Prerequisites: DMS 4674 or program chair consent.
Corequisites: DMS 4675.

DT Dietetic Technology

4100 Nutrition Science **3-0-3**
A course on the science of nutrition. Topics include: digestion, absorption, and metabolism of food nutrients; the relationship of nutrition to health maintenance; and determining adult nutritional needs.
Prerequisites: DT 4136, CHE 2236 or instructor consent.

4102 Nutrition for the Life Cycle **3-2-4**
The study of nutritional needs from conception through maturity. Topics include: correlating nutritional needs with normal growth patterns and consideration of the physiological, psychological, and sociological changes significant to each age group.
Prerequisites: BIO 4014, DT 4136 or instructor consent.

4104 Clinical Nutrition 1 **3-2-4**
The study of clinical nutrition and medical nutrition therapy. Topics include: assessment techniques for disease, burns, surgery, and rehabilitation and specific therapies for bone disorders, cancer, and immune disorders.
Prerequisites: BIO 4015, DT 4102.

4106 Clinical Nutrition 2 **3-2-4**
A continuation of DT 4104. Topics include: weight management; cardiovascular, respiratory, and endocrine disorders; and appropriate diet modifications.
Prerequisites: BIO 4016, DT 4104.
Corequisites: DT 4114.

4107 Clinical Nutrition 3 **3-2-4**
A continuation of DT 4106. Topics include: assessment for metabolic, upper and lower gastro-intestinal, and renal disorders.
Prerequisites: DT 4106.
Corequisites: DT 4115.

4109 Dietetics Technician Seminar **2-0-2**
A course that provides preparation for the DTR examination and portfolio process. Topics include: clinical and food service review, preparation of a technical paper in dietetics, and capstone exam.
Prerequisites: Completion of all Dietetic Technician courses or in final term.

4110 Food Service Directed Practice for Dietary Managers **0-6-1**
Food service practice component scheduled in student's pre-approved workplace. Topics are coordinated with the content of corequisite course.
Prerequisites: Admitted to the Dietary Manager Certificate program.
Corequisites: DT 4156.

4111 Introduction to Dietetics Technology **2-0-2**
A course that provides an orientation to the field of nutrition and dietetics. Topics include: roles, mission and relationship to the health care team.
Prerequisites: Admitted to the Dietetics program.

4112 Dietetics Clinical Practice 1 **0-9-3**
Supervised practice in a health care facility. Topics include: basic interviewing skills, nutrition screening, and assessment techniques.
Prerequisites: DT 4111, DT 4100.
Corequisites: DT 4102.

4113 Dietetics Clinical Practice 2 **0-9-3**
A continuation of DT 4112. Topics include: long term care documentation and practice of food service principles.
Prerequisites: DT 4112.
Corequisites: DT 4104.

4114 Dietetics Clinical Practice 3 **0-9-3**
A continuation of DT 4113. Topics include: long term care and hospital documentation and practice of tube feeding calculations.
Prerequisites: DT 4113.
Corequisites: DT 4106.

4115 Dietetics Clinical Practice 4 **1-9-4**
A continuation of DT 4114. Topics include: pediatric assessment and documentation.
Prerequisites: DT 4114.
Corequisites: DT 4107.

4116 Dietetics Directed Practice 6 **1-6-2**
Final supervised practice in a health care facility. Students review ADA competencies and meet individual curriculum goals.
Prerequisites: DT 4115.
Corequisites: DT 4109.

4117 Community Outreach Directed Practice 5 **1-6-3**
A study of federal, state, and local community nutrition programs. Includes a supervised practice component.
Prerequisites: DT 4115.

4118 Sanitation Directed Practice for Dietary Managers **0-2-1**
Sanitation practice component scheduled in student's pre-approved workplace. Topics are coordinated with the content of corequisite course. Student must work in a food service setting with a preceptor pre-approved by the DMC program director.
Prerequisites: Admitted to the Dietary Manager Certificate Program.
Corequisites: DT 4121.

4119 Human Resources Directed Practice for Dietary Managers 0-6-1
Food service practice component scheduled in student's pre-approved workplace. Topics are coordinated with the content of corequisite course.
Prerequisites: Admitted to the Dietary Manager Certificate program.
Corequisites: DT 4159.

4120 Culinary Skills for Healthy Cuisine 2-6-4
A course on basic culinary skills and presentation techniques. Topics include: food preparation and presentation techniques for group meal service, function of food ingredients, work station design, and table service requirements. Students prepare and present one culinary event.
Prerequisites: Admitted to the Dietetics program.

4122 Food Systems Management 1 2-3-3
An introduction to food systems management. Topics include: institutional menu planning and food service, purchasing and inventory controls, equipment maintenance, budgeting, and cost controls.
Prerequisites: DT 4125.

4124 Food Service Sanitation Certificate 2-0-2
A study of all aspects of food service sanitation and safety for commercial and health care industries. Upon completion of a qualifying exam, students receive certificates from the Ohio Department of Health and the Education Foundation of the National Restaurant Association.
Prerequisites: None.

4125 Quantity Food Production 2-6-4
Comprehensive instruction and practice in quantity food production. Topics include: identifying, caring for, and using institutional food service equipment; standardized recipes; quality assurance; work efficiency; costing; and food evaluation.
Prerequisites: DT 4120, DT 4124, DT 4136.

4129 Food Systems Management 2 2-6-4
Students practice advanced principles of food systems management. Each student manages one food service event and rotates through all aspects of a food service system.
Prerequisites: DT 4122.

4134 Nutrition for Growth and Development 3-2-4
A study of nutrients in foods and nutrition needs of population groups, emphasizing birth through adolescence. Includes menu planning for correlating nutritional needs with normal growth patterns.
Prerequisites: BIO 4073.

4135 Food Preparation for Children 2-3-3
Menu planning and preparation of nutritious foods for children from birth through adolescence. Includes proper food sanitation and safety techniques.
Prerequisites: DT 4134.

4136 Personal Nutrition 2-2-3
A review of basic nutrition concepts and diets for healthy living. Topics include: nutrition and fitness for optimal health, nutrient functions and sources, weight management, life cycle nutritional concerns, and consumer issues in food safety and access.
Prerequisites: None.

4137 Personal Healthy Cooking 1-3-2
A course on integrating basic food preparation techniques and healthy food choices for the individual. Topics include: basic food preparation for consumers, healthy food selection, supermarket savings, recipe modification, alternative seasonings, food safety, and holiday food choices.
Prerequisites: None.

4138 Computing for Clinical Dietetics Applications 0-2-1
An introduction to software applications in clinical dietetics. Topics include: history of computer use in dietetics, introduction to computer hardware, overview of software applications specific to clinical dietetics, nutrient analysis, computerized patient records, and Internet and clinical dietetic resources.
Prerequisites: Keyboarding skill, admitted to Dietetics Program.
Corequisites: DT 4112.

4139 Computing for Food Service Applications 0-2-1
An introduction to software applications in food service management. Topics include: introduction to food service resources on the Internet, overview and trends in food service management software, spreadsheets and food service financial reports, and computerized purchasing and presentation software.
Prerequisites: Keyboarding skill, DT 4125.
Corequisites: DT 4122.

4140 Nutrition Directed Practice for Dietary Managers 0-6-1
Supervised practice in a health care facility. Topics are coordinated with the content of corequisite course.
Prerequisites: Admitted to the Dietary Manager Certificate program.
Corequisites: DT 4158.

4155 Management of Human Resources for DT 3-0-3
Applied management skills for persons employed in food services. Topics include: organizational structures and types of leadership; policy and procedure writing and other types of communication; and practical knowledge needed for recruiting, hiring, training, and evaluating food service employees.
Prerequisites: Admitted to the Dietetics program.

4156 Food Service for Dietary Managers 4-0-4
A course that examines the scope and role of the Dietary Manager in a health care food service. Topics include: food production and evaluation, standardized recipes, menus, recipe quantification, costing, purchasing, receiving, and quality control.
Prerequisites: Admitted to the Dietary Manager Certificate program, employed in food service with a preceptor preapproved by DMC program director.

4158 Nutrition for Dietary Managers 5-0-5
A course that examines the scope and role of the Dietary Manager in a health care nutrition department. Topics include: introduction to nutrition, life cycle nutrition, diet therapy, nutrition assessment, menu modification for modified diets.
Prerequisites: Admitted to the Dietary Manager Certificate program, employed in food service with a preceptor pre-approved by DMC program director.

4159 Human Resources for Dietary Managers 5-0-5
A course that examines the human resource functions for Dietary Managers in a health care environment. Topics include: human resource needs, labor laws, leadership, diversity, communication, and professionalism.
Prerequisites: Admitted to the Dietary Manager Certificate program, must be employed in a food service setting with a preceptor pre-approved by the DMC program director.

4194 Workshops in Dietetics 3-0-3
Consideration and study of selected issues and topics in the dietetics area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

4197 Lifesteps Weight Management 2-0-2
A comprehensive weight management program that stresses the importance of diet, physical activity and behavior modification techniques for weight loss.
Prerequisites: None.

4198 Special Studies - Dietetics Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the DT program chair.
Prerequisites: Instructor consent.

4199 Special Studies - Dietetics Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the DT program chair. Students receive grades of S or U for this course.
Prerequisites: None.

9375 Parallel Cooperative Education - Dietetics Technology 1-20-1
The Dietetic Technology student participates in a part-time paid field learning experience while completing other program requirements. This experience provides an opportunity to apply knowledge and skills acquired in classes. The student must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the Dietetics program, coordinator consent, 2.0 minimum GPA.

ECE Early Childhood Care and Education

4359 Introduction to Childcare 2-0-2
An introduction to the childcare field. Topics include: theories, requirements, and opportunities related to effective childhood daycare operations. Students must complete Early Childhood Care and Education program admission requirements including background checks (fee charged).
Prerequisites: None.

4360 Principles of Early Childhood Education 3-0-3
A course on the theories of early childcare. Topics include: theories regarding physical, mental, social, emotional, and cognitive growth and development from birth through age 5; and developmentally appropriate childcare practice for this age group.
Prerequisites: None.

4361 Early Childhood 1 - Infant/Toddler 3-0-3
A course on the care and nurturing of infants and toddlers. Topics include: specific strategies for promoting growth and development in developmentally appropriate childcare practice.
Prerequisites: ECE 4360.
Corequisites: ECE 4362.

4362 Early Childhood Practicum 1 - Infant/Toddler 1-7-2
Practical application of childcare principles in an infant/toddler setting. Experiences include observations and supervised direct practice.
Prerequisites: ECE 4368, CPR certificate, and admitted to the Early Childhood Care and Education program.
Corequisites: ECE 4361.

4363 Early Childhood 2 - Preschool 3-0-3
A course on developmental principles and educational theories involved in caring for and teaching preschool age through school age children. Topics include: classroom management, guidance, and strategies used to promote growth and development of this age group.
Prerequisites: ECE 4361 and CPR certificate.
Corequisites: ECE 4364.

4364 Early Childhood Practicum 2 - Preschool 1-7-2
Practical application of childcare principles in a preschool setting. Experiences include observation and supervised direct practice.
Prerequisites: ECE 4362.
Corequisites: ECE 4363.

4365 Early Childhood 3 - School Age 3-0-3
A course on developmental principles and educational theories involved in caring for and teaching children ages 6 through 12. Topics include: effective organizational structures and environments, history and trends, curriculum development, classroom management, and licensing requirements.
Prerequisites: ECE 4363.

4366 Early Childhood Practicum 3 - School Age 1-7-2
Practical application of childcare and education principles

in programs for school age children. Experiences include observation and supervised direct practice.
Prerequisites: ECE 4364.
Corequisites: ECE 4365.

4367 Enrichment Activities for Early Childhood Programs 3-0-3
A course on art, music, math, science, and physical activities for young children. Students use a variety of materials and techniques appropriate for infants through school age.
Prerequisites: None.

4368 Early Childhood Observation Techniques 2-0-2
A course on techniques for observing, assessing, and recording information about early childhood care and education programs. Students must complete this course prior to practicum.
Prerequisites: None.
Corequisites: ECE 4359.

4369 Parents and Families in Early Childhood Education 2-0-2
An introduction to methods for parent-teacher collaboration. Topics include: effective communication between parents and teachers to enhance child development, and conducting effective parent-teacher conferences.
Prerequisites: None.

4370 Nutrition and Health for Early Childhood Programs 3-0-3
A course on concepts related to good child nutrition. Topics include: USDA requirements for children; infant feeding; growth rates; and the social, emotional, and mental health needs of early childhood.
Prerequisites: None.

4371 Communicable Diseases of Early Childhood 1-0-1
A course on the recognition, prevention, transmission, and management of early childhood communicable diseases.
Prerequisites: None.

4372 Child Abuse Recognition and Prevention 1-0-1
A course on various types of abuse children may face. Topics include: recognition and prevention of neglect and physical, mental, emotional, verbal and sexual abuse.
Prerequisites: None.

4373 Creating Safe Environments for Early Childhood Programs 3-0-3
A course on requirements for creating safe environments for young children. Topics include: indoor and outdoor safety, water safety, field trip procedures, fire and emergency procedures, and facility safety issues.
Prerequisites: None.

4374 Language Development and Literature for Childhood Programs 3-0-3
A course on the growth and nurturing of oral language development in children from infants to school age. Topics include: the development of listening, communication, and social interaction skills.
Prerequisites: ENG 1001.

4375 Diversity Education for Early Childhood Programs 3-0-3
A course on providing appropriate educational experiences to assist in socialization of young children. Topics include: the nature of multiculturalism, diversity, physical disabilities, developmental disabilities, educational practices and materials, and teacher education.
Prerequisites: None.

4376 Special Needs Children 3-0-3
A course on observation, identification, referral, and adaptation of environments for inclusion of children with mental, physical, and emotional disabilities in early childhood settings. Topics include: legal requirements, community resources, and communication with families.
Prerequisites: ECE 4360.

4378 Administration of Childcare Centers 3-0-3
A course on organization, operation, and management of childcare facilities and family care homes. Topics include: licensing requirements, record keeping, budgeting, working with staff and parents, team building, and resolving conflicts.
Prerequisites: MAT 1121.

4379 Administration Practicum 1-7-2
Practical application of childcare administration principles. Experiences include observation of an administrator of a childcare or Head Start center or a family care provider.
Prerequisites: ECE 4366 or ECE program chair consent.
Corequisites: ECE 4378.

4381 Early Literacy 1 3-0-3
Study of reading and writing skills development from birth to age 5. Topics include: assessing children's reading and writing processes, developing learning experiences to meet individual needs, and involving families in supporting language and literacy development.
Prerequisites: ECE 4374.

4382 Early Literacy 2 3-0-3
A continuation of ECE 4381. Topics include: the teacher's role in promoting early literacy, creating age-appropriate learning environments, creating and selecting materials, planning curriculums, and using a variety of effective teaching strategies.
Prerequisites: ECE 4381.

4383 Early Literacy 3 3-0-3
A continuation of ECE 4382. Topics include: vocabulary development, phonemic and print awareness, and selecting and designing materials to accommodate individual and cultural differences.
Prerequisites: ECE 4382.

4384 Curriculum Design and Technology 3-0-3
A course on planning developmentally appropriate curriculums and lessons to enhance childhood cognitive, social, emotional, and physical skills. Includes demonstrations of instructional technologies and computer software.
Prerequisites: OT 3058 or OT 3059.

4385 Creative Materials and Guided Play 2-0-2
A course on effective strategies for selecting and constructing toys, materials, and equipment for developmentally appropriate activities for children. Topics include: indoor and outdoor activities, social studies, dramatic play, creative movement, imagination development, and gross and fine motor skills development.
Prerequisites: None.

4386 Professional, Legal, and Ethical Issues in Childcare 3-0-3
A course on professional practices, confidentiality, ethical standards, legal issues, and policy implementation for childcare centers.
Prerequisites: None.

4387 Special Topics in Early Childhood Care and Education Var-Var-Var
A course on special topics in early childhood care and education. Content and emphasis vary from term to term. May be repeated for credit.
Prerequisites: ECE 4359 or ECE program chair consent.

4388 Child Development Associate (CDA) Portfolio Development 1-2-2
A course in which Early Childhood Care and Education students complete a resource file to include in the portfolio that documents their skills relevant to the Child Development Associate (CDA) competency areas.
Prerequisites: ECE 4364 with a grade of B or higher.

4389 Early Childhood Skills 5-0-5
A course for students who hold a valid and current CDA (Child Development Associate) credential and have not graduated from an accredited college or university. Students must demonstrate competency and developmentally appropriate practice in early childhood care and education settings.
Prerequisites: Valid CDA and 3 years work experience in ECE.

9900 Internship - Early Childhood Care and Education 1-20-1
Students participate in a part-time unpaid field experience that provides an opportunity to apply knowledge and skills acquired in class. Students must adhere to program internship policies and procedures to earn credit.
Prerequisites: Admitted to the ECE program.

9901 Cooperative Education - Early Childhood Care and Education 1-40-2
Students participate in a full-time paid field learning experience that provides an opportunity to apply knowledge and skills acquired in class. Students must adhere to program cooperative education policies and procedures to earn credit.
Prerequisites: Admitted to the ECE program.

9902 Parallel Cooperative Education - Early Childhood Care and Education 1-20-1
Students participate in a part-time paid field experience that provides an opportunity to apply knowledge and skills acquired in college classes. Students must adhere to program cooperative education policies and procedures to earn credit.
Prerequisites: Admitted to the ECE program.

ECM E-Commerce Marketing

9254 Cooperative Education - E-Commerce Marketing 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the E-Commerce Marketing program, 2.0 minimum GPA.

9255 Cooperative Education - E-Commerce Marketing 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to E-Commerce Marketing program, 2.0 minimum GPA.

ECO Economics

1512 Microeconomics 3-0-3
An overview of the economic micro-system. Topics include: the fundamental economic problem of scarcity, demand and supply analysis within individual markets, price determination, analysis of cost, forecasting, and economic decision-making in the firm.
Prerequisites: None.

1513 Macroeconomics 3-0-3
An overview of the economic macro-system. Topics include: analysis of price level; inflation and unemployment; the role of government in monetary and fiscal policy; and analysis of aggregate income, consumption, savings, and investment.
Prerequisites: None.

1514 International Aspects of Economics 3-0-3
A course on the application of micro- and macroeconomics to the global economy. Topics include: theories of comparative economic systems, resource markets, trade policies, economic development, the international monetary system, and trade policies.
Prerequisites: ECO 1512 or ECO 1513 or instructor consent.

EET Electronic Engineering Technology

7001 Computer Concepts 1-2-2
An introductory course on computers. Topics include: hardware, disk operating systems, basic word processing, elementary programming. Required for all Engineering Technology pre-tech students unless specifically waived by the Dean of Engineering Technologies.
Prerequisites: OT 3007.

7035 Computer Applications for Engineering Technology 2-3-3
Introduction to Windows, DOS, and applications software. Topics include: Microsoft Word, Excel, PowerPoint, and CAD software such as PSpice, AutoCAD, or similar software. Students integrate these software packages to solve engineering technology problems.
Prerequisites: EET 7001 or equivalent.

7700 Electrical Concepts 3-2-4
An introduction to electrical unit, circuit and measurement concepts for students with limited background in electrical fundamentals. Topics include: series, parallel, series-parallel and basic inductance and capacitance concepts. Required for all students in pre-BMET, pre-CPET, pre-EET, pre-EMET and pre-LEOT programs.
Prerequisites: None.
Corequisites: MAT 1161.

7701 Electronic Fundamentals 1 3-2-4
A course on the basic laws of AC and DC electricity and their applications. Topics include: voltage, current, power distribution as applied to resistive circuits, instrumentation, measurement techniques, component testing, basic circuit construction, and troubleshooting.
Prerequisites: DE 0025 or MAT 1161 or equivalent test scores.
Corequisites: MAT 1124, or MAT 1151 or MAT 1162, or MAT 1171.

7702 Electronic Fundamentals 2 3-2-4
A continuation of EET 7701. Topics in AC circuits include: capacitance, inductance, magnetic principles, reactance, impedance, instrumentation, measurement techniques, component testing, circuit construction, and troubleshooting.
Prerequisites: EET 7701, MAT 1124 or MAT 1151 or MAT 1162 or MAT 1171.
Corequisites: MAT 1172 or MAT 1191.

7703 Methods of Network Analysis 3-2-4
An introduction to methods of network analysis for single- and multi-source AC and DC circuits. Topics include: source conversions, branch and mesh methods of analysis, superposition, Thevenin's theorems, phase relationships, power factor, resonant and filter networks, measurement techniques, advanced circuit construction, and troubleshooting.
Prerequisites: EET 7702, MAT 1191.
Corequisites: MAT 1192.

7707 Survey of Analog Devices 3-2-4
A survey of analog devices for students in a non-engineering technology degree program. Topics include: operational characteristics and applications of capacitors, inductors, transformers, diodes, bipolar transistors, operational amplifiers, circuit construction, and troubleshooting.
Prerequisites: EET 7701, MAT 1161.

7710 DC Circuit Analysis 5-0-5
An introduction to the concept of electricity. Topics include: current, voltage, resistance, and power; applying various laws and theorems to series, parallel, and series parallel circuits; and network analysis using source conversions, Thevenin's, superposition, and maximum power transfer theorems. Students use circuit simulation software.
Prerequisites: None.
Corequisites: MAT 1191 or MAT 1172, EET 7711.

7711 DC Circuits Lab 0-3-1
An introduction to circuit construction, measurement, and troubleshooting DC circuits. Topics include: proper techniques and use of instruments commonly used by technicians in theory verification and troubleshooting. Students use DC power supplies, VOMs, and DMM extensively throughout the course.
Prerequisites: None.
Corequisites: EET 7710.

7716 Computer Calculations for Electronics 3-3-4
A course on DOS/Windows and application software. Topics include: Microsoft Word, Excel, PowerPoint, and CAD software such as PSpice or similar software. Students use these software packages to solve sophisticated electronics engineering technology problems.
Prerequisites: A knowledge of basic computer operations, CPET 7705 or CPET 7728, EET 7710 and EET 7711 or EET 7702.

7720 AC Circuit Analysis 5-0-5
An introduction to capacitance and inductance including transient circuit analysis. Topics include: AC waveforms; reactance; impedance; transformers; series, parallel and series-parallel AC circuits and applications of these circuits. Students use PSpice circuit simulation software.
Prerequisites: EET 7710, EET 7711.
Corequisites: MAT 1192, EET 7721.

7721 AC Circuits Lab 0-3-1
An introduction to the proper techniques and instruments commonly used by technicians in theory verification and troubleshooting AC circuits. Students use analog and digital oscilloscopes, signal generators, and frequency counters to construct circuits and measure AC electrical quantities.
Prerequisites: EET 7710, EET 7711.
Corequisites: EET 7720.

7730 Electronics 1 5-2-6
A course on semiconductor theory. Topics include: an introduction to diode circuits and basic power supply circuits; transistor theory covering biasing and amplification; and small signal amplifiers including common-emitter, common-collector, and cascaded amplifiers. Students use circuit simulation software.
Prerequisites: EET 7720, EET 7721.

7733 Electrical Applications 3-2-4
A continuation of EET 7132, emphasizing the operation and control of solenoid-operated valves used in both hydraulic and pnuematic circuits. Topics include: basic electrical fundamentals, digital concepts, relay logic application, and ladder diagrams.
Prerequisites: MET 7132.

7736 Electrical Power Systems 4-2-4
A course on the articles of the National Electrical Code that apply to electrical systems. Topics include: trans-

former principles, three-phase systems, overcurrent devices, conductors, grounding, wiring methods, branch circuits, service entrances, load calculations, and special topics.
Prerequisites: None.

7740 Electronics 2 5-2-6
A continuation of EET 7730. Topics include: FET theory for JFET and MOSFET devices including amplifiers; operational amplifier theory including inverting and non-inverting amplifiers; inverting adder, differential, bridge, and instrumentation amplifiers; and single supply operation and comparators. Students use circuit simulation software.
Prerequisites: EET 7730.

7750 Electronics 3 3-3-4
A course on analyzing and designing Class A, B, and C amplifiers; and thyristor devices. Students design, build, and present a project encompassing both analog and digital circuitry.
Prerequisites: EET 7740, CPET 7738.

7766 Computer Control Systems 3-2-4
An introduction to feedback and computer control techniques that accurately control DC motors and stepper motors using digital information obtained from sensors and transpulers.
Prerequisites: EET 7730, EET 7748.

7771 Soldering and Cabling 1-2-2
Topics include: soldering of printed circuit boards, standard parallel null modems, and RS232 cables; wire wrapping prototype circuits; crimping end connectors on coaxial cables; making telephone cables using RJ-11 connectors; and splicing fiber optic cable.
Prerequisites: None.

7779 Computer Repair: Basic 2-3-3
A course on theory and operation of computer systems. Topics include: operating systems, interface of operating systems and hardware, CPU structures and evolution, bus structures, memory, data storage, input/output devices, motherboard structures, number systems, and serial/parallel data transmission.
Prerequisites: EET 7701 or EET 7710 and EET 7711.

7780 Computer Repair: General Systems 2-3-3
A continuation of EET 7779. Topics include: demonstrations, lab exercises, diagnostic evaluations, and troubleshooting to the board/component level of personal computer systems using diagnostic software and instrumentation to isolate failures and restore systems to normal operation.
Prerequisites: EET 7779, EET 7702 or EET 7720 and EET 7721.

7781 Computer Repair: Advanced Systems 2-3-3
A continuation of EET 7780. Topics include: specialized hardware peripherals and devices, system optimization, driver installation, and printer maintenance.
Prerequisites: EET 7780.

7799 Special Problems Seminar-Electrical Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair.
Prerequisites: Program chair consent.

EMS Emergency Medical Services

4730 CPR for Health Care Professionals 0-2-1
Comprehensive Basic Life Support course for health care providers. Includes one and two rescuer CPR; adult, child and infant CPR; barrier devices and AED. Students who successfully complete this course receive an AHA CPR for Health Care Professionals card.
Prerequisites: None.

4731 First Aid 0-2-1
A basic first aid course. Topics include: recognizing and responding to emergencies and proper first aid for injuries, sudden illness, and medical emergencies. Students who successfully complete the course receive a First Aid card.
Prerequisites: None.

4732 CPR - BLS Heartsaver 0-1-1
An entry-level course on One Rescuer, Adult CPR. Topics include: choking, recognition of a heart attack, stroke warning signs, and healthy heart living.
Prerequisites: None.

4733 CPR - Pedriatric Basic Life Support 0-1-1
An entry-level Pediatric Basic Life Support course for infant and child CPR. Topics include: choking and infant and child safety.
Prerequisites: None.

4734 CPR & First Aid - BLS Heartsaver FACTS 0-1-1
A course that combines CPR and National Safety Council First Aid training. Includes Automatic External Defibrillation training.
Prerequisites: None.

4735 BLS for Healthcare Providers 0-1-1
A course for professionals who respond to respiratory and cardiac emergencies. Topics include: adult and pediatric CPR, AED, stroke, and barrier devices.
Prerequisites: None.

4736 Heart Saver First Aid 0-1-1
A first aid course for the worksite rescuer. Topics include: general principles of first aid, medical emergencies, injury emergencies, adult CPR, and AED (automatic external defibrillator).
Prerequisites: None.

4737 ACLS Provider 0-2-1
A course that provides knowledge and skills needed to evaluate and manage the first 10 minutes of an episode of ventricular fibrillation/ventricular tachycardia experienced

by an adult.
Prerequisites: BLS Card.

4738 Nurse/Paramedic Bridge Course 6-3-7
A course that enables RNs with appropriate prerequisites to be eligible to take the national registry paramedic exam. Upon successfully completing the course and this exam, students are eligible to take the State of Ohio Paramedic Certification.
Prerequisites: 3 years experience in ER/ICU within last 5 years, Ohio RN License, ACLS, BTLS, PeP, Ohio EMT.

4751 Basic Trauma Life Support 0-2-1
For advanced EMTs, paramedics and trauma nurses who initially evaluate and stabilize trauma patients. Topics include: rapid assessment, resuscitation, packaging and transport of trauma patients and conditions which cannot be stabilized in the field and require immediate transport.
Prerequisites: EMS 4797, ACLS, updated EMT card.

4752 Emergency Critical Care 3-6-5
For the paramedic or registered nurse with at least two years of experience. Topics include: advanced skills used in the critical care environment for the stabilization and management of critically ill and/or trauma patients.
Prerequisites: Paramedic or Registered Nurse + 2 years ACLS & BTLS.

4760 Emergency Medical Technician Basic Training 1 3-3-4
A course that provides initial training for EMTs. Students must successfully complete EMS 4760 and EMS 4761 to take the National Registry Exam for EMT-B certification by the State of Ohio. Requires college level reading and writing skills.
Prerequisites: None.

4761 Emergency Medical Technician Basic Training 2 3-6-5
A continuation of EMS 4760. Includes the curriculum's clinical component. Students must successfully complete EMS 4760 and EMS 4761 to take the National Registry Exam for EMT-B certification by the State of Ohio. Requires college level reading and writing skills.
Prerequisites: EMS 4760.

4762 Paramedic Anatomy and Physiology 4-0-4
A course on the Ohio Department of Public Safety Division of EMS's objectives for anatomy and physiology for paramedics.
Prerequisites: EMT-Basic Certification in the State of Ohio.

4763 Paramedic Theory and Practice 1 6-4-8
A course on Part 1 of the National EMT-Paramedic curriculum. Topics include: airway and ventilation, general pharmacology, and management of respiratory emergencies.
Prerequisites: BIO 4016 or EMS 4762, EMT-B Certificate.

4764 Paramedic Theory and Practice 2 5-14-12
A course on Part 2 of the National EMT-Paramedic Curriculum. Topics include: patient assessment, medical emergencies, and management of cardiovascular emergency.
Prerequisites: EMS 4763.

4765 Paramedic Theory and Practice 3 7-6-10
A course on Part 3 of the National EMT-Paramedic curriculum. Topics include: the anatomy, pathophysiology, assessment, and management of trauma, burns.
Prerequisites: EMS 4764.

4766 Paramedic Theory and Practice 4 7-8-11
A course on Part 4 of the National EMT-Paramedic curriculum. Topics include: neonatology, pediatrics, geriatrics, and ambulance operations.
Prerequisites: EMS 4765.

4767 Paramedic Theory and Practice 5 6-8-10
A course on Part 5 of the National EMT-Paramedic curriculum. Topics include: review of the National EMT-Paramedic curriculum, including ACLS, BTLS, and PEP.
Prerequisites: EMS 4766.

4768 EMT-Paramedic Field Experience-Internship 0-40-2
The student participates in an unpaid field learning experience 32-40 hours per week. The student must adhere to the Health Technologies Division Student Handbook and EMT-Paramedic program requirements.
Prerequisites: EMS 4766.

4769 EMT-Paramedic Field Experience-Cooperative Education 0-40-2
The student participates in a paid field learning experience 32-40 hours per week. The student must adhere to the Health Technologies Division Student Handbook and EMT-Paramedic program requirements.
Prerequisites: EMS 4766.

4770 Emergency First Responder 3-2-4
A course for those first on the scene at a medical emergency. This course follows the curriculum set by the Ohio Department of Public Safety Division of EMS, including airway management, CPR, AED, and illness and injury management.
Prerequisites: None.

4771 Basic EMT Refresher 3-2-4
A course that follows the curriculum set by the Ohio Department of Public Safety Division of EMS. Topics include: patient assessment, airway management and intubation, CPR, trauma, medical emergencies, pediatric emergencies, childbirth, anatomy and physiology of the heart, and geriatrics.
Prerequisites: Current Basic EMT card.

4772 EMT Paramedic Refresher 4-2-5
A refresher course for current paramedics. Topics include: patient assessment; cardiac, respiratory, and pediatric medical emergencies; EMS operations, and disaster and emergency planning. Follows the curriculum set by the Ohio Department of Public Safety Division of EMS.
Prerequisites: Current paramedic card.

4782 Pediatric Education for Pre-hospital 1-2-2
The assessment of pediatric patients during pre-hospital emergencies. Topics include: techniques on how to approach, assess, and manage pediatric patients involved in trauma, cardiovascular, respiratory and other life threat-

ening circumstances; communications; packaging; and radio reporting.
Prerequisites: EMT Certificate.

4797 Paramedic Technology Special Studies Var-Var-Var
Study and special projects concerning Paramedic Technology open to State of Ohio certified paramedics wishing advanced standing for Associate of Technical Studies Degree in Paramedic Technology. This course is arranged with the approval of the Dean of Health Technologies.
Prerequisites: Certified Paramedic (State of Ohio) or approval of Dean of Health Technologies.

4798 EMS Special Studies Var-Var-Var
Study and special project/classes/training pertaining to Emergency Medical Services at the basic or paramedic level. This course is arranged with the approval of the Dean of Health Technologies.
Prerequisites: Specific for course offered.

4799 EMS Special Studies Var-Var-Var
Study and special project/classes/training pertaining to Emergency Medical Services at the basic or paramedic level. This course is arranged with the approval of the Dean of Health Technologies.
Prerequisites: Specific for course offered.

9362 Cooperative Education - EMS 0-40-2
The student participates in a paid field learning experience 32-40 hours per week. The student must adhere to the Health Technologies Division Student Handbook and EMS program requirements.
Prerequisites: EMS 4766.

EMT Electro-Mechanical Engineering Technologies

7003 Engineering Science Concepts 3-0-3
An introduction to the principles of engineering technology. Topics include: an overview of the various areas of engineering technology including units of measurement and basic formulas. Required for all Engineering Technology pre-tech students unless specifically waived by the Dean of Engineering Technologies.
Prerequisites: None.

7006 Introduction to Electro-Mechanical Engineering Technology 1-0-1
An introduction to Electro-Mechanical Engineering Technology (EMET) and the EMET program. Topics include: descriptions of the functions and jobs typically performed by electro-mechanical systems technicians, the knowledge and skills requirements of EMET field, industry standards and requirements, the EMET cooperative education and academic programs, and development of goals and of personalized academic/co-op plan to achieve the goals.
Prerequisites: None.

7036 Technical Computer Programming 3-2-4
An introduction to computer programming with Basic. Topics include: solving a variety of technical problems encountered by electro-mechanical technicians, interfacing devices to the computer and developing algorithms and problem solving skills.
Prerequisites: MAT 1191 or MAT 1172.

7142 Industrial Mechanics 3-2-4
An introductory course on industrial mechanical components and machine drives. Topics include: the operation and maintenance of industrial components such as bearings, chain drives, gear drives, fasteners, and lubrication.
Prerequisites: None.

7146 Electro-Mechanical Controls 1 (Programmable Controllers-PLCs) 3-3-4
A course on power semiconductor devices used to control large industrial loads such as motors, heaters, and lighting systems. Topics include: transistors, thyristors, resistive loads, and signal and power line conditioning.
Prerequisites: CPET 7728, EMT 7758.

7154 Variable Speed Drives 2-2-3
An introduction to variable speed drive technology and applications. Topics include: principles of operation; selecting motors; applying variable speed technology to different types of loads; and troubleshooting, programming, and using soft motor starters, Stepper motors, DC variable speed drives, and AC variable frequency drives.
Prerequisites: EMT 7758.

7157 Electro-Mechanical Controls 2 (Servomechanisms) 3-3-4
A continuation of EMT 7146 emphasizing the concepts of negative feedback for closed-loop servo systems. Topics include: transducers for sensing system parameters; proportional (P), proportional-derivative (PD), and proportional-integral-derivative (PID) positional control systems; computer control of servo-control systems; and simple closed-loop control.
Prerequisites: CPET 7728, EET 7730.

7167 Robotics 1 2-2-3
An introduction to basic robotics concepts and factory automation. Topics include: analyzing industrial robotics applications in automated manufacturing environments, mechanical and electrical components, hands-on programming and operation of robots, selecting robots for industrial applications, quality assurance, and rigging.
Prerequisites: EMT 7730.

7181 Process Instrumentation 1 3-2-4
An introduction to all phases of process instrumentation. Topics include: principles and practices of measurement and control of temperature, pressure, flow, level, and analytical quantities. Includes hands-on projects with process instruments and controls. Requires minimum MAT 1171 math level and electrical background.
Prerequisites: None.

7182 Process Instrumentation 2 3-2-4
A continuation of EMT 7181, covering increasingly complex applications. Includes hands-on projects with process instruments and controls. Requires minimum MAT 1171 math level and electrical background.
Prerequisites: EMT 7181.

7183 Process Instrumentation 3 3-2-4
A continuation of EMT 7182, covering increasingly complex applications. Includes hands-on projects with process instruments and controls. Requires minimum MAT 1171 math level and electrical background.
Prerequisites: EMT 7182.

7184 Process Instrumentation 4 3-2-4
A continuation of EMT 7183, covering increasingly complex applications. Includes hands-on projects with process instruments and controls. Requires minimum MAT 1171 math level and electrical background.
Prerequisites: EMT 7183.

7185 Process Instrumentation 5 3-2-4
A continuation of EMT 7184, covering increasingly complex applications. Includes hands-on projects with process instruments and controls. Requires minimum MAT 1171 math level and electrical background.
Prerequisites: EMT 7184.

7501 HVAC - Plant Maintenance 3-2-4
An introduction to the maintenance and operation of electrical and mechanical building systems. Topics include: planning for the efficient operation of building systems; compliance with energy codes and standards; electrical and lighting system operation and maintenance; energy management system and control systems operation and maintenance; building envelope, boiler, and fired-system operation and maintenance; water treatment; steam, condensate, and insulation maintenance; and HVAC systems operation and maintenance.
Prerequisites: EMT 7552.

7525 HVAC Fundamentals 3-2-4
A course on the basics of heating, ventilating and air conditioning (HVAC) concepts and theory. Topics include: HVAC system components, refrigeration cycle/systems operation, psychometrics, refrigerator water piping, refrigerants and oils/practical applications, gas heating basics and hydronic heating, gas furnaces and controls, combustion and fuels, properties of air, airflow measuring devices, fan laws and performance, and air flow calculations. Requires minimum MAT 1171 math level.
Prerequisites: None.

7535 HVAC Equipment and Systems 3-0-3
A course on heating and cooling systems. Topics include: air systems, water systems, air-water systems, direct refrigerant systems, co-generation, central station air handlers/coils, packaged reciprocating liquid chillers, central plant systems, heating systems, air compressors/dryers and process equipment, VAV/VVT, and controls.
Prerequisites: EMT 7525.

7536 Evaluation of Building Electrical Systems 3-2-4
A course on the basics of electrical systems used in buildings. Topics include: electric rates, AC circuits, single and three-phase systems, transformers, power distribution, panel load calculations, riser diagrams, electric safety and protection, grounding, voltage drop calculations, power loss calculations, power factor correction, electric motors, lighting fundamentals and applications lighting retrofits, and payback analysis. Requires minimum MAT 1171 math level.
Prerequisites: None.

7541 Evaluation of Energy-Efficient Building Systems 3-2-4
A course on the principles and practices of maintenance, operation, and selection of energy-efficient building systems. Topics include: terms, definitions, units, conversions, blueprint reading, comfort design conditions and load calculations, air conditioning system selection, heating system selection, thermal insulation, ducts and fans, pipes and pumps, and balancing and testing HVAC controls.
Prerequisites: EMT 7552.

7546 Motors and Controls for Building Systems 3-2-4
A course on fundamentals, applications, selection, and control of single and three-phase AC motors. Topics include: speed and torque characteristics; horsepower and efficiency calculations; control circuits; acceleration methods; speed control; plugging; braking; jogging; variable frequency drives and their selection and sizing; building equipment control circuits such as air conditioning and sizing; and boilers, fans, pumps, and other systems. Lab exercises include: design, construction, and fault analysis of motor control circuits as used in building systems.
Prerequisites: EMT 7535.

7552 HVAC Controls and Building Automation Systems 3-2-4
A course on the basics of building automation systems and HVAC controls. Topics include: control applications and terminology; electrical and electronic control fundamentals; pneumatic control fundamentals; introduction to Building Automation Systems (BAS); hardware and software for BAS; boiler, chiller, AHU, and HVAC BAS controls; and lighting and miscellaneous building systems controls.
Prerequisites: EMT 7535.

7555 Energy Economics, Accounting and Auditing 3-2-4
A course on the factors related to the costs of energy usage in buildings. Topics include: gas and electric rates, demand charges, the load management rider, power factor corrections, savings calculations, payback equations, life cycle costs vs. first costs, energy audit procedures, demand scheduling, commercial and industrial energy consumption, common energy-saving recommendations with short or immediate paybacks, reports and graphs for presentation to management, and programs and resources available for assistance.
Prerequisites: EMT 7725, EMT 7535.

7731 Industrial Control Electronics 1 5-3-6
A course for EMET students on digital circuits as applied to industrial control systems.
Prerequisites: MAT 1191, EET 7710, EET 7711.

7732 Industrial Control Electronics 2 5-3-6
A theoretical and practical course on electronic devices for electro-mechanical technicians. Topics include: analyzing schematics, predicting voltages and signal waveforms,

rectifier diodes, zener diodes, bipolar transistors, field effect transistors, operational amplifiers, silicon controlled rectifiers, unijunction transistors, triacs, optoelectronic devices and various sensors.
Prerequisites: EET 7720, EET 7721.

7758 Motors & Controls 2-3-3
An introduction to DC, single phase, and three-phase AC motors. Topics include: operating, selecting, and troubleshooting motors and control circuits; calculating speed, torque, horsepower, and efficiency; motor protection, failure, and troubleshooting; and designing, constructing, and fault analysis/troubleshooting motor control circuits.
Prerequisites: EET 7720.

ENG English

1001 English Composition 1 3-0-3
An introduction to the composition process. Topics include: prewriting, drafting, revising, editing, identifying audiences, and developing a strong thesis that results in a unified and coherent essay with grammatical, mechanical, and stylistic correctness.
Prerequisites: None.

1002 English Composition 2 3-0-3
A continuation of ENG 1001. Topics include: further development of writing skills emphasizing critical reading, reasoning, and argumentation; the research process; and the research paper.
Prerequisites: ENG 1001.

1003 English Composition 3 3-0-3
A continuation of ENG 1002 including advanced practice of the principles of good writing, emphasizing reading and responding critically to works of literature.
Prerequisites: ENG 1002.

1009 Business English 3-0-3
A course on current practices in business communication. Topics include: composing various types of business-related documents; achieving accuracy in grammar; mechanics; usage; spelling; and syntax.
Prerequisites: ENG 1002.

1010 Technical Writing 1 3-0-3
A course on the principles and practices of composing various types of professional and technical communication. Topics include: audience analysis, planning and preparing documents used for reference or instruction, and integrating visuals with text. Students who register for this course should also register for an upper level course in their degree program.
Prerequisites: ENG 1001 or ENG 1002 and 12 hours in technical area.

1011 Business Communications 3-0-3
A course on the principles and practices of composing various types of business correspondence. Topics include: informal and formal business reports, and development of style.
Prerequisites: ENG 1001 or equivalent.

1015 Technical Writing 2 3-0-3
A continuation of ENG 1010. Topics include: selecting, organizing, and presenting materials in written and oral reports for professional and technical audiences; preparing surveys, proposals, lab reports, and other job-related reports. Students who register for this course should also register for an upper level course in their degree program.
Prerequisites: ENG 1010.

1017 Research and Composition 2-2-3
The study and practice of writing skills emphasizing use of appropriate research methods. Topics include: selection, analysis, interpretation, and documentation of materials from print, electronic, and other sources; interviewing skills; questionnaire design; and other elements of writing non-fiction based on primary and secondary sources.
Prerequisites: ENG 1001 or ENG 1018.

1018 Professional Writing Styles 1 2-2-3
Study and practice of the conventions, styles, and structures of professional non-fiction writing. Topics include: principles of economy, emphasis, clarity, and correctness in planning, composing, and revising prose. Technical Communication degree or certificate students must earn a grade of B or higher.
Prerequisites: ENG 1001 or Technical Communication program chair consent.

1019 Professional Writing Styles 2 2-2-3
A continuation of ENG 1018. Topics include: concreteness, unity, coherence, and variety in planning, composing, and revising prose and preparing research-based materials. Technical Communication degree or certificate students must earn a grade of B or higher.
Prerequisites: ENG 1018 or Technical Communication program chair consent.

1036 Creative Writing: Poetry 3-0-3
An introduction to the art of writing poetry. Topics include: the invention process, revision, poetic form, and critical response to professional and student works. Students must submit a portfolio of finished work.
Prerequisites: 9 hours of English composition.

1037 Creative Writing: Short Fiction 3-0-3
An introduction to the art of writing short fiction. Topics include: the invention process, revision, narration, dialogue, characterization, plot, story development, point of view, and critical response to professional and student works. Students must submit a portfolio of finished work.
Prerequisites: 9 hours of English composition.

1038 Creative Writing: Non-Fiction 3-0-3
An introduction to the art of writing creative expository prose. Topics include: the invention process, revision, biography, memoir, journal writing, journalistic writing, travel and nature essays, and critical response to professional and student works. Students must submit a portfolio of finished work.
Prerequisites: 9 hours of English composition.

1039 Creative Writing: Writing for Children 3-0-3
An introduction to the art of writing for children. Topics

include: the invention process, revision, narration, dialogue, characterization, and plot. Genres include: picture books, easy readers, chapter books, and middle grade novels. Students must submit a portfolio of finished work.
Prerequisites: 9 hours of English composition.

1098 Workshops in Communication Skills Var-Var-Var
Consideration and study of selected areas of written and oral communication designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

1099 Special Problems in Communication Skills Var-Var-Var
Individual study and special projects pertaining to the particular technology in which the student is enrolled. Open to students wishing advanced standing, independent study, and/or research. Students arrange this course with the instructor and request approval of the Dean of Humanities and Sciences.
Prerequisites: 6 hours in communication skills.

ESL English as a Second Language

0060 English as a Second Language - Reading and Writing Level 1 4-0-4
An advanced beginner/intermediate English as a Second Language course. This course integrates speaking, listening, reading, and writing skills from simple sentence structure through developing paragraphs. Topics include: American culture and issues facing new immigrants.
Prerequisites: None.

0061 English as a Second Language - Reading and Writing Level 2 4-0-4
An advanced English as a Second Language course. This course integrates speaking, listening, reading, and writing skills. Topics include a variety of American social issues.
Prerequisites: None.

0063 English as a Second Language - Conversation 2-0-2
A course that covers speaking and listening skills using a variety of simulated situations. Topics include: American culture and issues facing new immigrants.
Prerequisites: None.

0064 English as a Second Language Advanced Writing 4-0-4
An advanced writing course for Limited English Proficient (LEP) students to prepare for college level composition courses. Topics include: writing process, organization, grammar and mechanics, and sentence structure.
Prerequisites: ESL 0061 or instructor consent.

0098 English as a Second Language Workshops Var-Var-Var
Study of selected topics in ESL designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

ET Engineering Technologies

7004 Technical Problem Solving Seminar 2-0-2
A course on problem solving skills for engineering majors. Students use exercises to improve logic and reasoning skills and practice the five basic strategies used in technical problem solving.
Prerequisites: None.
Corequisites: MAT 1161 or DE 0024.

7099 Special Studies - Engineering Technologies Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Students must make special arrangements with the instructor and program chair. Students may substitute this course for technical elective credits.
Prerequisites: None.

9400 Cooperative Education - Engineering Technologies (Alternating) 1-40-2
Students participate in a full-time (minimum of 36 hours per week) paid field learning experience. This experience relates to the student's academic discipline and career goals by providing an opportunity to acquire appropriate knowledge and skills associated with that discipline. Students must adhere to the division's cooperative education policies and procedures.
Prerequisites: Full-time status, admitted to an ET program, 2.0 minimum GPA.

9401 Cooperative Education - Engineering Technologies (Parallel) 1-20-1
Students participate in a paid field learning experience directly related to the program discipline for 15 to 30 hours per week, while registered for a minimum of 8 credit hours of program course requirements during that same term. Students must adhere to the Engineering Technologies Division cooperative education policies and procedures.
Prerequisites: Admitted to an ET program, 2.0 minimum GPA.

EVET Environmental Engineering Technology

7015 Introduction to Environmental Topics 1-2-2
Topics include: basic concepts and terminology associated with environmental science, environmental problems, regulations, and solutions.
Prerequisites: DE 0020.

7600 Introduction to Environmental Engineering Technologies 3-0-3
Topics include: the fundamentals of environmental engineering technologies and key environmental concepts.
Prerequisites: None.

7601 Industrial Waste Treatment 3-2-4
A course on the responsibilities of the industrial wastewater treatment plant operator. Topics include: the activat-

ed sludge process, physical-chemical treatment, instrumentation, industrial waste monitoring, waste treatment processes and maintenance.
Prerequisites: EVET 7646 or instructor consent.

7602 Supervisory Management in the Environmental Field 3-2-4
Concepts and practices of management as they apply to the environmental field. Topics include: problem solving, communication skills, delegation and motivation, planning and organization, and manager-employee relationships.
Prerequisites: None.

7603 Operation of Wastewater Treatment Plants 3-2-4
A course on efficient operation of wastewater treatment plants. Topics include: start-up, daily operations, interpretation of lab results, and possible approaches to solving operational problems. The course helps students prepare for certification examinations.
Prerequisites: EVET 7646 or instructor consent.

7604 Water Treatment Plant Operations 3-2-4
A course on efficient operation of water treatment plants. Topics include: proper installation, inspection, operation, maintenance, repair, and management of water treatment plants; corrosion control; control of trihalomethanes; and water sample analysis. The course helps students prepare for certification examinations.
Prerequisites: EVET 7646 or instructor consent.

7605 Environmental Statistics 3-2-4
A hands-on, computer lab intensive course on basic statistical methods used in environmental pollution monitoring. Emphasizes environmental statistics as a physical science, not just as a mathematical science.
Prerequisites: MAT 1132 or MAT 1179.

7607 Environmental Sampling 2-3-3
Following lectures on sampling requirements and techniques, students sample groundwater, surfacewater, drums, sediments, soil, and air.
Prerequisites: None.

7608 OSHA-40 Hour Course 3-3-4
Students complete the OSHA-specific requirements under 29 CFR 1910.120 for 40-Hour Hazardous Waste Site Training, and receive a certificate of training upon successful completion. Topics include: how to avoid injury on an uncontrolled hazardous waste site and the basis for health and safety programs.
Prerequisites: None.

7609 Fundamentals of Industrial Hygiene 3-2-4
An overview of the principles of industrial hygiene. Topics include: techniques for recognizing, evaluating, and controlling health and safety hazards in the workplace; radiation safety; noise; solvents; biological hazards; and video display terminal hazards.
Prerequisites: None.

7610 Radiation Safety 3-2-4
An introduction to radiation safety and protection principles. Topics include: the interaction of radiation with matter, radiation's biological effects and types of radioactivity, dosimetry, radiation protection criteria, shielding calculations and radiation measurement.
Prerequisites: None.

7611 Risk Assessment in Environmental Management 3-0-3
A course on how risk assessment is used for solid waste management, hazardous waste/superfund sites, water and wastewater, and biological and ecological issues. Real-world case studies illustrate the risk assessment process.
Prerequisites: None.

7612 Environmental Microbiology 3-3-4
A course on microbiology of air, solid and hazardous waste, soil, water and wastewater. Topics include: genetically engineered microbes; bioremediation; microbial disinfection; microbes as indicators of pollution; and analysis of water and wastewater, soils, solid waste and aerosols.
Prerequisites: High school biology within 7 years or BIO 4071 and BIO 4072 or instructor consent.

7613 Environmental Surveying & Drafting 3-3-4
An introductory course in field measurement techniques and surveying drafting. Topics include: contour maps, cross sections, grading plans, volume calculations, and boundary plats.
Prerequisites: None.

7614 Basic Mechanics of Fluids 3-3-4
Topics include: engineering properties of fluids including fluid flow, buoyancy and stability; Bernoulli's equation and the energy equation; Reynold's number; energy losses; and series, parallel, and open channel flow. Students use lab time for problem solving, experimentation, and field applications.
Prerequisites: MAT 1192, PHY 2291.
Corequisites: MAT 1154, PHY 2292.

7616 Environmental Chemistry 2-3-3
A course on chemical principles of environmental systems. Topics include: the applications of chemical instrumentation such as gas chromatography, liquid chromatography, and atomic absorption to environmental measurements in air, water, wastewater, and solid waste.
Prerequisites: CHE 2231, CHE 2232.

7617 Environmental Mountain Ecology 1 2-0-2
Topics include: principles of ecology and pollutant dispersion as they pertain to mountain ecosystems and environmental impact of human activities.
Prerequisites: EVS 7623 or EVET 7607.

7618 Environmental Mountain Ecology 2 0-6-2
A continuation of EVET 7617. An intensive field experience that includes a trip to the mountainous regions of the western United States. Students pay for the trip.
Prerequisites: EVET 7617.

7640 Introduction to the Wastewater Industry 2-3-3
An introduction to the wastewater industry. Topics include: terminology; physical, biological, and chemical units used in calculations; current issues; environmental and human

health issues; and scientific and engineering principles and applications.
Prerequisites: None.

7643 Calculations for Water Treatment Operators 2-3-3
A course on calculations for water treatment applications. Topics include: applied volume, flow and velocity, chemical dosage, loading rates, detention and retention, pumping, mathematical applications for water treatment plant processes, including water sources and storage, coagulation and flocculation, sedimentation, filtration, chlorination, fluoridation, softening, and laboratory basics.
Prerequisites: MAT 1191 and EVET 7646 or instructor consent.

7644 Calculations for Wastewater Operators 2-3-3
Topics include: the calculation of volumes; flow and velocity; conversions; pumping rates; loading rates; F/M ratio; sludge age; MCRT; and efficiency and percentage calculations.
Prerequisites: MAT 1191 and EVET 7646, or instructor consent.

7646 Water & Wastewater Technology 3-2-4
A course on scientific and engineering principles and applications in water quality control. Topics include: concepts and practices in the treatment of industrial and domestic wastewater before discharge to either municipal POTW or the environment, and principles and design of physical, chemical, and biological units in the treatment plant.
Prerequisites: CHE 2200 or CHE 2231.

7647 Collection & Distribution Systems 2-3-3
An introduction to operating and controlling water delivery and wastewater collection systems. Topics include: gravity and pumped lines; storage and holding tanks; pumps; system monitoring, repair, and rehabilitation; water system depressurization, back-flow prevention, and metering; wastewater system sewer overflows; and gaseous buildup.
Prerequisites: EVET 7614.

7670 Regulations & Permits 2-3-3
An introduction to federal, state, and local environmental laws with emphasis on related computer applications. Topics include: TSCA, FIFRA, OSHA, CAA, CWA, SDWA, CERCLA, and RCRA. Students write a research paper and give a presentation using appropriate software.
Prerequisites: None.

7671 Air Pollution Control 3-3-4
A course on the permitting and controlling of air releases. Topics include: air quality management, environmental and health effects of air pollution, the selection and design of appropriate control equipment, and indoor air pollution, the operation of particulate and gaseous sampling equipment, instrument maintenance and calibration, data analysis, pollen and mold counts, and stack testing.
Prerequisites: EVET 7670.

7675 Solid Waste Management 2-3-3
An introduction to the solid waste problem. Topics include: various methods and basic design concepts of solid waste disposal techniques, landfills, incineration, composting, recycling, and emerging technologies in this field.
Prerequisites: None.

7676 Hazardous Waste Management 2-3-3
Topics include: the origin of hazardous materials and their impact on humans, plants, and animals; principles and practices in the sampling, storage, transport, treatment and disposal of hazardous wastes; and governmental regulations and permits pertaining to hazardous wastes.
Prerequisites: EVET 7675.

7677 Treatment Technologies 2-3-3
An overview of the basic principles and applications of mainstream treatment and monitoring technologies used to prevent, monitor, and control pollution by industries and government agencies. Topics include: physical, chemical, and biological treatment methods.
Prerequisites: CHE 2232.

7699 Special Problems Seminar - Environmental Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Students must make special arrangements with the instructor and program chair.
Prerequisites: Program chair consent.

EVS Environmental Sciences

7621 Environmental Science 1 3-2-4
A course on fundamental principles of environmental science and ecology and their relationship to human health and well-being. Topics include: the types of ecosystems and how they function, elementary soil science, biodiversity, and issues of population growth.
Prerequisites: High school biology or equivalent.

7622 Environmental Science 2 3-2-4
A course on the fundamentals of environmental science as it pertains to human activity and the resulting environmental impact. Topics include: water treatment, air pollution control, energy, and solid and hazardous waste management issues. May be taken prior to EVS 7621.
Prerequisites: High school biology or equivalent.

7623 Environmental Geology 3-2-4
An introduction to the relationship of applied geology to the human environment. Topics include: an overview of geologic concepts and terminology, groundwater hydrogeology, human responsibility to protect these resources from contamination, the geologic aspects of environmental health, land use practices, and resource exploitation.
Prerequisites: CHE 2200 or high school equivalent.

FIN Finance

1804 Risk & Insurance 3-0-3
A course on the concept of risk in the business enterprise. Topics include: the need for insurance protection against risks in areas of property and liability, casualty, fire, life, and health; fundamentals of insurance contracts; and selecting insurers.
Prerequisites: None.

2960 Principles of Finance 1 3-0-3
An introduction to financial institutions, markets, and management. Topics include: the U.S. financial system and how business uses this system to finance operations for short, intermediate, and long terms.
Prerequisites: None.

2961 Financial Planning 3-0-3
A course on coordinated, realistic personal financial planning. Topics include: buying insurance, homes, and investment property; accumulating capital; retirement planning; estate planning; and individual and investment tax planning.
Prerequisites: None.

2969 Principles of Finance 2 3-0-3
A continuation of FIN 2960. Topics include: an overview of government financing; consumer financing; international financing and monetary, fiscal and debt management policies.
Prerequisites: FIN 2960.

2976 Financial Institutions 3-0-3
A course on the services, pricing techniques, goals and objectives, management styles, internal problems and risks, and markets in which financial institutions operate.
Prerequisites: None.

FRN French

1060 Elementary French 1 4-0-4
An introduction to the French language providing the foundation for understanding, speaking, reading, and writing French. Topics include: fundamentals of French intonation, grammar, and syntax. Laboratory work may be required.
Prerequisites: None.

1061 Elementary French 2 4-0-4
A continuation of FRN 1060 providing the foundation for understanding, speaking, reading, and writing French. Topics include: fundamentals of French intonation, grammar, and syntax and more advanced readings. Laboratory work may be required.
Prerequisites: FRN 1060 or 1 year of high school French or equivalent.

1062 Elementary French 3 4-0-4
A continuation of FRN 1061 providing the foundation for understanding, speaking, reading, and writing French. Topics include: fundamentals of French intonation, more complex grammar and syntax, advanced readings, and basic composition. Laboratory work may be required.
Prerequisites: FRN 1061 or 2 years high school French or equivalent.

1063 Intermediate French 1 4-0-4
A review and extension of basic principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and short literary pieces. Laboratory work may be required.
Prerequisites: FRN 1062 or 3 years high school French or equivalent.

1064 Intermediate French 2 4-0-4
A continuation of FRN 1063 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: FRN 1063 or equivalent.

1065 Intermediate French 3 4-0-4
A continuation of FRN 1064 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: FRN 1064 or equivalent.

FST Fire Service Technology

4773 Volunteer Firefighter 2-2-3
An introduction to the essentials of firefighting following NFPA 1001 standards. Topics include: basic equipment and procedures pertaining to fire control and suppression. State certification is available.
Prerequisites: None.

4774 Firefighter Transition 4-4-5
A course on the concepts of firefighting strategies and tactics following NFPA 1001 standards. Topics include: HAZMAT and fire cause, prevention, suppression, salvage and overhaul. State certification available.
Prerequisites: FST 4773.

4775 Firefighter Agility Skills 1-2-2
A course on preparing for competitive agility skills testing required for entry into fire service.
Prerequisites: FST 4783.

4776 Thermal Imaging for the Firefighter 1-2-2
A course on the use of thermal imaging to increase firefighter safety and the probability of finding lost or trapped victims. Students use infrared equipment and techniques.
Prerequisites: FST 4783.

4777 Emergency Vehicle Safety and Maintenance 1-2-2
A course on routine safety and maintenance of emergency vehicles. Topics include: procedures and practical experience necessary for maintenance of optimal vehicle performance and safety concerns.
Prerequisites: None.

4778 Fire Service Rapid Intervention Techniques 1-2-2
A course on concepts of firefighter safety during fireground activities.
Prerequisites: FST 4784.

4779 Fire Service Engine/Pump Operation 2-2-3
A course on theory and operation of engines and pumpers used in firefighting, including demonstration and practice on equipment operation.
Prerequisites: FST 4777.

4780 Firefighting Strategies and Tactics 3-0-3
A course on firefighting methods and best practices. Topics include: the incident command system, benchmarking, and outcomes. Students review large fire case studies.
Prerequisites: FST 4784.

4783 Firefighter 1 6-6-8
An accelerated course for students seeking Firefighter 1 State certification. Topics include: fire cause, equipment and procedures pertaining to fire control, prevention, suppression, salvage, overhaul, and HAZMAT.
Prerequisites: None.

4784 Firefighter 2 6-6-8
A continuation of FST 4783. Topics include: department organization, building construction, suppression systems, company fire control, alarm systems, and response to hazardous materials incidents. Course content complies with NPFA 1001 standards. State certification is mandatory.
Prerequisites: FST 4783 or FST 4774.

4785 Law and Emergency Service Providers 3-0-3
A course that explores legal issues regarding emergency services. Topics include: disciplinary hearings, collective bargaining agreements, background checks and court decisions involving current issues such as do not resuscitate orders, duty to act, sexual harassment and Americans With Disabilities Act.
Prerequisites: None.

4786 Fire Company Officer Management 3-0-3
An introduction to fire company management. Topics include: company readiness, preincident planning, incident command and the communications process.
Prerequisites: None.

4787 Structures and Fire Concerns 1 2-0-2
An introduction to basic construction principles. Topics include: recognizing common building construction types and anticipating problems that may hinder fire-ground procedures and operations.
Prerequisites: None.

4788 Structures and Fire Concerns 2 2-0-2
Topics include: improving skills needed during operations and identifying safety concerns in noncombustible and fire resistive structures.
Prerequisites: FST 4787.

4789 Firefighter Internship 0-12-2
A course in which students are assigned to a designated fire department mentor and participate in activities such as house duties, equipment checks, classroom training and drills.
Prerequisites: FST 4783.

4790 Firefighter Self Rescue 1-3-2
A course that uses classroom instruction, demonstrations and practice to teach firefighters how to help themselves when their lives are at risk on the fire ground.
Prerequisites: FST 4784.

4791 Fire Safety Inspector 6-2-7
A course in which students complete classroom and practical exercises in basic fire safety inspection procedures and responsibilities. This course meets requirements prescribed in House Bill 590 and National Fire Protection Association 1031.
Prerequisites: FST 4784, member of Fire Dept.

4792 Fire Service Blueprint Reading 2-2-3
An introductory course that explores architectural and civil engineering symbols and abbreviations used on drawings. Topics include: various systems utilized in buildings including water, fire protection, mechanical devices, and electrical systems including power distribution through lighting systems.
Prerequisites: FST 4784.

4793 Evolution of the Fire Service 2-0-2
A course on the growth of the fire service from its creation through the 21st century. Topics include: changes in suppression methods, building codes, and rescue techniques; administrative philosophies; and personnel behaviors.
Prerequisites: None.

4798 Special Studies-FST Var-Var-Var
Special projects pursued by certified firefighters seeking college credit in the Fire Service Technology degree program. Before registration, students must have the plan of study approved by the supervising faculty member and the Dean of Health Technologies.
Prerequisites: None.

4799 Special Studies-FST Var-Var-Var
Special projects pursued by certified firefighters seeking college credit in the Fire Service Technology degree program. Students must have the plan of study approved by the supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: None.

GC Graphic Communications

1403 Computer Graphics for Printing 1 2-3-3
An introduction to page layout utilizing various software applications. Topics include: simple layouts, printers' measurement system, typographic concepts, color selection, and generating artwork using paint applications, scanners, and the Internet. Emphasizes production for the high-end press environment.
Prerequisites: OT 3007.

1415 Graphic Arts Processes 2-3-3
A course on evaluating printing processes including: lithography, flexography, screen, gravure, and letterpress. Lab projects involve basic training in prepress and presswork, and demonstrations of flexographic and screen

printing procedures.
Prerequisites: None.

1419 Survey of Printing Inks 3-0-3
A course on the physical characteristics of ink and the manufacturing process for different types of ink used in the printing industry. Topics include: how ink components affect color, drying properties, substrates, and cost.
Prerequisites: None.

1421 Computer Graphics for Printing 2 2-3-3
A continuation of GC 1403. Topics include: advanced QuarkXPress, introduction to drawing and image editing applications, methods of scanning graphics and text, resolution of files and devices, and essential hardware for the prepress environment.
Prerequisites: GC 1403.

1422 Graphic Design for Desktop Publishing 2-2-3
A course on the fundamentals of design and working with graphics and type to produce various kinds of publications. Students use desktop publishing software, printers, and scanners.
Prerequisites: OT 1850 or instructor consent.

1423 Adobe InDesign 2-3-3
An introduction to using Adobe InDesign desktop publishing software to create basic print documents. Techniques include: master pages, importing text and graphics, color, swatches and gradients, formatting type, transparency, using tables and preparing for handoff for print production or creating PDF files.
Prerequisites: None.

1425 Film and Plates for Packaging 1-4-3
A course on the fundamentals of using a step and repeat camera. Topics include: the proper darkroom procedure necessary to produce film(s) used to make photopolymer printing plates, and basic operation of a flat bed, solvent-based photopolymer plate-making system.
Prerequisites: GC 1421.

1426 Packaging and Advertising Processes 3-0-3
A course on how packages are created for advertising. Topics include: developing and evaluating the many packaging options for advertising processes such as lithography, flexography, and gravure; corrugated and plastic packaging technology; and digital-on-demand presses for the packaging industry.
Prerequisites: None.

1429 Screen Printing 2-6-4
A course on using and operating manual and semi-automatic screen printing presses. Topics include: fundamentals of printing frames, mesh, emulsions, stencils, squeegees, and inks and printing on many substrates and odd-shaped objects.
Prerequisites: GC 1421.

1430 Label and Packaging Presswork 1 1-7-4
A course on operating four-color narrow web flexographic presses and handfed and automatic platen letterpresses. Topics include: using this equipment to print, perforate, score, diecut, number, emboss, and foil stamp; an introduction to flexographic cameras; platemaking; and operating a flexo press.
Prerequisites: GC 1421.

1431 Label and Packaging Presswork 2 3-9-6
A continuation of GC 1425 and GC 1430, emphasizing operating a four-color 7-inch Comco narrow web flexo press. Topics include: in-line diecutting, laminating, perforating and slitting pressure-sensitive substrates, and using water- soluble and UV inks.
Prerequisites: GC 1421, GC 1430, GC 1425.
Corequisites: GC 1483.

1439 Introduction to Offset Presswork 1-4-3
A course on sheetfed offset printing. Topics include: comparison of wet and dry forms of lithography; plate comparisons including presensitized, bi-metal, and grainless synthetics; the adjustments necessary for quality printing; and using pressroom and plate equipment.
Prerequisites: None.

1440 Offset Presswork 3-9-6
A course on advanced sheetfed and webfed offset printing. Topics include: color consistency, controlling dot gain and slur, plugging halftones, maintaining the ink and dampening systems for high quality printing. Includes demonstration of Advanced Quality Control production devices that produce top notch printing quality.
Prerequisites: GC 1415 and GC 1439 or equivalent knowledge.

1449 Printing Estimating 1 2-3-3
A course on determining job cost with an emphasis on paper used in sheet-fed offset and flexographic printing. Students use formulas to calculate impositions and the most cost effective printing methods, including ink, spoilage, and quality.
Prerequisites: None.

1450 Printing Estimating 2 2-3-3
A continuation of GC 1449. Topics include: an in-depth determination of job cost including labor, materials, burden, profit, and mark-up; characteristics and types of paper; paper sizes; selection process; proper cuts from mill size sheets; and use of manufacturer's catalogs and price books.
Prerequisites: GC 1449.

1480 Digital Photography & Imaging 1 1-4-3
A course on digital photography and how to capture quality images with a hand-held or studio digital camera. Topics include: proper lighting, detail, and color balance; and storing images for other processes. Students print images on a digital press.
Prerequisites: None.

1481 Computer Graphics for Printing 3 2-3-3
A continuation of GC 1421, emphasizing desktop publishing, illustration, and image editing software for high-end production processes. Topics include: file construction for various end uses, resolution of files and devices, trapping

techniques, retouching, preflighting, and color separations.
Prerequisites: GC 1421.

1483 Computer Graphics for Printing 4 2-3-3
A continuation of GC 1481. Topics include: advanced desktop publishing concepts; illustration and image editing software; color correction, separations, proofing, UCR, and GCR; advanced trapping concepts using TrapWise; Preps imposition software; and creating PDF files using Adobe Acrobat.
Prerequisites: GC 1481.

1484 Commercial Portfolio Production 1-0-1
A course on building a portfolio that represents students' work. Students learn to present samples of creative work to a prospective employer or client in different formats including traditional portfolios to digital presentation. Students must provide samples of their work.
Prerequisites: None.

1490 Digital Photography & Imaging 2 1-4-3
A continuation of GC 1480. Topics include: advanced lighting techniques, configuring camera for proper exposure and resolution, manipulating images with Adobe Photoshop, quality color, and reproducing images on digital printers or high resolution digital presses.
Prerequisites: GC 1480.

9223 Cooperative Education - Graphics 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the GC program, 2.0 minimum GPA.

9243 Cooperative Education Graphics - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the GC program, 2.0 minimum GPA.

GEO Geography

1551 World Regional Geography 1 3-0-3
A study of the characteristics and differences of the major world regions. Topics include: the concepts used to study regional geography and the cultural, economic, political, historical, and physical characteristics of Anglo-America, Latin America, Western Europe, Eastern Europe including Russia and Baltic States, and Australia/New Zealand.
Prerequisites: None.

1552 Cultural Geography 3-0-3
A study of the spatial distribution of human customs and activities across the earth's surface. Topics include: causes and problems of population growth; distributions of cultural patterns including language, religions, and social customs; the impact of cultural factors on the political landscape; and the reasons for the location of social groups and cities.
Prerequisites: None.

1553 World Regional Geography 2 3-0-3
A continuation of GEO 1551. Topics include: the concepts used to study regional geography and the cultural, economic, political, historical, and physical features of Sub-Saharan Africa; the Middle East and North Africa; East Asia including Japan and South Asia, and Southeast Asia.
Prerequisites: None.

GRM German

1070 Elementary German 1 4-0-4
An introduction to the German language providing the foundation for understanding, speaking, reading, and writing German. Topics include: fundamentals of German intonation, grammar, and syntax. Laboratory work may be required.
Prerequisites: None.

1071 Elementary German 2 4-0-4
A continuation of GRM 1070 providing the foundation for understanding, speaking, reading, and writing German. Topics include: fundamentals of German intonation, grammar, and syntax and more advanced readings. Laboratory work may be required.
Prerequisites: GRM 1070 or 1 year high school German or equivalent.

1072 Elementary German 3 4-0-4
A continuation of GRM 1071 providing the foundation for understanding, speaking, reading, and writing German. Topics include: fundamentals of German intonation, more complex grammar and syntax, advanced readings, and basic composition. Laboratory work may be required.
Prerequisites: GRM 1071 or 2 years high school German or equivalent.

1073 Intermediate German 1 4-0-4
Review and extension of basic principles of grammar and syntax through composition and conversation, stressing fluency. Introduces more advanced reading, composition, and short literary pieces. Laboratory work may be required.
Prerequisites: GRM 1072 or 3 years high school German or equivalent.

1074 Intermediate German 2 4-0-4
A continuation of GRM 1073 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: GRM 1073 or equivalent.

1075 Intermediate German 3 4-0-4
A continuation of GRM 1074 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: GRM 1074 or equivalent.

HFT Health and Fitness Technology

4058 Advanced Life Saving 1-2-2
Instruction in life saving techniques that meet the American Red Cross life saving certificate requirements.
Prerequisites: Deep water swimming ability and 500 yard continuous swim.

4060 Water Safety Instructor Certification 1-2-2
Instruction in practice of approved techniques. Meets qualifications for American Red Cross certification.
Prerequisites: HFT 4058.

4153 Foundations of Exercise Science 3-2-4
An introduction to the human body's response and adaptation to exercise and physical training. Laboratory experiences include testing and measurement related to exercise and fitness.
Prerequisites: BIO 4073.

4160 Fundamentals of Aerobics 1-3-2
A course that combines stretches, aerobics, step aerobics, and resistive exercises to promote cardiorespiratory endurance and enhance strength and flexibility. Topics include: exercise and its effects on the body.
Prerequisites: Informed consent, health form, medical clearance (if applicable).

4161 Health and Fitness Practicum 1-13-2
A practicum in a health and fitness setting. Students gain in-depth experience in transforming health and fitness knowledge and skills into a practice setting.
Prerequisites: Completion of at least one of the four regular HFT certificate programs.

4162 Fundamentals of Water Aerobics 1-3-2
Low impact aquatic aerobics that improve cardiorespiratory endurance, muscle tone and flexibility. Classroom topics include: exercise and its effects on the body. Opportunity for people of all ages with musculoskeletal difficulties to participate in a fitness program.
Prerequisites: Informed consent, health form, medical clearance (if applicable).

4163 Foundations of Health and Fitness 2-2-3
A course on developing fitness and wellness programs for individuals and groups, emphasizing health promotion and disease prevention.
Prerequisites: None.

4164 Developing Exercise Prescriptions 2-2-3
A course on developing and implementing exercise prescriptions for healthy adults and special populations. Topics include: developing programs for health related, fitness related, and performance related criteria emphasizing safe, effective, and efficient goal achievement.
Prerequisites: HFT 4169.

4165 Group Fitness Instructor 2-4-4
Prepares student for the National Group Fitness Instructor Examination. Topics include: communication skills, education principles, effective exercise design, choreography, safety guidelines and modifications for special populations. Lab includes conducting classes in traditional and step aerobics.
Prerequisites: HFT 4160.

4166 Aquatic Group Fitness Instructor 3-2-4
Prepares student for the national Aquatic Instructor Examination. Topics include: communication skills, educational principles, effective exercise design, fundamentals of water properties, choreography, safety guidelines and modifications for special populations. Lab includes classes in the aquatic environment.
Prerequisites: HFT 4162.

4167 Aquatic Personal Trainer 1-2-2
An intermediate course for the candidate with experience as a personal trainer or in the aquatic fitness industry. Emphasizes practical application skills needed for aquatic personal trainers.
Prerequisites: Aquatic Group Fitness Instructor Certification.

4168 Aquatic Leadership and Development 1-2-2
An advanced course on developing and reinforcing instructor skills and techniques essential to design, implement, and lead various aquatic group exercise programs.
Prerequisites: Aquatic Group Fitness Instructor Certification.

4169 Fitness Assessment 2-2-3
A course on health related fitness assessment tools and skills. Topics include: choosing assessment protocols and administering fitness assessments to healthy adults and to special populations. Students practice assessment skills through lab and outside experiences.
Prerequisites: None.

4170 Personal Fitness Trainer 1 3-2-4
An introduction to techniques used in the fitness field. Topics include: screening and consultation guidelines, dietary and exercise principles, communication, and documentation. Lab includes: skin fold testing, blood pressure, flexibility and resistance testing, and training.
Prerequisites: Informed consent, health form, medical clearance (if applicable).

4171 Personal Fitness Trainer 2 3-2-4
Provides CSC Certificate and prepares student for the National Health/Fitness Instructor Certification Exam. Topics include: application of dietary and exercise principles, therapeutic exercise, special populations, legal issues, and analysis and evaluation of common fitness techniques and norms.
Prerequisites: HFT 4170.

4172 Special Fitness Training: Larger Adults 1-0-1
A course in which students learn to address the psychological and physiological needs of larger adults in group or individual fitness training. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal fitness training certification from Cincinnati State or an approved national/international certification.

4173 Special Fitness Training: Older Adults 1-0-1
A course in which students learn to address the psychological and physiological needs of senior citizens in group or individual fitness training. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal fitness certifcate from Cincinnati State or an approved national/international certifying agency.

4174 Special Fitness Training: Children 1-0-1
A course in which students learn to address the psychological and physiological needs of children in group or individual fitness training on land and in water. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal training certification from Cincinnati State or an approved national/international agency.

4175 Special Fitness Training: Musculoskeletal/Neurologic Disorders 1-0-1
A course in which students learn to work with individuals with arthritis, fibromyalgia, multiple sclerosis, Parkinson disease, ALS, low back pain, hip/knee replacements, spinal cord injuries and cancer. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal training certification from Cincinnati State or an approved national/international certifying agency.

4176 Special Fitness Training: Nutrition and Exercise 1-0-1
An advanced course on nutrition through the lifespan emphasizing nutritional supplements, the effects of fad diets and athletic performance. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal training certification from Cincinnati State or an approved national/international agency.

4177 Special Fitness Training: Perinatal 1-0-1
A course in which students learn to work with perinatal and postpartum clients using the American College of Obstetricians and Gynecologists (ACOG) guidelines Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal training certification from Cincinnati State or an approved national/international certifying agency.

4178 Special Fitness Training: Common Chronic Diseases 1-0-1
A course in which students apply knowledge, skills, and techniques for teaching fitness and wellness to clients with chronic illnesses such as cardiovascular, pulmonary, and metabolic diseases. Credit may be applied to CECs for general certification or a specialty national agency certification.
Prerequisites: Group fitness or personal fitness training certification from Cincinnati State or an approved national/international certifying agency.

4180 Leading and Developing Exercise Programs 2-2-3
Topics include: exploration of leadership concepts and styles as they relate to the development and implementation of exercise programs for individuals and groups.
Prerequisites: None.

4181 Fitness Assessment and Exercise Prescription 2-2-3
Methods of assessing health status, cardiorespiratory and muscular fitness, and flexibility and body composition in healthy individuals; and development and evaluation of exercise prescriptions.
Prerequisites: None.

4182 Community Health Assessment 2-2-3
A course on techniques for screening, appraising and developing health history and activity patterns for the community. Students complete a community health and fitness needs assessment project.
Prerequisites: HFT 4181.

4183 Health and Fitness Internship 1-16-3
Students apply health and fitness knowledge and skills in a community setting. Students develop a portfolio of individual competencies.
Prerequisites: Instructor consent.

4185 Fundamentals of Resistance Training 2-2-3
Safe, effective, and efficient resistance training programming techniques. Topics include: evaluation of biomechanical, physiologic, and genetic factors affecting strength and muscle tissue gain.
Prerequisites: Informed consent, health questionnaire, medical clearance (if applicable).

4186 Resistance Training Development and Implementation 2-2-3
Topics include: advanced application of proper resistance training form, technique, spotting, program design, and implementation for healthy adults and special populations.
Prerequisites: HFT 4185.

4188 Special Studies in Health and Fitness Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the HFT program chair.
Prerequisites: Instructor consent.

4199 Special Studies in Health and Fitness Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and the faculty member, carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the HFT program chair. Students receive grades of S or U for this course.
Prerequisites: Instructor consent.

9368 Cooperative Education - Health and Fitness Technology 1-40-2
Health and Fitness Technology students apply knowledge and skills acquired in classes in a full-time paid learning

experience. Students must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the Health and Fitness Technology program, coordinator consent, 2.0 minimum GPA.

9378 Parallel Cooperative Education - Health and Fitness Technology 1-20-1
Health and Fitness Technology students apply knowledge and skills acquired in classes in a part-time paid learning experience. Students must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the Health and Fitness Technology program, coordinator consent, 2.0 miminum GPA.

HIM Health Information Management

4405 Orientation to Health Information 3-0-3
An orientation to the health information field. Topics include: history, philosophy, and development of the profession.
Prerequisites: Admitted to the Health Information Management program.

4406 Records Management 1-2-2
A course on systems for managing paper-based and electronic health care records.
Prerequisites: None.

4407 Health Record Content and Format 2-2-3
A course that provides an overview of the health record. Topics include: the content of the health record and documentation requirements.
Prerequisites: MCH 4806.

4409 HIM Seminar 3-0-3
Study of selected current issues and topics in the Health Information Management field.
Prerequisites: HIM 4431, HIM 4432, HIM 4453.

4410 Basic CPT Coding 3-2-4
An introduction to current procedural terminology and HCPCS coding.
Prerequisites: MCH 4807, BIO 4074, HIM 4407, HIM 4411.

4411 Clinical Abstracting 2-4-4
A course on abstracting supportive data to validate diagnoses and procedures and using the information to create clinical databases. Topics include: analysis and interpretation of clinical documentation and UHDDS guidelines.
Prerequisites: MCH 4806, HIM 4407.

4414 Health Information Assessment 1-2-2
A course on evaluation of health documentation according to JCAHO Standards and Conditions of Participation (Medicare).
Prerequisites: HIM 4407.

4415 Legal Aspects of Health Information 3-0-3
A study of the medical record as a legal document. Topics include: confidentiality, access to information, legal terminology, and retention.
Prerequisites: None.

4417 Statistical Applications in Health Care 3-2-4
A course on common statistical formulas, spreadsheet applications, and data presentation. Topics include: application of common statistical formulas, spreadsheet applications and data presentation. Students must have a calculator.
Prerequisites: HIM 4420, MCH 4002.

4420 Basic ICD-9-CM Coding 2-2-3
A course on basic principles for coding ICD-9-CM classification system.
Prerequisites: MCH 4807, BIO 4074.

4421 Intermediate ICD-9-CM Coding 3-2-4
A continuation of HIM 4420. Topics include: cardiovascular system, neoplasms, pregnancy, injuries, and poisonings.
Prerequisites: HIM 4420, BIO 4074.

4422 Clinical Classification Systems 2-2-3
A course on principles and applications of coding systems, case mix analysis, severity of illness, and data quality.
Prerequisites: HIM 4421.

4423 Introduction to Coding 2-0-2
An introduction to the field of coding. Topics include: roles, guidelines for ethical practices, and an overview of the healthcare system.
Prerequisites: Admitted to the Coding Specialist certificate program.

4428 Health Information Management-Record Management Directed Practice 1-4-2
Student practice in a medical record department. Activities include: admission/discharge procedures, correspondence and medical information release, analysis of documentation, record control and projects in health information.
Prerequisites: HIM 4405, HIM 4406, HIM 4407, HIM 4415.

4429 Health Information Management Directed Practice 2 2-8-4
A course that includes special interest assignments and exposure to alternative specialties in the medical records field.
Prerequisites: HIM 4422, HIM 4428, HIM 4451, HIM 4452

4431 Health Information Department Management 4-0-4
A course on the management functions of a health information department. Topics include: organizational structure, line and staff relationships, position descriptions, job procedures, personnel evaluations, budgeting, and specific issues in medical record department management.
Prerequisites: HIM 4405, HIM 4407.

4432 Alternative Health Record Systems 3-0-3
Topics include: health record content and format, regulato-

ry and accreditation requirements, storage and retention needs, classification systems, data collection/reporting and quality issues in specialized patient care settings.
Prerequisites: HIM 4405, HIM 4407, HIM 4415, HIM 4421.

4449 Medical Billing Procedures 2-4-4
A course on methods for completing and processing health care claims. Topics include: applying coding guidelines and practical experience in completing a variety of health care claims.
Prerequisites: HIM 4421, HIM 4410.

4450 Reimbursement Methodologies 2-2-3
A course on various methods of reimbursement for health care services. Topics include: an overview of auditing procedures necessary for compliance and accurate reimbursement.
Prerequisites: HIM 4449.
Corequisites: HIM 4452.

4451 Intermediate CPT Coding 2-2-3
A course on guidelines for accurate CPT coding assignment of surgical cases. Students abstract information from actual operative reports and case studies.
Prerequisites: BIO 4074, HIM 4410.

4452 Coding Skills Clinical Lab 0-3-1
A clinical lab course in which students practice and demonstrate competency in ICD-9-CM and CPT coding skills.
Prerequisites: HIM 4421, HIM 4451.
Corequisites: HIM 4450.

4453 Quality Assessment in Health Information Management 3-0-3
A course on performance improvement initiatives in healthcare. Topics include: implementing quality tools as they relate to HIM activities and concepts and theories of utilization management and risk management.
Prerequisites: HIM 4417, HIM 4420.

4490 HIM Capstone 1-0-1
A review of theory and practice in health information management in preparation for national examination.
Prerequisites: Successful completion of all HIM program core courses.

4494 Workshops in Medical Records 3-0-3
Consideration and study of selected issues and topics in the medical records area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

4498 Special Studies Health Information Management Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4499 Special Studies - Health Information Management Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: None.

9373 Cooperative Parallel Education - HIM 1-20-1
Health Information Management students participate in part-time paid learning experience while completing other program requirements. This experience provides an opportunity to apply knowledge and skills acquired in classes. The student must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the HIM program, coordinator consent, 2.0 mimimum GPA.

HLT Health Technologies

4061 Contemporary Health Care Issues 3-0-3
A course on health care economics and new trends and issues in health care.
Prerequisites: None.

4094 Workshops in Health Technologies 3-0-3
A study of selected issues and topics in the health technologies area that meets current needs. Content and emphasis vary from year to year.
Prerequisites: None.

4098 Special Studies in Health Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have a plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Varies.

4099 Special Studies in Health Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: Varies.

9320 Internship - Health Technologies 1-20-1
Students participate in an unpaid field learning experience 16 to 20 hours per week. Students must adhere to Health Division co-op policies and procedures to earn credit.
Prerequisites: Admitted to a program, coordinator consent, 2.0 minimum GPA.

HNR Honors Experience

1695 Orientation to Honors 1-0-1
A course required for students admitted to the Cincinnati State Honors Experience. Topics include: the expectations, responsibilities, and opportunities of the Honors Experience; and planning and implementing personal and

academic skills and strategies needed for Honors courses. This course is the pre/co-requisite for all other Honors classes, and also fulfills the College orientation course requirement for students admitted to the Honors Experience.
Prerequisites: Admitted to the Honors Experience.

1696 Honors Colloquium Var-Var-Var
Study and discussion of selected interdisciplinary topics in a seminar format, emphasizing student inquiry, critical thinking, and critical analysis of material. Students complete papers, projects, and/or presentations. Topics vary from term to term.
Prerequisites: HNR 1695, ENG 1001.

HOSP Hotel-Restaurant Management

9224 Cooperative Education-Hospitality Technologies 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the HOSP program, 2.0 minimum GPA.

9244 Cooperative Education Hospitality - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the HOSP program, 2.0 minimum GPA.

HRM Hotel-Restaurant Management

2801 Food & Beverage Sanitation & Safety 3-0-3
A study of sanitation and safety and their importance in the food service industry. This course provides information and methods to help a foodservice manager apply sanitation procedures to good handling functions. This course is the National Restaurant Association's Educational Institute certification course.
Prerequisites: None.

2802 Food & Beverage Cost Control 1 3-0-3
This course is designed to introduce the student to the area of food service cost systems emphasizing purchasing and production. Topics to be discussed, through lecture and class participation include: buying, receiving, inventories, portioning, and computing costs. Completion of DE 0024 or equivalent recommended.
Prerequisites: MAT 1115.

2803 Menu Production & Facilities Planning 3-0-3
A course on basic principles of menu development. Topics include: menu planning, construction constraints, analysis, and pricing.
Prerequisites: None.

2804 Catering & Banquets 3-0-3
A comprehensive study of a hotel banquet operation and catering office. Topics include: off-premise catering, event sales, menu planning, and room design and set-up.
Prerequisites: None.

2805 Food & Beverage Supervision 3-0-3
A course on human resource management in food service. Topics include: the problems of human resources and the elements of leadership and supervision.
Prerequisites: None.

2806 Hospitality Beverage Management 3-0-3
A course on hospitality refreshment management. Topics include: studies of actual situations, pricing and profit, beverage personnel job descriptions, terms, merchandising, and liquor laws in relation to hospitality refreshments.
Prerequisites: None.

2808 Dining and Beverage Service 1-6-3
A course on the practical application of the basic skills of professional dining and beverage service.
Prerequisites: None.

2811 Introduction to Hospitality Management 3-0-3
An overview of hospitality management. Topics include: a study of the various departments within the framework of private clubs, hotels, and motels; available vocational opportunities and a look at the future.
Prerequisites: None.

2812 Hotel Front Office Procedure 4-0-4
Study of front office management and operation with emphasis on the use of various types of front office equipment, supplies, and procedures. Practical operating procedures in performing the hotel night audit including registration, rates, and posting charges and credits.
Prerequisites: None.

2813 Hospitality Housekeeping 3-0-3
A course on housekeeping and its administration. Topics include: control of supplies, sanitation, cleaning techniques, decoration, equipment, and related subjects.
Prerequisites: None.

2818 Food & Beverage Cost Control 2 2-2-3
A continuation of HRM 2802. Topics include: food service cost control systems emphasizing sales control, profit and loss, and labor control. Students use relevant software applications.
Prerequisites: HRM 2802.

2821 Hospitality Sales & Marketing 3-0-3
A course on marketing and sales techniques in the hospitality industry and purposes and goals of internal and external marketing strategies. Topics include: marketing plans, menu design, personal sales, advertising, and market segmentation.
Prerequisites: None.

2828 Nutrition for Food Service 2-2-3
A course on the characteristics of the major nutrient groups and their relationship to diet and health. Topics

include: the foods in which nutrients are found and application of nutritional principles to menu planning, marketing, food purchasing, preparation and service activities.
Prerequisites: None.

2830 Fundamentals of Cooking 2-4-4
An overview of the principles of cooking. Topics include: using commercial equipment and guidelines for proper food service and merchandising.
Prerequisites: None.

2840 Restaurant Operations 4-0-4
A course on applying marketing, financial and human resource concepts used in restaurant operations. This is the capstone course for restaurant management students and should be taken near the completion of the curriculum coursework.
Prerequisites: HRM 2805, HRM 2818, HRM 2821.

HST History

1561 History of World Civilization 1 3-0-3
An introduction to the major trends in the development of Western and Asiatic civilizations from ancient Eurasian times to the fall of Byzantium.
Prerequisites: None.

1562 History of World Civilization 2 3-0-3
An introduction to the major trends in Western and Asiatic civilizations from the fall of Byzantium to the Congress of Vienna. Includes the native civilizations of the Americas.
Prerequisites: None.

1563 History of World Civilization 3 3-0-3
An introduction to the major trends in Western and Asiatic civilizations from the Congress of Vienna to contemporary times.
Prerequisites: None.

1568 American History 1 3-0-3
General historical survey of the formative years of the Republic from Colonial America through the outbreak of the American Civil War.
Prerequisites: None.

1569 American History 2 3-0-3
General historical survey of the United States from the Civil War through the end of World War I.
Prerequisites: None.

1570 American History 3 3-0-3
General historical survey of the United States from the Roaring Twenties to contemporary times.
Prerequisites: None.

1575 History of Africa 3-0-3
General survey of African history with emphasis on the Diaspora, and the political, social, and cultural factors creating modern Africa.
Prerequisites: None.

1576 African-American History 1 3-0-3
African-American history from 1619 to the Civil War of 1860. Topics include: the different experiences of Blacks in the New World and the various factors that have shaped African-American communities in America.
Prerequisites: None.

1577 African-American History 2 3-0-3
A history of African-Americans from 1860 to the Depression era. Topics include: the role of African-Americans in the Civil War, their post-war experiences, the intensification of segregation, and their involvement in WWI and the post-war era.
Prerequisites: None.

1578 African-American History 3 3-0-3
A history of African-Americans from the Depression era to the present. Topics include: African-Americans in WWII, involvement in African resistance movements, rise of civil rights movements, and important African-American personalities.
Prerequisites: None.

HUM Arts & Humanities

1698 Topics in Humanities Var-Var-Var
Study and discussion of selected topics in the humanities, which may be drawn from one field within the humanities (e.g., urban history, criminology, social welfare in society, film studies) or may be interdisciplinary (e.g., popular culture studies, women's studies). Content and emphasis may vary from term to term.
Prerequisites: ENG 1001.

1699 Special Problems in Humanities Var-Var-Var
Individual study and special projects pertaining to one or more areas of the humanities. Open to students wishing to conduct independent study and/or research. Enrollment requires prior consent of the supervising instructor and the Dean of Humanities and Sciences.
Prerequisites: 6 credits of English composition.

9801 Career Exploration Seminar 3-0-3
Students seeking an Associate of Arts or Associate of Science degree assess their life experience, skills, and interests, and carry out a variety of structured activities (including directed reading and writing assignments) in order to set realistic career goals. Students should complete this course during their second or third academic term.
Prerequisites: ENG 1001.

9802 Internship - Humanities & Sciences 1-40-2
Students seeking an Associate of Arts or Associate of Science degree participate in a part-time (15 to 32 hours per week for one academic term) unpaid field learning experience related to their career goals. Students must adhere to degree program internship policies and procedures to earn credit. The course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9803 Cooperative Education Humanities & Sciences 1-40-2
Students seeking an Associate of Arts or Associate of

Science degree participate in a full-time (32 to 40 hours per week for one academic term) paid field learning experience related to their career goals. Students must adhere to the degree program cooperative education policies and procedures to earn credit. The course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9804 Parallel Cooperative Education Humanities & Sciences 1-20-1
Students seeking an Associate of Arts or Associate of Science degree participate in a part-time (15 to 32 hours per week for one academic term) paid field learning experience related to their career goals. Students must adhere to the degree program cooperative education policies and procedures to earn credit. This course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9805 Career Education Project Humanities & Sciences 1-40-2
Students seeking an Associate of Arts or Associate of Science degree complete individual study or a special project related to their major field and pertaining to their career goals. Working with an assigned faculty mentor, students define the project goals, carry out project tasks, and evaluate the results. This course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9806 Career Education Project 2 Arts & Sciences 2-40-4
Students seeking an Associate of Arts or Associate of Science degree complete individual study or a special project related to their major field and pertaining to their career goals. Working with an assigned faculty mentor, students define the project goals, carry out project tasks, and evaluate the results. This course may not be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimun GPA.

IDT Industrial Design Technology

7825 Human Factors in Design 2-3-3
A course on the study of elements relevant to human form and function. Topics include: using these principles as the foundation for designing safe and functional products.
Prerequisites: MET 7008.

7850 Computer Modeling 1 2-3-3
An introductory course on creating accurate 3D surface and solid models. Students develop 3D computer models for graphic visualization using advanced surfacing software.
Prerequisites: MET 7110.

7855 Computer Modeling 2 2-3-3
A continuation of MET 7850. Topics include: creating, editing and manipulating 3D surface models.
Prerequisites: IDT 7850.

7870 Model Making/Prototyping 2-3-3
A course on the skills and techniques of fabricating models and prototypes. Students create actual physical models to demonstrate their designs.
Prerequisites: IDT 7855.

7890 Industrial Design Project 2-3-3
A capstone course in which students complete an individual design of a product from concept to prototype.
Prerequisites: IDT 7870.

IMT Integrative Medical Massage Therapy

4085 Clinical Anatomy and Physiology for the Massage Therapist 1 3-6-5
An introductory course on the human body, and skeletal and muscular systems in the context of integrative medical massage.
Prerequisites: Admitted to the Integrative Medical Massage Therapy Technical Sequence, BIO 4016 with a grade of B or higher.
Corequisites: IMT 4856.

4086 Clinical Anatomy and Physiology for the Massage Therapist 2 3-6-5
A continuation of IMT 4085. Topics include: biochemistry, cells, tissues, and the integumentary system in the context of integrative medical massage.
Prerequisites: IMT 4085, IMT 4856.
Corequisites: IMT 4857.

4087 Clinical Anatomy and Physiology for the Massage Therapist 3 3-6-5
A continuation of IMT 4086. Topics include: articulations, myology, and neurology in the context of integrative medical massage.
Prerequisites: IMT 4086, IMT 4857.
Corequisites: IMT 4858.

4088 Clinical Anatomy and Physiology for the Massage Therapist 4 3-6-5
A continuation of IMT 4087. Topics include: special senses, cardiovascular system, and lymphatic system in the context of integrative medical massage.
Prerequisites: IMT 4087, IMT 4858.
Corequisites: IMT 4859.

4089 Clinical Anatomy and Physiology for the Massage Therapist 5 3-6-5
A continuation of IMT 4088. Topics include: respiratory system, digestive system, urinary system, and reproductive system in the context of integrative medical massage.
Prerequisites: IMT 4088, IMT 4852.

4851 Integrative Medical Massage in Health Care Settings 1-3-2
Theory and practice of appropriate intervention and referral protocols required of the Medical Massage Therapist working with clients in a variety of health care settings.
Prerequisites: IMT 4087, IMT 4859.
Corequisites: IMT 4852, IMT 4088.

4852 Integrative Medical Massage Student Clinic 3-6-5
A simulated clinical setting in which the student provides direct patient care, applying structural and functional assessment of neuromuscular and skeletal disorders under the direct supervision of a Licensed Massage Therapist.
Prerequisites: IMT 4892, IMT 4859, IMT 4088.
Corequisites: IMT 4089.

4855 Introduction to Integrative Medical Massage 1-2-2
An introduction to theory and techniques applied in integrative medical massage. Topics include: history of medical massage, therapeutic environment, Swedish massage techniques, integrative professional ethics, applied anatomy, and integument pathology.
Prerequisites: Personal Education Number issued by the Ohio Medical Board, BIO 4014, BIO 4015 with a grade of B or higher.

4856 Integrative Medical Massage 2 3-4-5
A continuation of IMT 4855. Topics include: medical history taking, Swedish massage techniques, professional ethics in integrative medical massage, palpatory practice, applied anatomy and clinical pathology.
Prerequisites: IMT 4855.
Corequisites: IMT 4085.

4857 Integrative Medical Massage 3 3-4-5
A continuation of IMT 4856. Topics include: Swedish massage techniques, assessment of musculoskeletal health, pathology of soft tissue, Muscle Energy Techniques, professional ethics, and applied anatomy.
Prerequisites: IMT 4856, IMT 4085.
Corequisites: IMT 4086.

4858 Integrative Medical Massage 4 3-4-5
A continuation of IMT 4856. Topics include: Swedish massage techniques, assessment of musculoskeletal and joint health, pathology of joints, professional ethics of integrative medicine, and taking and recording medical history.
Prerequisites: IMT 4857, IMT 4086.
Corequisites: IMT 4087.

4859 Integrative Medical Massage 5 3-4-5
A continuation of IMT 4858. Topics include: Swedish massage techniques theory review, introduction to craniosacral therapy as a soft tissue modality, assessment and treatment of soft tissue disorders, and documenting soft tissue function for the medical record.
Prerequisites: IMT 4858, IMT 4087.
Corequisites: IMT 4088.

4892 Business Practices for the Medical Massage Therapist 3-0-3
A course on developing a business plan and designing and managing a professional office. Topics include: practices related to establishing a professional practice such as marketing, record keeping, taxes, insurance and Ohio law as it applies to the licensed massage therapist.
Prerequisites: MGT 2971.

4893 Integrative Medical Massage Therapy Community Service 1-8-2
Community service experience in which the student applies knowledge and skills of integrative medical massage.
Prerequisites: IMT 4852.
Corequisites: IMT 4894.

4894 IMT Clinical Anatomy Review 3-0-3
A comprehensive review of anatomy and physiology required for massage therapists in preparation for the Ohio Medical Board Exam.
Prerequisites: IMT 4088, IMT 4852.
Corequisites: IMT 4895.

4895 IMT Comprehensive Review of Massage Therapy 3-0-3
A comprehensive review of the theory and practice of massage therapy techniques in preparation for the Ohio Medical Board Licensure examination.
Prerequisites: IMT 4859, IMT 4089.
Corequisites: IMT 4894.

IT Information Technologies

5102 Introduction to Macintosh 2-2-3
An introduction to operating the Apple Macintosh computer. Topics include: Microsoft Word word processing software and Claris Draw graphics software. Competency in typing or keyboarding is recommended.
Prerequisites: None.

5103 Macintosh Applications-Excel/FileMaker 2-2-3
An introduction to operating Microsoft Excel spreadsheet software and Claris FileMaker Pro database management software on the Apple Macintosh computer. Competency in typing or keyboarding is recommended.
Prerequisites: IT 5410 or IT 5430.

5105 Macintosh Applications - Microsoft Word 2-2-3
An introduction to operating Microsoft Word word processing software on the Apple Macintosh computer. Competency in typing or keyboarding is recommended.
Prerequisites: None.

5106 Macintosh Applications - FileMaker Pro 2-2-3
An introduction to operating Claris FileMaker Pro database management software on the Apple Macintosh computer. Competency in keyboarding is recommended.
Prerequisites: IT 5102 or IT 5410 or equivalent experience.

5116 Macintosh Applications - Adobe PageMaker 2-3-3
An introduction to desktop publishing techniques for creating, revising, and producing print and multimedia materials using Adobe PageMaker. Topics include: selecting appropriate page layouts, formatting text, positioning graphics, and applying appropriate typographic and design enhancements.
Prerequisites: IT 5410 or IT 5430.
Corequisites: IT 5420 or IT 5430.

5120 LAN Administration: Novell 3-2-4
A course in user administration for Novell local area network technology. Topics include: adding and controlling

users, making network resources available to users, diagnosing and troubleshooting common problems, making Windows available and setting up user scripts and menus.
Prerequisites: IT 5231, IT 5211.

5121 LAN Administration: Windows 1 3-2-4
A course on user administration for Microsoft Windows NT local area network technology. Topics include: adding and deleting users, changing user privileges, and installing client software.
Prerequisites: IT 5231, IT 5211.

5122 LAN Administration: Windows 2 3-2-4
A continuation of IT 5121. Topics include: directory services, active directory, performance monitoring, and deploying and managing software.
Prerequisites: IT 5121.

5125 LAN Administration: Messaging 3-2-4
A course on messaging via a network system. Topics include: e-mail, voice mail, intergrating e-mail to voice mail, voice over IP, and instant messaging.
Prerequisites: IT 5211.

5128 LAN Administration: NETAD Design Project 3-2-4
A capstone course for students in the Network Administration Program. Topics include: analyzing and designing proper network architecture and network installation. Students work in teams to develop network solutions for various business applications.
Prerequisites: IT 5151, IT 5120 or IT 5121.

5130 Telecommunications Management 3-2-4
A course on business telephone systems, equipment, services, and management. Topics include: PBX, Digital IBX, ISDN, SDN, DDS, ACD T-1, WATS, Megacomm, tariffs, wire distribution systems, documentation, and integration between computers and phone systems.
Prerequisites: None.

5131 Network Management/Help Desk 3-2-4
A course in evaluating the operation of a help desk from all levels. Topics include: actual operation, network management systems/software, troubleshooting with a network management system, server management, and configuring for fault tolerance.
Prerequisites: IT 5201, IT 5206.

5151 Network Communications 1 2-3-3
A course on network and basic operation systems. Topics include: network orientation, connecting components, architecture, operations, and problem solving. This course helps prepare students for the Microsoft Exam, Networking Essentials, a first exam in the Microsoft Certified Systems Engineer (MCSE) certification process.
Prerequisites: IT 5201 or EET 7710 or EET 7701.

5152 Network Communications 2 2-3-3
A continuation of IT 5151. Covers network hardware and software requirements for medium to large sized networks. Topics include: network hubs, bridges, Ethernet switches, routers, gateways and network software. Students set up hardware and software to demonstrate expandable network operation.
Prerequisites: IT 5151.

5153 Network Communciations 3 2-3-3
A continuation of IT 5152. Topics include: Gateway/WAN connections, use of DNS, Proxy Servers, firewalls and other network services, ATM devices, Gigabit Networks, Voice over IP, virtual private networks and wireless networks. Students design a variety of network topologies in lab.
Prerequisites: IT 5152.

5154 Network Security and Legal Issues 3-2-4
A course on security and legal issues surrounding the use of computers. Topics include: security implementation, software protection, physical security, policy development, legal and ethical issues relevant to computer crime, software usage and ethical responsiblities of business professionals.
Prerequisites: IT 5201.

5199 Special Studies - Information Technologies Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Students must make special arrangements with the instructor and program chair.
Prerequisites: None.

5201 Information Technology Concepts 2-3-3
An overview of information technologies. Topics include: terminology, hardware and software concepts, and career development issues. Lab exercises expand understanding of key concepts.
Prerequisites: OT 1850 or equivalent experience.

5202 Programming Logic and Methods 2-3-3
An introductory course in programming logic, methods, and documentation, emphasizing the structured approach to programming. Lab exercises focus on typical business applications.
Prerequisites: IT 5201.

5204 Program Design 1 2-3-3
An introduction to the basic elements of program design. Topics include: the sequence and iteration process, decision trees, decision tables, algorithms, flow charts, and basic program functions of business applications.
Prerequisites: None.

5205 Program Design 2 2-3-3
A continuation of IT 5204. Topics include: reading flowcharts, creating pseudocode for fundamental programming concepts for business applications, data flow diagrams, and database concepts.
Prerequisites: IT 5204.

5206 Programming Logic and BASIC 4-6-6
An introductory course in programming logic, methods,

and documentation emphasizing the structured approach to programming. Students use typical business applications as problems, incorporating BASIC programming using structured programming techniques. Keyboarding ability necessary.
Prerequisites: None.
Corequisites: IT 5201, MAT 1124.

5207 Systems Analysis and Design 2-3-3
A complete methodology of analyzing and designing computer-oriented information processing systems. Topics include: data collecting, data structure, file structure and design, input editing and volume consideration, processing requirements, output formats, real time, and time sharing systems. The IT major should complete at least 15 credits in IT coursework before enrolling in IT 5207.
Prerequisites: IT 5206.

5208 PC Software Support 3-2-4
An introductory course in PC software support processes. Topics include: using utility programs to back up and recover from hardware and software disasters, installing new software and updating existing programs, optimizing computer performance using software tools, and modifying/optimizing the Windows environment.
Prerequisites: IT 5232.

5211 Data Communications 1 2-3-3
An introductory course in business data communications. Topics include: basic terminology and concepts, operation and design of data communications systems, and a logical approach to recognizing communication problems.
Prerequisites: IT 5201.

5212 Data Communications 2 3-2-4
A continuation of IT 5211. Topics include: wide-area communications systems, communications test equipment, software testing programs, the model for Open Systems Interconnection of the International Standards Organization (ISO), protocol analysis, transmission cables and connectors and software diagnosis of communications problems.
Prerequisites: IT 5211.
Corequisites: EET 7702.

5216 Applied Programming Concepts 1 2-3-3
A course on solving data manipulation problems using structured programming concepts. Topics include: simple data types, keyboard input, disk file input and output, formatted printing, and using control fields in data. Students design and use programming tools to plan, design, and document programs.
Prerequisites: None.

5217 Applied Programming Concepts 2 2-3-3
A continuation of IT 5217. Topics include: using sub-procedures, arrays, data conversions, and string manipulations to solve complex data manipulation problems; using data types, passing values, and defining functions; programming in a graphical user interface environment; and object-oriented constructs.
Prerequisites: IT 5216 or IT 5291.

5221 Video Production Basics: Premiere 2-3-3
An introductory course on the video production process from concept to completion using Adobe Premiere. Topics include: industry terminology, use and care of equipment, shot techniques, digital editing techniques, and planning methods related to budgeting and to preparing storyboards.
Prerequisites: IT 5420 or IT 5430.

5222 Audio Recording/Editing Basics 3-4-5
An introductory course on audio recording and editing. Topics include: essentials of recording, mixing, applying effects, and producing a digital audio file used in multimedia products; basic audio terminology; microphone fundamentals; signal equalization and signal processing; and using computer software to produce audio files.
Prerequisites: IT 5221.

5223 Advanced Audio Production Techniques 3-4-5
A continuation of IT 5222. Topics include: live audio recording and production techniques needed to create professional audio/video presentations, concepts of MIDI data and files, incorporating MIDI files into other audio editing environments, and MIDI synchronization techniques.
Prerequisites: IT 5222.

5224 Video Production/Editing: Avid 3-4-5
A course on professional techniques for video production and editing using Avid Xpress DV. Topics include: advanced video shooting and editing techniques; visual storytelling techniques; digital editing techniques including transitions, effects, and output; scripting; and production pre-planning.
Prerequisites: IT 5221.

5225 Video Post-Production: After Effects 3-4-5
A course on professional techniques using Adobe Premiere and Avid Xpress DV for video post-production and Adobe After Effects for compositing. Topics include: advanced video editing techniques including compositing, lighting, framing, and motion control.
Prerequisites: IT 5224.

5226 Gripping and Lighting Techniques 3-4-5
A course on lighting and support equipment used in the production of video and film projects.
Prerequisites: IT 5224.

5227 Video Production/Editing: Final Cut Pro 3-4-5
A course on professional techniques for video production and editing, using Apple Final Cut Pro. Topics include: advanced video post-production techniques, and production of video presentations for multiple computer platforms and a variety of distribution media.
Prerequisites: IT 5225.

5228 Audio/Video Project 3-3-4
As members of an interdisciplinary team working for an external client, students develop video products for information, education, business or entertainment. Activities include: audience, client and market analysis; product design, planning, production and testing; and project management. Students present projects to internal and external reviewers.

Prerequisites: Successful completion of all other Audio/Video Production program requirements.

5229 Audio/Video/Film Seminar 2-0-2
A course in which students meet with local and/or national professionals in the fields of audio, video, and/or film production for discussion of professional issues and concerns.
Prerequisites: Program chair consent.

5230 Introduction to Computer Operations: iSeries 2-3-3
An introductory course on computer operations including the operational function of key-operated equipment. Includes laboratory work.
Prerequisites: High school typing or OT 3001.

5231 Operating Systems: DOS/Windows 1 2-3-3
An introduction to the Microsoft DOS and Windows operating systems used on PCs. Topics include: basic commands and options of DOS; creating, naming, and manipulating files; sub-directories; batch files; start-up files; and Windows utilization and management. Lab work reinforces concepts.
Prerequisites: None.

5232 Operating Systems: DOS/Windows 2 2-3-3
A continuation of IT 5231. Topics include: additional utilities, drivers, memory management, and functions of DOS; constructing DOSKEY macros and batch files with conditions and iterations; backing up and recovering from directory and file errors; third party utilities such as Norton; and managing and installing applications under Windows.
Prerequisites: IT 5231.

5233 Operating Systems: iSeries 1 2-3-3
A course in which students use the IBM OS/400 operating system to learn fourth generation operating systems. Topics include: using Control Language to expedite operations and create accounts, libraries and files and writing Control Language procedures programs. Students need some programming experience.
Prerequisites: None.

5234 Operating Systems: iSeries 2 2-3-3
A continuation of IT 5233. Topics include: writing user-assisting procedures in Control Language and using system commands that enable efficient system management.
Prerequisites: IT 5233.

5240 Advanced Facilities: iSeries 4-6-6
A course on iSeries tools and facilities. Topics include: iSeries architecture and operating systems and CL syntax and spool file concepts.
Prerequisites: IT 5230.

5241 PC Support/iSeries Access 2-3-3
A course on integrating Microsoft Office with the database capabilities of the iSeries. Topics include: using Microsoft Word, Excel, Access and Query and transferring data using iSeries Access, FTP, ODBC and UDA.
Prerequisites: IT 5206, IT 5240.

5247 Systems Analysis & Design Project 2-3-3
Students analyze, design, and implement a solution to a business problem using computerized project management tools and methodologies. Students must complete a presentation of the finished project.
Prerequisites: None.
Corequisites: IT 5207.

5251 Structured COBOL 1 4-6-6
Students use the COBOL-85 standard language in the structured programming environment, emphasizing debugging techniques. Assignments use disk, printer and terminal data.
Prerequisites: Grade of C or higher in IT 5206.

5252 Structured COBOL 2 4-6-6
A continuation of IT 5251. Topics include: advanced COBOL techniques using randomly processed disc files and accessing indexed-sequential and direct-access files using keys and algorithms.
Prerequisites: Grade of C or higher in IT 5251.

5261 RPG 1 4-6-6
An introductory course for IT majors. Topics include: processing sequential files and generating typical business reports.
Prerequisites: Grade of C or higher in IT 5206 or IT 5291.

5262 RPG 2 3-6-5
A continuation of IT 5261. Topics include: indexed files, advanced table handling, printer files, interprogram communication, Integrated Language Environment (ILE) and Application Programming Interfaces (API).
Prerequisites: IT 5261.

5271 Java Programming 1 2-3-3
An introductory course on computer programming using the Java programming language. Topics include: introduction to OOP, classes, applets, controls, event handling, layouts, mathematical operations, looping, conditional statements, functions, arrays, and strings.
Prerequisites: IT 5331 or IT 5455 or IT 5291.

5272 Java Programming 2 2-3-3
A continuation of IT 5271. Topics include: application frames, menus, dialogs, multimedia, serialization, streams, JDBC, and database programming.
Prerequisites: IT 5271.

5275 C++ Programming 1 3-3-4
An introductory course on computer programming using the C++ programming language. Topics include: mathematical operations, looping, conditional statements, functions, arrays, and strings; methods for solving mathematical problems; and menu-driven programming. Students need basic computer operating systems knowledge and text editor or word processor capability.
Prerequisites: IT 5291.

5276 C++ Programming 2 3-3-4
A continuation of IT 5275. Topics include: graphic functions, structured variables, pointers, bitwise operations, and preprocessor commands. Students use advanced pro-

gramming techniques including disk I/O operations and command line operations to produce database managers, graphical analysis and display programs.
Prerequisites: IT 5275.

5277 Object Oriented Programming: C++ 3-3-4
An introductory course on concepts and techniques of Object Oriented Programming (OOP) using the C++ programming language. Topics include: constructors, destructors, polymorphism, inheritance, encapsulation, virtual functions, and overloaded operators.
Prerequisites: IT 5276.

5278 Visual C++ Programming 1 3-3-4
An introductory course on Visual C programming using C Sharp (#). Topics include: programming in C++, object oriented programming, and database applications using ADO.
Prerequisites: IT 5277, IT 5321.

5291 Visual BASIC 1 2-3-3
An introductory course on programming logic/methods and structured and event-driven programming using Visual BASIC. Topics include: flowcharts, pseudocode, hierarchy charts, simple controls, data types, variable scope condition statements, relational and mathematical operators, loops, functions and subroutines, event handling, introduction to arrays, and basic file input/output.
Prerequisites: None.

5292 Visual BASIC 2 2-3-3
A continuation of IT 5291. Topics include: multiple forms, list controls, advanced array manipulation, user defined data types, advanced file operations, common dialog, data handling, error handling, searching/sorting, MDI applications, and debugging techniques.
Prerequisites: IT 5291.

5293 Visual BASIC 3 2-3-3
A continuation of IT 5292. Topics include: basic and advanced database programming techniques with ADO, adding/editing/deleting records in a table, searching tables, Windows common controls, classes, class properties, class methods, class events, and ActiveX controls.
Prerequisites: IT 5292.

5294 Visual BASIC 4 2-3-3
A continuation of IT 5293. A guided project class in which students design and build a complete database program in which users may add new records and edit and/or delete existing records from all tables. Students implement error handling and follow coding standards.
Prerequisites: IT 5293.

5295 Visual BASIC 5 2-3-3
An introduction to Microsoft Visual Basic.NET. Topics include: differences between Visual Basic 6.0 and Visual Basic.NET, database programming with data adapters and datasets, collections, object oriented programming, polymorphism, inheritance, encapsulation, Try& Catch& Finally statements, and file operations.
Prerequisites: IT 5294.

5310 Programming Database Applications 2-3-3
An introduction to database programming using COBOL. Topics include: the concepts of database management systems, both hierarchical and relational.
Prerequisites: IT 5252.

5311 Database Management Systems 2-3-3
A course on using external database managers to manipulate data and extract information. Topics include: designing, creating, and accessing the database. Methods of access include: interactive manipulation, user-written procedures, and access through other languages.
Prerequisites: IT 5206.

5312 Data Warehousing: iSeries 2-3-3
An introduction to various data warehousing/data mining concepts and algorithms using a database perspective. Topics include: cover data collection, structure and design.
Prerequisites: IT 5311.

5321 Database Programming & Administration1: SQL Server 2-3-3
A course on fundamentals of relational database design and implementation using Microsoft SQL Server. Students use the SQL Enterprise Manager and examine objects and their properties. Topics include: SQL groups, databases, table structure, data field types, and query statements.
Prerequisites: None.

5322 Database Programming & Administration 2: SQL Server 2-3-3
A continuation of IT 5231. Students use the SQL Enterprise Manager to program and administer database objects and their properties. Topics include: stored procedures, advanced database normalization, and advanced query statements to join across tables.
Prerequisites: IT 5321.

5323 Database Programming & Administration 3: Oracle 2-3-3
A course on fundamentals of relational database design and implementation using Oracle. Students use the Oracle SQL query language to program and administer database objects and their properties. Topics include: SQL groups, databases, table structure, data field types, and query statements.
Prerequisites: IT 5322.

5324 Database Programming & Administration 4: Oracle 2-3-3
A continuation of IT 5323. Students use the Oracle SQL query language to program and administer database objects and their properties. Topics include: stored procedures, advanced database normalization, and advanced query statements to join across tables.
Prerequisites: IT 5323.

5331 Internet Programming: VBScript 2-3-3
A course on programming user interactive Active Server Pages as components of a complete web application. Students integrate Visual Basic Script and HTML to produce complex Web projects. VBScript topics include: key words, constants, errors, events, functions, methods,

objects, operators, properties, and statements.
Prerequisites: IT 5206, IT 5453.

5332 Internet Programming: JavaScript 2-3-3
A course on fundamentals of the JavaScript scripting language. Student work with introductory topics in JavaScript and progress through more advanced topics such as frames and forms. Students must have a thorough knowledge of HTML before entering this course.
Prerequisites: IT 5453.

5333 Internet Programming: XML 2-3-3
A course on programming user interactive Active Server Pages as components of a complete web application. Students use XML and HTML to produce complex Web projects. XML topics include: creating and displaying an XML document, defining and using entities, and displaying XML documents using cascading style sheets, data binding, and XSL style sheets.
Prerequisites: IT 5206, IT 5453.

5340 PCSA Design Project 2-3-3
A capstone design project in which students work in teams to resolve a variety of complex assignments.
Prerequisites: EET 7781, IT 5208, IT 5212.

5351 CIS Design Project 1 2-3-3
A capstone design project in which students design a working system using the team concept of project design. The five phases of project development are discussed and the planning, analysis, and design phases are used to complete various team assignments.
Prerequisites: IT 5233, IT 5240.

5352 CIS Design Project 2 2-3-3
A continuation of IT 5351. Students work in teams to resolve a variety of complex assignments.
Prerequisites: IT 5351.

5353 CIS Design Project 3 2-3-3
A continuation of IT 5352. Students work in teams to resolve a variety of complex assignments.
Prerequisites: IT 5352.

5361 DBMS Design Project 1 2-3-3
Students write a complete eBusiness software suite of programs. The integrated package includes a desktop VB application and an interactive ASP Internet application utilizing a common SQL Server database.
Prerequisites: IT 5293, IT 5322, IT 5331.

5362 DBMS Design Project 2 2-3-3
A continuation of IT 5361. Students introduce SQL Stored Procedures into the desktop and Web applications to increase application speed and efficiency.
Prerequisites: IT 5361.

5363 DBMS Design Project 3 2-3-3
A continuation of IT 5362, emphasizing reliability, speed, accuracy, and ease of use. Students develop a complete set of Help Files for the desktop and Web applications.
Prerequisites: IT 5362.

5371 DBA Design Project 1 2-3-3
Students administer a complete eBusiness suite of programs. The integrated package includes a desktop VB application and an interactive ASP Internet application utilizing a common SQL Server database. Students focus their efforts on database administration and work in conjunction with the DBMS programmers.
Prerequisites: IT 5291, IT 5322, IT 5331.

5372 DBA Design Project 2 2-3-3
A continuation of IT 5371. Students introduce SQL Stored Procedures into the desktop and Web applications to increase application speed and efficiency. Students focus their efforts on database administration and work in conjunction with DBMS programmers.
Prerequisites: IT 5371.

5373 DBA Design Project 3 2-3-3
A continuation of IT 5372. Students focus their efforts on database administration and work in conjunction with the DBMS programmers.
Prerequisites: IT 5372.

5410 Cross-Platform Computer Systems and Applications 2-2-3
An introduction to operating systems software and end-user applications software in both Windows and Macintosh computing environments. Topics include: file management, file compressing, printer installation, and other basic processes and procedures for each computing environment.
Prerequisites: OT 1850 or IT 5102 or equivalent experience.
Corequisites: IT 5201.

5420 Digital Media Concepts 2-3-3
An introduction to software, hardware, and peripheral equipment used to create, revise, and produce digital images and audio and video input for multimedia products. Equipment used includes: scanners, printers, digital cameras, and audio and video recording equipment.
Prerequisites: IT 5201 or equivalent.
Corequisites: IT 5410.

5430 Accelerated Multimedia Concepts 2-3-3
An accelerated introduction to key computer concepts for producing multimedia products. Topics include: Windows and Macintosh operating systems, and production of digital input for multimedia.
Prerequisites: A computer concepts course in high school or college.

5431 Multimedia Tools: Dreamweaver 1 2-3-3
An introduction to creating dynamic web site content using Macromedia Dreamweaver, emphasizing using an authoring program for project planning and development and web site management. Topics include: formatting features, code editing, navigation methods, using layers and libraries, and inserting media elements.
Prerequisites: IT 5441.
Corequisites: IT 5455.

5432 Multimedia Tools: Director 1 2-3-3
An introduction to creating, revising, and producing multi-

media presentations using Macromedia Director. Topics include: principles for effective design; using Lingo scripting; and developing Director-generated materials for delivery on Web sites, CD-ROMs, and DVD-ROMs.
Prerequisites: IT 5453, IT 5443, IT 5206.

5433 Multimedia Tools: Authorware 1 2-3-3
An introduction to using Macromedia Authorware to develop interactive training and educational materials for delivery on Web sites, LANs, and CD-ROMs. Topics include: principles for effective use of Authorware, adding motion and sound, and working with templates and knowledge objects.
Prerequisites: IT 5453, IT 5206.

5434 Multimedia Tools: Authorware 2 2-3-3
A continuation of IT 5433. Topics include: incorporating DirectX, Flash, Director and XML; user login and information tracking; and reading/writing to external files.
Prerequisites: IT 5433.

5435 Multimedia Tools: Director 2 2-3-3
A continuation of IT 5432. Topics include: advanced techniques for using Director and Lingo scripting, extending user feedback and control, using Shockwave, using digital audio and video, and creating games.
Prerequisites: IT 5432.

5436 Multimedia Tools: Dreamweaver 2 2-3-3
A course on planning and creating dynamic Web site content using Macromedia Dreamweaver UltraDev. Topics include: moving database content to and from a Web page, creating and validating logins, and creating an e-commerce site with a shopping cart.
Prerequisites: IT 5431, and OT 3068 or IT 5321.

5441 Graphics Tools: Photoshop 1 2-3-3
An introductory course on creating, revising, and producing images using Adobe Photoshop. Topics include: principles for effective use of Photoshop-generated images in print and multimedia products.
Prerequisites: IT 5410 (or IT 5430) and MAT 1124.
Corequisites: IT 5420 or IT 5430.

5442 Multimedia Tools: Flash 1 2-3-3
An introductory course on techniques for creating, revising, and producing dynamic multimedia content using Macromedia Flash. Topics include: principles for project planning, creating and importing vector graphics, creating navigational elements, and other techniques for effective creation and use of Flash-generated elements in multimedia products.
Prerequisites: IT 5453, and IT 5441 or IT 5443.

5443 Graphics Tools: Illustrator 2-3-3
An introduction to techniques for creating, revising, and producing images using Adobe Illustrator. Topics include: principles for effective use of Illustrator-generated images in print and multimedia products.
Prerequisites: IT 5410 or IT 5430.
Corequisites: IT 5420 or IT 5430.

5444 Graphics Tools: Photoshop 2 2-3-3
A continuation of IT 5441. Topics include: advanced techniques for creating, revising, and producing images using Adobe Photoshop.
Prerequisites: IT 5441.

5445 Graphics Tools: Freehand 1 2-3-3
An introductory course on techniques for creating and manipulating images using Macromedia Freehand. Topics include: using Freehand as a tool for layout and technical illustration.
Prerequisites: IT 5410 or IT 5430.

5446 Graphics Tools: Freehand 2 2-3-3
A continuation of IT 5445. Topics include: advanced use of Macromedia Freehand as a tool for layout and technical illustration.
Prerequisites: IT 5445.

5447 Graphics Tools: Fireworks 1 2-3-3
An introduction to techniques for creating, revising, and producing images using Macromedia Fireworks. Topics include: principles for effective use of Fireworks-generated images in multimedia products.
Prerequisites: IT 5410.
Corequisites: IT 5420 or IT 5430.

5451 Animation Tools: Maya 1 3-4-5
An introduction to creating, manipulating and animating in Alias|Wavefront Maya. Topics include: basic skills for modeling, texturing, lighting and animating.
Prerequisites: IT 5224, IT 5420 or IT 5430, IT 5441, and IT 5443 or IT 5445.

5452 Animation Tools: Maya 2 3-4-5
A continuation of IT 5451. Topics include: dynamics and particles, character animation and creating believable characters.
Prerequisites: IT 5451.

5453 Web Development 1: HTML 2-3-3
A course on designing and developing effective Web sites. Topics include: site design and navigation principles; and markup language code for text, images, links, tables, frames, and other commonly-used elements. Students must earn a grade of C or higher to take continuation courses.
Prerequisites: TC 5010, ART 1692, MAT 1124.
Corequisites: IT 5410 or IT 5430.

5454 Web Development 2: JavaScript 2-3-3
A continuation of IT 5453. Topics include: additional principles of site design, navigation, and functionality; and use of a scripting language to increase site functionality. Students must earn a grade of C or higher in this course to be eligible for continuation courses.
Prerequisites: IT 5453, IT 5206, TC 5010, TC 5020.

5455 Web Development 3: Advanced Topics 2-3-3
A continuation of IT 5454. Topics include: advanced principles of site design, navigation, and functionality; intermediate use of a scripting language; and dynamic elements of Web design incorporating Dynamic HTML and Cascading Style Sheets. Students must earn a grade of C or higher in

this course to be eligible for continuation courses.
Prerequisites: IT 5454.

5456 Desktop Publishing: QuarkXPress 2-3-3
Introduction to desktop publishing techniques for creating, revising, and producing print and multimedia materials using QuarkXPress. Topics include: selecting appropriate page layouts, formatting text, positioning graphics, and applying appropriate typographic and design enhancements.
Prerequisites: IT 5410 or IT 5430.
Corequisites: IT 5420 or IT 5430.

5457 Web Design Project 3-3-4
Students develop a Web-based product for information, education, business or entertainment. Activities include: audience, client and market analysis; product architecture design and navigation schema; planning, selecting and organizing materials; developing and producing content; and usability testing. Students present project results to internal and external reviewers.
Prerequisites: Successful completion of all other Web Design program requirements.

5458 Web Development 4: Web Programming 2-3-3
A continuation of IT 5455. Topics include: use of newer technologies to add dynamic elements to a Web site, creating scripts to communicate between client-side and server-side Web pages, XML, or CGI and Perl.
Prerequisites: IT 5455.

5542 Multimedia Tools: Flash 2 2-3-3
A continuation of IT 5442. Topics include: using Flash Action Scripts to build dynamic, interactive Web sites; defining user variables; tweening techniques; animation techniques; and using movie clips, preloader scripts, and test scripts.
Prerequisites: IT 5442, IT 5455.

5543 Animation Tools: Maya 3 3-4-5
A continuation of IT 5452. Topics include: advanced techniques for digital character animation.
Prerequisites: IT 5452.

5544 Graphics Tools: Photoshop 3 2-3-3
A continuation of IT 5444. Topics include advanced techniques for creating photorealistic images and for revising existing images.
Prerequisites: IT 5444.

5570 Multimedia Portfolio Production 2-0-2
A course in which students prepare a professional portfolio that describes academic and work achievements. Multimedia professionals assess student portfolios.
Prerequisites: Completion of MID core courses or instructor consent.

5571 Computer Graphics Project 3-3-4
Students develop a computer graphics product for information, education, business or entertainment. Activities include: audience, client and market analysis; product design and planning; selecting and organizing materials; developing and producing content and usability testing. Students present project results to internal and external reviewers.
Prerequisites: Successful completion of all other Computer Graphics program requirements.

5598 Workshop in Multimedia Information Design Var-Var-Var
Group discussion and practice of selected topics related to multimedia information design. Course content and emphasis may vary from year to year.
Prerequisites: Instructor consent.

5599 Special Problems in Multimedia Information Design Var-Var-Var
A course in which students who are seeking advanced standing or implementing independent research or specialized multimedia information design projects complete individual studies and special projects related to multimedia information design. Enrollment requires prior MID program chair and Dean of Information Technologies consent. May be repeated for credit.
Prerequisites: Program chair consent.

9500 Cooperative Education - Information Technologies (Alternating) 1-40-2
The student participates in a full-time (minimum of 36 hours per week) paid field learning experience related to the student's academic discipline and career goals. Students must adhere to the Information Technology Division's cooperative education policies and procedures.
Prerequisites: Full-time status; admitted to an IT degree program; 2.0 minimum GPA.

9501 Cooperative Education - Information Technologies (Parallel) 1-20-1
The student participates in a paid field learning experience directly related to the student's academic discipline for 15 to 30 hours per week, while registered for a minimum of 8 credit hours of program course requirements during that same term. The student must adhere to the division's cooperative education policies and procedures.
Prerequisites: Admitted to an IT degree program; 2.0 minimum GPA.

ITE Industrial Training

8500 Problems-Mechanical Apprentice Var-Var-Var
Individual study and special projects pertaining to mechanical areas of specialization. Open to students with valid documented course academics, work experience, professional certification and/or licensing, or completed formal training programs.
Prerequisites: Completed formalized training program/apprenticeship.

8700 Problems-Electrical Apprentice Var-Var-Var
Individual study and special projects pertaining to electrical/electronic areas of specialty. Open to students with documented valid academics or work experience, professional certification and/or licensing, or completed formal training programs.
Prerequisites: Completed formalized training program apprenticeship/licensing.

8900 Problems-Plumber/Pipefitter Var-Var-Var
Individual study and special projects pertaining to plumber/pipefitting areas of specialization. Open to students with valid documented course academics, work experience, professional certification and/or licensing or completed formal training programs.
Prerequisites: Completed formalized training program/apprenticeship.

ITHT Industry Training Health Technologies

3811 General X-ray Machine Operation 2-0-2
Prepares students for Ohio licensure as a General X-ray Machine Operator. The curriculum includes: instruction on radiation physics, radiographic techniques, darkroom processing and film handling, radiation health safety and protection, and radiation biology.
Prerequisites: None.

3813 Nurse Aide Train the Trainer Program 3-0-3
This state-approved course meets the requirements for nurses teaching either the classroom or clinical supervised parts of an approved Training and Competency Evaluation program for long term care aides.
Prerequisites: RN or LPN with an active Ohio License and 2 years experience caring for the elderly.

ITM International Trade Management

2980 Introduction to International Business 3-0-3
An overview of international business and the institutions that affect business today. Topics include: the scope and challenges of international trade, concepts and theories, market entry strategies, cultural dynamics, business customs and practices, political environments, and legal systems.
Prerequisites: None.

2981 International Marketing 3-0-3
An overview of the components of international marketing. Topics include: determining export potential, international market research, internationalization of products, pricing methods, market entry strategies, promotional techniques, and long-term marketing planning.
Prerequisites: None.

2983 International Orders Processing & Finance 3-0-3
A course on skills required by international order processing and shipping departments. Topics include: required documentation; selecting forwarders, carriers, and insurance; inter-company communication; responsibilities of all parties to the contract of carriage for shipments; and trade, tariff, and exchange regulations and restrictions.
Prerequisites: None.

9252 Cooperative Education
International Trade Management 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ITM program, 2.0 minimum GPA.

9253 Cooperative Education
International Trade Management-Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ITM program, 2.0 minimum GPA.

ITP Interpreter Training

1086 Beginning ASL 1 3-2-4
An introduction to American Sign Language. Topics include: ASL vocabulary; Deaf culture; grammar; and beginning conversational, comprehensive, and expressive skills.
Prerequisites: None.

1087 Beginning ASL 2 3-2-4
A continuation of ITP 1086. Topics include: ASL vocabulary; Deaf culture; grammar; and beginning conversational, comprehensive, and expressive skills.
Prerequisites: ITP 1086 or equivalent.

1088 Beginning ASL 3 3-2-4
A continuation of ITP 1087. Topics include: ASL vocabulary; Deaf culture; grammar; and beginning conversational, comprehensive, and expressive skills.
Prerequisites: ITP 1087 or equivalent.

1089 Advanced Fingerspelling 3-0-3
An advanced course on producing the letters of the manual alphabet and incorporating them into the interpreting process. Topics include: developing and practicing strategies that improve understanding of fingerspelling embedded in signed utterances and improving receptive and expressive skills.
Prerequisites: ITP 1091 or equivalent.

1091 Intermediate American Sign Language 1 3-2-4
A course on the linguistics of American Sign Language. Topics include: receptive and expressive readiness skills for acquiring ASL targeted vocabulary and grammar, and fingerspelling.
Prerequisites: ITP 1088 or advisor consent.

1092 Intermediate American Sign Language 2 3-2-4
A continuation of ITP 1091. Topics include: written information on targeted grammatical features, receptive and expressive mastery of these features, targeted vocabulary items, and producing student-generated ASL sentences.
Prerequisites: ITP 1091 or equivalent.

1093 Intermediate American Sign Language 3 3-2-4
A continuation of ITP 1092. Topics include: additional information on targeted grammatical features, receptive and expressive mastery of prepared dialogues, interpreting English sentences into ASL, and producing short student-generated ASL narratives.
Prerequisites: ITP 1092 or equivalent.

1094 Advanced American Sign Language 1 3-2-4
An advanced course on the linguistics of American Sign Language, emphasizing native-like signing. Topics include: demonstrating target vocabulary and grammatical features through prepared dialogues and short narratives, interpreting English paragraphs into ASL, and producing student-generated ASL dialogues.
Prerequisites: ITP 1093, program chair consent.

1095 Advanced American Sign Language 2 3-2-4
A continuation of ITP 1094. Topics include: additional practice of ASL communicative skills, vocabulary, and grammatical features; and continued development of expressive and receptive interpreting skills.
Prerequisites: ITP 1094 or equivalent.

1096 Advanced American Sign Language 3 3-2-4
A continuation of ITP 1095. Topics include: additional ASL vocabulary and grammatical features, and mastering simultaneous interpreting using short stories and student-generated dialogues.
Prerequisites: ITP 1095 or equivalent.

5459 Beginning Fingerspelling 3-0-3
An introduction to expressive and receptive skills related to fingerspelling. Topics include: Lexical Borrowing and numbers.
Prerequisites: None.

5460 Interpreting for the Deaf 3-0-3
A course that provides a framework for understanding the interpreting field. Topics include: the code of ethics and physical factors.
Prerequisites: None.

5461 Preparation for ITP Practicum 3-0-3
An advanced course that combines American Sign Language with the cognitive process of interpreting. Topics include: the interpreter's role in various settings, the interpreting process, physical factors, and modeling and practicing language variations.
Prerequisites: ITP 1093 with a grade of C or higher.

5462 Community Resources for Deaf 3-0-3
A course on human service agencies that serve the deaf population. Topics include: an overview of the laws and legal implications of interpreting situations.
Prerequisites: None.

5463 Role of Interpreter 3-0-3
A continuation of ITP 5460. Topics include: history, trends, and issues in the interpreting field. Includes information on the written portion of the RID National Certification Test.
Prerequisites: ITP 5460 or equivalent, ITP 5461.

5464 Sign-to-Voice Interpreting 1 3-2-4
A course on improving receptive skills in preparation for sign to voice interpreting and transliterating situations.
Prerequisites: ITP 1093 with a grade of C or higher.

5465 Sign-to-Voice Interpreting 2 3-2-4
A continuation of ITP 5464. Topics include: receptive skills and skill development in transforming signed expressions into vocal expressions.
Prerequisites: ITP 5464 with a grade of C or higher.

5466 Sign-to-Voice Interpreting 3 3-2-4
A continuation of ITP 5465. Topics include: techniques to help the interpreter develop the skills and poise needed to handle frustrations and problems that arise in sign to voice interpreting and transliterating situations.
Prerequisites: ITP 5465 or equivalent.

5467 Sign-to-Voice Interpreting 4 3-2-4
A continuation of ITP 5466. Students learn advanced techniques in sign to voice interpreting and transliterating.
Prerequisites: ITP 5466 or equivalent.

5468 Deaf-Blind Communications 3-0-3
An intermediate to advanced course on the specific communication skill set for the deaf-blind population. Topics include: various communication needs of deaf-blind individuals, communication modes/languages, and application and feedback.
Prerequisites: ITP 1091 with a grade of C or higher.

5470 Transliterating 1 4-0-4
A course on transmitting spoken English into one of several English-related or English-oriented varieties of manual communication for communication between deaf and hearing people.
Prerequisites: ITP 1093 with a grade of C or higher.

5471 Medical/Technical/Legal Interpreting 4-0-4
A course on technical sign vocabulary used in business, engineering, mathematics, and biology. Topics include: protocol and sign vocabulary for medical, mental health, social work, and legal interpreting settings.
Prerequisites: ITP 1093.

5472 Specialized Interpreting 4-0-4
An introduction to ASL vocabulary related to sexual behavior/sexual abuse and drug use/abuse. Topics include: increasing student comfort and skill level for interpreting in the areas of OB/GYN, Alcoholics Anonymous, Narcotics Anonymous, counseling, and court settings.
Prerequisites: ITP 1093.

5474 Vocabulary Building for Interpreters 3-0-3
A course on developing receptive and expressive skills in sign language vocabulary emphasizing American Sign Language.
Prerequisites: ITP 1091 with a grade of C or higher.

5475 Educational Interpreting 1 3-0-3
An overview of educational interpreting. Topics include: the educational setting, code of ethics, inservicing, the IEP process, and the Ohio Department of Education's Educational Interpreter Guidelines.
Prerequisites: ITP 1091 with a grade of C or higher.

5476 Educational Interpreting 2 3-0-3
Hands-on practice and feedback pertaining to expressive and receptive skills in educational settings. Classroom vocabulary focuses on several educational subjects. Topics include: the specific needs of learners at each age and

how interpreters can best meet those communication needs.
Prerequisites: ITP 5475 with a grade of C or higher.

5477 Transliterating 2 4-0-4
A continuation of ITP 5470. Topics include: extensive hands-on practice and feedback related to expressive and receptive skills in transliterating and several different modes of English-related or English-oriented sign systems.
Prerequisites: ITP 5470 with a grade of C or higher.

5478 Religious Interpreting 3-0-3
A course emphasizing skills needed for interpreting/transliterating in religious settings. Topics include: vocabulary building and conceptual accuracy.
Prerequisites: ITP 1091 with a grade of C or higher.

5479 Theatrical Interpreting 3-0-3
A course on the art of interpreting for theater and related settings. Topics include: developing skills in the processes of script translation, preparation, and performance.
Prerequisites: ITP 1091 with a grade of C or higher.

5480 ITP Practicum 1 2-10-3
Students are assigned to various educational institutions and community agencies. Students spend a total of 10 hours per week observing, and subsequently assuming, the role of the interpreter under supervision. Students participate in weekly seminars.
Prerequisites: ITP 5461 or equivalent.

5481 ITP Practicum 2 2-10-3
Students are assigned to a community or human service agency for the deaf for 10 hours per week to gain practice interpreting. Students participate in weekly seminars.
Prerequisites: ITP 5480 or equivalent.

5482 ITP Practicum 3 2-10-3
Students assume interpreting responsibilities under the mentorship of interpreter(s) in an assigned agency or institution. Students prepare a portfolio for an exiting interview.
Prerequisites: ITP 5481 or equivalent.

5498 Topics in Interpreter Training Var-Var-Var
Study of selected topics in interpreter training. Content and emphasis may vary from term to term.
Prerequisites: ITP 1091.

5499 Special Studies in Interpreter Training Var-Var-Var
Individual study and special projects pertaining to interpreter training. Open to students wishing to conduct independent study and/or research under the supervision of a faculty member. Before registration, the student must have the plan of study approved by the program chair and the Dean of Humanities and Sciences.
Prerequisites: ITP 1091.

JOU Journalism

1031 News Writing 1 2-2-3
An introduction to basic principles of journalism, emphasizing techniques for reporting and writing news stories. Laboratory activities involve preparation of materials for the College newspaper or other publications.
Prerequisites: 6 hours of English composition.

1032 News Writing 2 2-2-3
A continuation of JOU 1031. Topics include: techniques for reporting and writing complex news stories and feature stories; and design, editing, and production of materials for varied forms of print journalism. Laboratory activities involve preparation of materials for the College newspaper or other publications.
Prerequisites: JOU 1031.

1033 Journalism Practicum 0-7-1
Practical journalism laboratory experience. Topics include: writing, editing, and production of the College newspaper or other publications. May be repeated for credit.
Prerequisites: JOU 1032 or instructor consent.

LAW Law

1823 Business Law 1 3-0-3
A course on fundamental principles of business law. Topics include: contracts, negotiable instruments, and agencies.
Prerequisites: None.

1824 Business Law 2 3-0-3
A continuation of LAW 1823. Topics include: government regulations, trust, and insurance.
Prerequisites: LAW 1823.

1825 Hospitality Law 3-0-3
A comprehensive study of fundamental principles of hospitality, hotel, motel, and tourism law concerned with the various public callings. Topics include: the essential laws including federal, state, and administrative laws for making responsible decisions in complex and diverse hospitality operations.
Prerequisites: None.

1827 International Law 3-0-3
A course on the three basic systems of international law. Topics include: the influence of a nation's culture on its legal system, laws involving the rights and duties of states, intergovernmental organizations that affect legal relations between nations, and legal issues that affect foreign travel and international business transactions.
Prerequisites: None.

1828 Family Law 3-0-3
A comprehensive overview of the various areas comprising family law including the laws of marriage, dissolution, and divorce; prenuptial agreements; child custody and visitation; child support and collection; paternity; juvenile law; and adoption. The course focuses on common law concepts and legal procedures.
Prerequisites: LAW 1823.

1829 Litigation 3-0-3
A course on procedural aspects of criminal and civil litigation within the U.S. legal system. The Federal Rules of Civil Procedure and The Federal Rules of Criminal Procedure will be utilized and some state and local proce-

dural rules. Includes trial and appellate procedure in federal and state courts.
Prerequisites: LAW 1823.

1830 Legal Research 1 3-0-3
An introductory course on legal research. Topics include: an overview of the U.S. legal system; types of law; purposes and uses of research; researching primary and secondary authority; citation procedure and format; research strategies; and computer research including LEXIS, WESTLAW and CD-ROM. Students use local law libraries.
Prerequisites: LAW 1829.

1831 Legal Research 2 3-0-3
A continuation of LAW 1830. Topics include: drafting and writing case, trial and appellate briefs; pleadings; internal and external memoranda; motions; discovery documents; persuasive writing. Emphasizes shepardizing and proper citation and formatting.
Prerequisites: LAW 1830.

1875 E-Commerce Law and Regulation 3-0-3
A course on the legal and social environment of e-commerce. Topics include: uniform commercial code; enforceability of electronic agreements; evidentiary problems; privacy; consumer rights; and intellectual property as it relates to e-commerce, criminal statutes; and trans-border issues.
Prerequisites: None.

LBR Labor Relations

1535 Introduction to Labor/Management Relations 3-0-3
A course providing a general overview of the historical, legal, and current status of labor/management relations, in union and non-union environments, in both the public and private sectors. Topics include: labor economics, labor law, labor movements, and the concept of relative bargaining power.
Prerequisites: None.

1537 Negotiation and Dispute Resolution 3-0-3
A course on the theory and practice of negotiations. Topics include: personal and business negotiations, collective bargaining, bargaining power, strategies and tactics, impasse procedures, third party neutrals, private and public sector legal structures and considerations. Students participate in a bargaining simulation.
Prerequisites: LBR 1535 or equivalent.

1538 Case Studies in Labor Relations 3-0-3
A course on employee and labor relations. Topics include: application of labor laws, grievance, arbitration and alternative dispute resolution.
Prerequisites: LBR 1535 or equivalent.

1539 Introduction to Employment and Workplace Law 1 3-0-3
A course on the major federal legislation regarding employment rights and responsibilities from the viewpoints of the manager and the employee. Topics include: public policy regarding hiring, EEO, ADA, FMLA, sexual harassment, and developing legal trends.
Prerequisites: None.

1540 Introduction to Employment and Workplace Law 2 3-0-3
A continuation of LBR 1539. Topics include: major legislation regarding FLSA, safety, workers' compensation, age discrimination, unemployment compensation, and developing trends in employment law.
Prerequisites: LBR 1539 or instructor consent.

LC Loss Control

(Courses available for ATSL Police Academy students only.)

1202 First Aid 3-0-3
First aid instruction using the Red Cross Multimedia Standard First Aid course including instructor certification and CPR instruction including instructor certification.
Prerequisites: None.

1203 Security Investigation 3-0-3
A course on investigations that provides the security officer methods for gathering information from public records and private individuals. Topics include: legal aspects, investigative strategies, and report writing.
Prerequisites: ENG 1001.

1205 Criminal Interrogation 3-0-3
An in-depth study of proper interrogation procedures.
Prerequisites: None.

1208 Criminal Law 1 3-0-3
A course on the scope of all criminal rules and their applicability as established by the State of Ohio. Topics include: procedures and options of criminal justice.
Prerequisites: ENG 1001.

1209 Criminal Law 2 3-0-3
A continuation of CJR 1208 covering all areas dealing with Ohio codes and statutes (H.B.511).
Prerequisites: LC 1208.

1233 Emergency Planning 3-0-3
A course on developing, implementing, and troubleshooting bomb threat, fire, explosion, storm, riot, and strike violence emergency plans.
Prerequisites: None.

1239 Special Studies in Law Enforcement Var-Var-Var
Individual or independent study or particular project related to the area of law enforcement.
Prerequisites: Advisor consent.

1240 Directed Case Study 3-0-3
A course on analysis of criminal court decisions. Students reduce these decisions to written briefs.
Prerequisites: LC 1208, LC 1209.

LH Landscape Horticulture

3500 Orientation to Horticulture Occupations 1-0-1
An introduction to the various horticulture occupations. Topics include: benefits, working conditions, abilities

needed, and job levels within the horticulture industries.
Prerequisites: None.

3501 Soils and Plant Nutrition 2-2-3
A course on the formation and physical, chemical, and biological properties of soils that affect plant growth.
Prerequisites: CHE 2200.

3502 Horticulture Science 2-2-3
A course on plant classification, structures, physiology, and development and the environmental conditions that affect plant growth.
Prerequisites: None.

3504 Woody Plant Materials 1 2-3-3
The study of woody plants primarily grown by nurseries and found in the landscape and secondarily found in naturalized settings of Ohio. Topics include: deciduous and evergreen trees, shrubs, and vines with emphasis on identifying features, culture, and landscape use. Weekly plant walk field trips are required.
Prerequisites: None.

3505 Introduction to Herbaceous Plant Materials 2-2-3
A course on the classification, identification, and general cultural requirements of annuals, perennials, bulbs, and roses commonly used in garden plantings. Topics include: researching theme gardens and basic bed design. Field trip required.
Prerequisites: None.

3506 Nursery Management 1 2-2-3
A course on the techniques and practices used in the commercial production of field or containerized landscape plants, nursery business management, organization, culture, irrigation, and pruning. Field trips required.
Prerequisites: None.

3507 Arboriculture 2-3-3
A course on the commercial arboriculture business. Topics include: the diagnosis and treatment of tree ills, principles and techniques used to protect trees from disease and damage, pruning, removal, and climbing safety. Field activities required.
Prerequisites: None.

3508 Turfgrass Management 2-2-3
A course on turfgrass management principles and practices of identification. Topics include: growth, uses, establishment, and pest control of turfgrass areas. Field trips required.
Prerequisites: None.

3509 Landscape Design 1 2-3-3
A course in landscape development for residential sites. Topics include: the design process, graphics, and lettering. Students must provide drawing tools. Field trips required.
Prerequisites: None.

3510 Small Engine Maintenance & Repair 2-2-3
A study of the operation and maintenance of small gasoline engines with emphasis on safety and troubleshooting.
Prerequisites: None.

3511 Introduction to Landscape Construction 2-3-3
A course on selecting and working with materials such as wood, stone, concrete, brick, and interlocking pavers used in landscape feature construction. Topics include: measuring, site layout, grading, drainage, and erosion control and hand and power tool use. Field trips required.
Prerequisites: LH 3509.

3513 Advanced Landscape Construction 2-3-3
A course on advanced techniques of landscape construction. Topics include: constructing decks, patios, walkways, retaining walls, steps, and water features. Field trips required.
Prerequisites: LH 3511.

3515 Woody Plant Materials 2 2-3-3
A course on woody plants grown by nurseries and used in the landscape. Topics include: novel plants found in arboreta; plants in naturalized settings in Ohio; and deciduous and evergreen trees, shrubs, and vines with emphasis on identifying features, culture, and landscape use. Weekly plant walk field trips required.
Prerequisites: None.

3516 Herbaceous Plants 2 2-2-3
A course on the design, long-term establishment, selection, maintenance, and propagation of herbaceous plants. Prior gardening experience or the successful completion of LH 3505 is recommended before taking this course. Field trips required.
Prerequisites: LH 3509.

3517 Computer Aided Landscaping Drafting 2-3-3
An introductory course on the use of computers in landscape design. Topics include: the techniques of generating plot plans, planting plans, and presentation drawings used in landscape contracting.
Prerequisites: LH 3509.

3518 Landscape Design 2 2-3-3
A continuation LH 3509, with progressively more difficult problems. Topics include: basic details of landscape architectural construction grading, construction, drainage, and irrigation factors.
Prerequisites: LH 3509.

3519 Landscape Contracts and Specifications 3-0-3
A study of planting design and plan presentation. Topics include: cost estimates, procedures, specifications, and types of contracts. Students examine typical plantings in the field.
Prerequisites: LH 3511.

3520 Horticulture Lab 0-3-1
Supervised practical experience carried out in a structured environment. Topics include: installation and maintenance of landscape plantings and operation of equipment and vehicles common to the industry. Field trips required.
Prerequisites: None.

3523 Horticulture Entomology 2-2-3
A course on principles and practices in diagnosing and controlling insect pests on various horticultural crops and

integrated pest management principles. Field trips required.
Prerequisites: None.

3524 Plant Pathology 2-2-3
A course on principles and practices in diagnosing, preventing, and controlling plant diseases on various horticulture crops. Field trips required.
Prerequisites: None.

3526 Introduction to Golf and Turf Management 1-1-1
A course on facility requirements; rules of major sports; organization, staffing, resource management, and the special needs and concerns of golf courses, athletic facilities, and lawn care operators. Field trips required.
Prerequisites: None.

3528 Greenhouse and Garden Center Management 2-3-3
A course on principles and practices in controlling the greenhouse environment for plant growth and sales. Topics include: growing, marketing, retailing, purchasing, inventory, and customer service.
Prerequisites: None.

3529 Landscape Grading, Drainage and Surveying 2-3-3
An introductory course in site preparation. Topics include: site assessment, establishing grades, soil conservation and improvement, surface and sub-surface drain systems, cut and fill calculations, legal issues, and equipment operation and safety. Field trips required.
Prerequisites: MAT 1161.

3530 Horticulture Seminar 1-0-1
Guest speakers and field trips dealing with current industry topics.
Prerequisites: None.

3532 Landscape Management 2-3-3
A course on principles and practices involved in maintaining ornamental plants. Topics include: planting, fertilizing, pruning, pest control, and other related maintenance practices. Field projects required.
Prerequisites: None.

3533 Landscape Irrigation 2-2-3
A course on the design, construction, installation, and use of landscape irrigation systems.
Prerequisites: None.

3534 Interior Plantscaping 2-2-3
A course on identification, culture, and maintenance of tropical plants used in residential and commercial interior plantings. Field trips required.
Prerequisites: None.

3535 Woody Plant Materials 3 2-3-3
A course on plants commercially available and widely used in the landscape and nursery industry, cultivar distinctions, and landscape use. Field trips required.
Prerequisites: LH 3504, LH 3515.

3536 Turfgrass Culture 2-2-3
An in-depth look at the turf environment from establishment through renovation. Topics include: modifying soil, selecting turf species and cultures, managing thatch, and fertilization practices. Field trips required.
Prerequisites: LH 3508.

3537 Turfgrass Pests 2-2-3
A course on insects, diseases, weeds, and other pests that affect turf grasses. Topics include: diagnosing and managing these problems. Field trips required.
Prerequisites: LH 3508.

3538 Turfgrass Practices 2-2-3
A course on the special concerns of athletic turf, golf courses, and the commercial lawn care industry. Research project and field trips required.
Prerequisites: LH 3508.

3539 Landscape Design 3 2-3-3
A continuation of LH 3518. Topics include: applying design theory; landform design; using water in garden design; advanced graphic skills including section, elevation, isometric, and perspective techniques; and computer applications in design. Course projects emphasize client contact and sales presentation skills.
Prerequisites: LH 3518.

3540 Introduction to Floral Design 2-2-3
A basic course on principles of making simple flower arrangements and corsages. Topics include: types of design, style, principal tools, equipment, materials, foliage, and flower types.
Prerequisites: None.

3544 Advanced Floral Design 2-2-3
A continuation of LH 3540. Topics include: complex designs such as wedding, hospital, church, and funeral work.
Prerequisites: LH 3540.

3546 Computer Aided Landscape Drafting 2 2-3-3
A continuation of LH 3517. Topics include: advanced skills in plot plans, planting plans, and presentation drawings.
Prerequisites: LH 3517.

3547 Photo Imaging for Landscape Design 2-3-3
An introductory course on computer use in developing photo/realistic images of proposed landscape designs. Topics include: techniques such as scanning, scaling, color selection, and image editing.
Prerequisites: LH 3517.

3548 Cemetery Operations & Facilities Management 2-2-3
An overview of cemetery operation management issues. Topics include: sales and marketing, customer relations, investments for perpetuity, planning and development, record keeping, interment processing, and building and facilities management. Self-study research, projects, and field trips required.
Prerequisites: Able to converse and write in the English language.

3599 Studies in Cemetery Management Var-Var-Var
Courses taken at The College of Mortuary Science pertaining to the Cemetery Management program. Advisor approval required.
Prerequisites: None.

9225 Cooperative Education
Landscape Hort./Turf Mgt. 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the LH program, 2.0 minimum GPA.

9245 Cooperative Education
Landscape Horticulture - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the LH program, 2.0 minimum GPA.

LIT Literature

1040 Survey of American Literature 1 3-0-3
Chronological survey of American authors from the colonial period to the beginning of the Civil War. Topics include: the major historical and cultural issues of their times.
Prerequisites: 9 credits of English composition.

1041 Survey of American Literature 2 3-0-3
A course on American authors from the Civil War era to the period before World War I emphasizing developments and changes in American culture.
Prerequisites: 9 credits of English composition.

1042 Survey of American Literature 3 3-0-3
A course on notable American authors since World War I including discussion of major cultural and social developments.
Prerequisites: 9 credits of English composition.

1045 Survey of British Literature 1 3-0-3
A chronological survey of major works of English literature from the Anglo-Saxon period to 1550.
Prerequisites: 9 credits of English composition.

1046 Survey of British Literature 2 3-0-3
A survey of major British authors from the Renaissance through the 18th century.
Prerequisites: 9 credits of English composition.

1047 Survey of British Literature 3 3-0-3
A survey of major British authors and literary movements in the 19th and 20th centuries.
Prerequisites: 9 credits of English composition.

1048 Introduction to Shakespeare 3-0-3
Students read 3-5 of Shakespeare's best-known plays and view one or more video versions of those plays. Course emphasizes the issues facing modern interpreters of these classic plays. Regular written assignments and out of class screenings required.
Prerequisites: 9 credits of English composition or other writing classes.

1049 Introduction to World Literature 3-0-3
An introductory course on non-Western literature from a variety of cultures. Topics include: literature of Asian, African, Middle-Eastern, Hispanic, Caribbean, and indigenous peoples. Readings include representative works from ancient, classical, medieval, and modern periods.
Prerequisites: 9 credits of English composition.

1050 The Short Story 3-0-3
An introduction to short fiction with examples from a variety of periods, styles, and cultures. Emphasizes critical reading and involves regular written assignments.
Prerequisites: 9 credits of English composition.

1051 Drama 3-0-3
An introduction to drama as a literary form including plays that represent a variety of periods and styles. Regular written assignments and out of class screenings required.
Prerequisites: 9 credits of English composition.

1052 Poetry 3-0-3
An introduction to poetry as a literary form. The poems represent a variety of periods, styles, and cultures. The course involves regular written assignments.
Prerequisites: 9 credits of English composition.

1053 The Novel 3-0-3
An introduction to major themes and issues in the novel with examples from a variety of periods and cultures. Content and emphasis vary from term to term. Regular written assignments required.
Prerequisites: 9 credits of English composition.

1054 Children's Literature 3-0-3
An introduction to themes and issues in multicultural children's literature, including poetry and prose. Emphasizes critical assessment of materials in relation to the interests and needs of varied age groups. Regular written assignments required.
Prerequisites: 9 credits of English composition or instructor consent.

1055 Science Fiction 3-0-3
An introduction to themes and issues in science fiction, emphasizing the stories' analysis of social and technological trends. Regular written assignments required.
Prerequisites: 9 credits of English composition.

1056 Women Writers 3-0-3
An introduction to major themes and forms in women's writing from a variety of periods and cultures including American ethnic women. Content and emphasis vary from term to term. Regular written assignments required.
Prerequisites: 9 credits of English composition.

1057 African-American Writers 3-0-3
An introduction to major themes and forms in African-American writing from a variety of periods, including contemporary writers. May also include African or Afro-Caribbean writers. Content and emphasis vary from term to term. Regular written assignments required.
Prerequisites: 9 credits of English composition.

1058 Introduction to Literature 3-0-3
An introduction to strategies for interpreting literature. Topics include: literary theory and a variety of interpretative approaches.
Prerequisites: 9 hours of English composition.

1059 Topics in Literature 3-0-3
Study and discussion of selected topics or genres in literature (detective fiction, images of women, etc). Content and emphasis vary from term to term.
Prerequisites: 9 credits of English composition.

LOT Laser Electro-Optics

6700 Introductory Laser Principles 3-0-3
Study of introductory laser concepts and principles. Required for Laser Electro-Optics Engineering Technology pre-tech students unless specifically waived by the Dean of Engineering Technologies.
Prerequisites: MAT 1161.

6710 Introduction to Lasers 3-3-4
An introduction to laser fundamentals. Topics include: emission and absorption of photons, elements of the laser, properties of laser light, optical cavities, helium-neon lasers, laser classifications and characteristics, and an introduction to laser safety.
Prerequisites: None.
Corequisites: MAT 1172 or MAT 1191.

6715 Laser Safety 2-2-3
An introduction to safe laser use. Topics include: parts of the eye most susceptible to damage from laser light; point sources and extended sources; specular, diffuse and Fresnel reflections; hazards of laser beams; laser classification; bioeffects; associated hazards and calculations of MPE, OD, and nominal hazard zone.
Prerequisites: LOT 6710.

6720 Geometrical and Wave Optics 3-3-4
A course on the basics of geometrical and wave optics. Topics include: reflection and refraction of light, mirrors, lenses and prisms; reflection; interference; diffraction; and polarization.
Prerequisites: MAT 1191, LOT 6710.

6730 Optical Components and Devices 3-3-4
An introduction to optical components and devices. Topics include: optical components such as optical windows, flats, filters, and beamsplitters and laser-optic devices such as photodetectors, laser power and energy detectors, collimators, autocollimators, beam expanders, spatial filters, electro-optic Q-switches, and laser modulators.
Prerequisites: LOT 6720.

6735 Industrial Laser Systems 3-3-4
A course on various types of industrial laser systems. Topics include: various types of lasers such as Nd: YAG, CO2, Excimer, Argon, and Semiconductor; motion control systems; and beam delivery systems.
Prerequisites: LOT 6730.

6736 Medical Laser Systems 3-3-4
A course on various types of medical laser systems. Topics include: various types of medical lasers such as Nd: YAG, CO2, Excimer, dye, and argon used in medical applications; beam delivery systems; and filters, tips, and other accessories.
Prerequisites: LOT 6730.

6740 Applications of Lasers 3-3-4
An introduction to laser materials processing. Topics include: cutting, drilling, welding, engraving, surface modification, and holography.
Prerequisites: LOT 6730.

6741 Introduction to Fiber Optics 3-3-4
A course on optics review-lenses, imaging, numerical aperture, diffraction, light wave fundamentals dispersion, pulse distortion, reflection at a plane boundary, critical-angle reflections, wave guides, modes in symmetric slab wave guide, step index fiber, graded index fiber, modes in step-index fiber, distortion in step-index fiber, couplers and connectors, lateral misalignment, angular misalignment, end separations, and splices.
Prerequisites: LOT 6710.

6742 Medical Laser Applications 3-3-4
An introduction to the medical applications of lasers. Topics include: laser tissue interaction; various techniques and power levels used; and medical laser applications such as ophthalmology, gynecology, dermatology, and general surgery.
Prerequisites: LOT 6740.

6745 Optical System Design 3-3-4
An introduction to the design of optical systems. Topics include: co-axial system of two thin lenses, thick lenses, cardinal points, refraction matrix, translation matrix, lens matrix, system matrix of two thin lenses, system matrix of combination of lenses, Gaussian constants and their physical significance, and lens aberrations.
Prerequisites: LOT 6720.

6749 Laser Electro-Optic Project 0-4-2
Individual study and special projects pertaining to laser technology. The study may deal with an idea or concept not usually covered by existing courses at the College, or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth-term students by special arrangement with the instructor and program chair. Students receive grades of S or U for this course.
Prerequisites: Fourth or fifth term status.

6750 Laser Electro-Optic Measurements 3-3-4
An introduction to different types of spectrometers and interferometers. Topics include: laser power and energy

measurements, wavelength, dispersion and refractive index measurements, using monochromators and spectrophotometers, using Fabry-Perot Michaelson, and laser cavity.
Prerequisites: LOT 6740.

6758 Laser Electronics 2-3-3
An introduction to theory, operation, and construction of various types of power supplies that energize lasers. Topics include: safety considerations, supplies needed for different types of lasers, and physical configuration of actual supplies.
Prerequisites: EET 7710, EET 7720.

6768 Laser Maintenance 2-3-3
Topics include: the use of support and test equipment; schematic reading, cleaning, and alignment of optical systems; and the maintenance of optical, electronics, and cooling systems of the laser.
Prerequisites: LOT 6758.

6799 Special Problems Seminar - Lasers Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair. Students receive grades of S or U for this course.
Prerequisites: Fourth or fifth term status.

MA Medical Assisting

4200 Medical Office Practice 1 2-3-3
Topics include: medical law and ethics, communication skills, team working relationships, and career and professional characteristics and behavior. Students work through laboratory practice modules simulating office practices and use an office automation system.
Prerequisites: MA 4214.

4201 Medical Office Practice 2 2-3-3
Topics include: fundamentals of patient reception, appointment making, mail handling, telephone techniques, inventory procedures, care of equipment and supplies, medical-legal relationships of the medical office, and the assistant's role.
Prerequisites: MA 4200.

4202 Clinical Procedures 1 3-3-4
Topics include: fundamentals of patient preparation, history taking, positioning, draping, taking and recording vital signs, assisting the physician with examinations, caring for physician's bag, and caring for examination room before and after patients.
Prerequisites: Admitted to the Medical Assisting program.

4203 Clinical Procedures 2 3-3-4
Topics include: medications, sterile procedures, assisting in minor office surgeries, assisting in OB/GYN and special examinations - pap smears, pelvic, proctology, etc.
Prerequisites: MA 4202.

4204 Medical Laboratory Procedures 1 3-3-4
Topics include: the use of basic laboratory equipment, quality assurance and quality control, specimen collection, hematology procedures, chemistry procedures including blood glucose and cholesterol, and urinalysis.
Prerequisites: High school biology, chemistry and math or instructor consent.

4205 Medical Laboratory Procedures 2 3-3-4
A continuation of MA 4204. Topics include: microbiology, serology, and other diagnostic techniques such as electrocardiography, X-ray procedures, ultrasound, CT scan, radionuclides, and pulmonary function testing.
Prerequisites: MA 4204.

4206 Office Diagnostic & Treatment Procedures for Medical Assistants 1 2-3-3
A study of the relationship between diagnostic and therapeutic procedures and patient conditions. Topics include: infectious diseases, circulatory diseases, diseases and conditions that require X-rays for diagnosis and therapy and respiratory conditions and diseases.
Prerequisites: MA 4205.
Corequisites: BIO 4015.

4207 Office Diagnostic & Treatment Procedures for Medical Assistants 2 2-3-3
Special diagnostic procedures and techniques related to the patient in the physician's office. Topics include: the diagnosis and treatment of patients with urinary tract problems, reproductive system problems, nervous system disorders, endocrine, and other disorders.
Prerequisites: MA 4205.
Corequisites: BIO 4016.

4208 Medical Office Insurance and Coding 3-6-5
A course on principles of insurance and filing insurance claims. Topics include: using superbills, coding of claims using CPT, ICD-9-CM, HCPCS and electronic claims filing. Students use simulations and practical exercises emphasizing managed care environments and ambulatory care settings.
Prerequisites: None.

4209 Medical Assistant Seminar 2-3-3
Review of the theory and practice of skills the entry-level medical assistant needs. Topics include: job readiness skills, resume preparation, job search, interviewing and preparing for National Certification Exam.
Prerequisites: MA 4201, MA 4208, MA 4203.

4211 Medical Assisting Certificate Clinical Experience 1-16-3
Clinical practice in medical assisting in physician offices, health centers, clinics, and hospital outpatient departments. Students spend an equal number of hours in clinical and administrative assisting. Students receive no remuneration for these experiences.
Prerequisites: Successful completion of first and second terms. Students must schedule pre-clinical conference with instructor.

4213 MA Clinical Experience 1-16-3
Clinical practice in medical assisting in physician offices, health centers, clinics, and hospital outpatient departments. Students spend an equal number of hours in clinical and administrative assisting. Students receive no remuneration for these experiences.
Prerequisites: Successful completion of first year of MA program.

4214 Medical Office Computer Literacy 1-3-2
An introduction to computer use in the medical office. Topics include: computer software, hardware, terminology, and medical office applications. Students gain hands-on experience using computers for word processing and in medical office applications.
Prerequisites: Keyboarding skill level at 25 wpm.

4215 Medical Assisting Clinical Applications 2-3-3
Topics include: trends in managed care, ambulatory care and health care in general. Students present on topics in MA professional practice and operate an on-site health clinic providing testing and patient education services.
Prerequisites: MA 4207, MA 4224.

4224 Advanced Clinical Procedure 2-3-3
Topics include: specialties and special patient concerns and geriatrics, pediatrics, ophthalmology, orthopedics, and ENT.
Prerequisites: MA 4203.

4245 Medical Office Billing and Reimbursement 3-3-4
A course on principles of bookkeeping and billing for medical office and managed care settings. Topics include: collection theories and techniques, systems used for reimbursement practices, collection ratios and percentages, double entry and pegboard procedures.
Prerequisites: MA 4208 or equivalent experience.

4294 Workshops in Medical Assisting Var-Var-Var
Consideration and study of selected issues and topics in the medical assisting area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

4298 Special Studies - Medical Assisting Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4299 Special Studies - Medical Assisting Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: None.

9387 Introduction to Medical Assisting Service Learning 1-1-1
A course that gives an overview of community service organizations and agencies. Provides students with a sampling of possible service activities and assists with portfolio development and activity selection.
Prerequisites: Completion of the MA certificate program.

9388 Medical Assisting Service Learning Project 0-3-1
A continuation of MA 9387 in which students complete a selected service project through a community agency. A minimum of 30 service hours is required and may be completed over three terms.
Prerequisites: MA 9387.

MAT Mathematics

1105 Science Mathematics 4-0-4
An applied mathematics course incorporating laboratory experiences. Topics include: problem solving; algebraic manipulation of formulas; metric system; significant figures; graphing; ratio, proportion, and unit conversions; percents; estimation; measurement; data collection; and an introduction to statistics.
Prerequisites: DE 0024 or appropriate placement test score.

1108 Math for Food Service 1-2-2
A course on applied mathematical concepts and computations used in the food service industry. Topics include: recipe conversion, portion costing, costs as a percentage of sales, periodic food costs, selling price determinations, and weights and measures. Includes a lab component.
Prerequisites: DE 0024 or appropriate placement test score.

1111 Statistics 1 3-0-3
An introduction to the quantitative techniques of statistics emphasizing applications. Topics include: the scientific method, quality characteristics, organizing and picturing data, descriptive statistics, correlation and regression, normal distribution, and probability. Students must have a scientific calculator with STAT capabilities.
Prerequisites: MAT 1124 or MAT 1151 or equivalent.

1112 Statistics 2 3-0-3
A continuation of MAT 1111. Topics include: probability distributions, binomial distribution, hypothesis testing of proportions and means (one sample), chi-square tests, sampling and estimation. Course includes a group project. Students must have a scientific calculator with STAT capabilities.
Prerequisites: MAT 1111.

1113 Statistics 3 3-0-3
A continuation of MAT 1112. Topics include: confidence and prediction intervals, experimental design, hypothesis testing of standard deviations and means (two samples), analysis of variance, and nonparametric methods. Course includes a group project. Students must have a calculator with STAT capabilities.
Prerequisites: MAT 1112 or MAT 1179.

1121 Business Mathematics 1 3-0-3
A course on the applications of mathematics in the business world. Topics include: arithmetic review, equations,

ratios, review of percents, payroll, taxes, and insurance. Students must have a scientific calculator.
Prerequisites: Appropriate placement test score or DE 0024.

1122 Business Mathematics 2 3-0-3
A continuation of MAT 1121. Topics include: trade and cash discounts, markups and markdowns, inventory, depreciation, financial reports, graphs, statistics, distribution of profit, and overhead. Students must have a scientific calculator.
Prerequisites: MAT 1121.

1123 Business Mathematics 3 3-0-3
A continuation of MAT 1122, emphasizing financial math. Topics include: simple interest, bank discounts, compound interest, multiple payment plans, annuities, amortizations, stocks, and bonds. Students must have a scientific calculator.
Prerequisites: MAT 1121.

1124 Business Algebra 4-0-4
A review of the basic laws of algebra. Topics include: polynomials, factoring, rational expressions, exponents, linear and quadratic equations with business applications in compound interest and annuities, graphing as a problem solving method, and simultaneous equations. Students must have a scientific calculator.
Prerequisites: Appropriate placement test scores or DE 0025.

1128 Business Calculus 5-0-5
A foundation calculus course. Topics include: library of functions, derivatives, shortcuts to differentiation, using derivatives, and an introduction to integration. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1152.

1151 College Algebra 4-0-4
An entry-level college math course. Topics include: introduction to functions and functional notation; average rates of change of functions; graphing, writing, and solving equations for linear functions; and solving simultaneous equations. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: DE 0025 or appropriate placement score.

1152 Pre-Calculus 5-0-5
A continuation of MAT 1151. Topics include: review of functions and function properties; comparing linear and non-linear functions including polynomial, exponential, logarithmic, and periodic; and transforming functions. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1151 or MAT 1191 or MAT 1124 or instructor consent.

1154 Calculus 1 5-0-5
A foundation calculus course. Topics include: library of functions, derivatives, shortcuts to differentiation, using derivatives, and an introduction to integration. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1152 or MAT 1192 or instructor consent.

1155 Calculus 2 5-0-5
A continuation of MAT 1154. Topics include: methods of integration (substitution, parts, tables, numerical, and CAS), solutions to differential equations, Euler's method, separation of variables, and Taylor Series. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1154.

1156 Calculus 3 5-0-5
A continuation of MAT 1155. Topics include: functions of more than two variables; limits, continuity, and differentiation of functions of more than two variables; vectors (dot and cross products); partial derivatives; and local and global extrema. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1155.

1161 Applied Algebra 3-2-4
A course on the practical uses of mathematics in engineering and basic science applications. Topics include: review of percents and fractions, manipulating measured values and variables in formulas, and reading numbers from technical drawings and from measuring devices. Students must have a scientific calculator.
Prerequisites: Appropriate placement test score.

1162 Applied Geometry & Trigonometry 3-2-4
A course on the practical uses of geometry and trigonometry. Topics include: manipulating formulas, using geometric facts, the relationship between geometry and trigonometry, constructing and reading graphs, quadratic equations and 2x2 systems, and reading numbers from technical drawings and from measuring devices. Students must have scientific calculator.
Prerequisites: MAT 1161.

1171 Technical Mathematics 1 4-0-4
A course that strengthens algebraic, geometric, and trigonometric skills with practical applications. Topics include: order of calculation, scientific notation, accuracy, rounding, unit conversion, formula and equation manipulation, ratio and proportion, area and volume calculation, right triangle trigonometry, functions, graphs, and simultaneous equations. Students must have a scientific calculator.
Prerequisites: Appropriate placement test score or MAT 1162.

1172 Technical Mathematics 2 4-0-4
A continuation of MAT 1171. Topics include: quadratic equations, equations involving fractions, oblique triangle trigonometry, vector addition, and solving exponential equations and equations using angles in radians. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1171.

1173 Algebra & Trigonometry 2 with Statistics 4-0-4
A continuation of MAT 1172. Topics include: solving exponential and logarithmic equations; graphs of basic trigonometric functions; solving trigonometric equations, variation, second degree simultaneous equations, and radical equations; and introduction to statistics. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1191 or MAT 1172.

1179 Applied Statistics 4-0-4
An accelerated introduction to the quantitative techniques of probability and statistics. Topics include: the scientific method, organization of data, graphical displays, descriptive measures, probability, binomial and normal distributions, sampling, hypothesis testing, and linear regression and correlation. Students use statistical software.
Prerequisites: MAT 1191 or MAT 1151 or MAT 1124.

1191 Algebra and Trigonometry 1 3-2-4
A course that strengthens algebraic, geometric, and trigonometric skills with practical applications. Topics include: scientific calculations, unit conversions, geometry review, solving algebraic formulas, graphing, right triangle and oblique triangle trigonometry, vector addition, quadratic equations and simultaneous equations. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: Appropriate placement test score or grade of A in MAT 1162.

1192 Algebra and Trigonometry 2 4-0-4
A continuation of MAT 1191. Topics include: solving exponential and logarithmic equations, complex numbers, solving trigonometric equations, variation, second degree simultaneous equations and graphs of trigonometric functions. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1191 or MAT 1172.

1193 Analytic Geometry & Calculus 1 4-0-4
A traditional approach to analytic geometry and calculus. Topics include: analytic geometry involving lines and the conic sections, graphs, analysis of polynomial functions, derivative concept, and indefinite and definite integrals. Integral applications include areas and volumes and related topics. Students must have a graphing calculator; TI-83 preferred.
Prerequisites: MAT 1192.

1198 Workshops in Mathematics Var-Var-Var
Study of selected topics in mathematics designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

1199 Special Studies-Mathematics Var-Var-Var
A personal academic pursuit related to the student's technical field of study mutually agreed upon by the student and supervising faculty member. The Dean of Humanities and Sciences must approve the plan of study prior to registration. Students receive grades of S or U for this course.
Prerequisites: None.

MCH Multi-Competent Health Technology

4000 Introduction to Medical Terminology 1-2-2
A computer-based introduction to a basic medical vocabulary through word analysis; use of prefixes, suffixes, word roots, and their combining forms; and definition, spelling, and pronunciation of medical and surgical terms.
Prerequisites: None.

4001 Introduction to the Health Care System 2-0-2
An overall view of the health care system. Topics include: history, organization, areas of specialization, roles and relationships, education, medical ethics, and patient rights.
Prerequisites: None.

4002 Informatics in Health Care 1-2-2
A course on information technology use in health care delivery systems including hardware, software, Internet, and database use.
Prerequisites: OT 3007.

4004 Medical Terminology 2 1-2-2
A continuation of MCH 4000. Topics include: basic word roots, prefixes and suffixes included in the integumentary, gastrointestinal, respiratory, cardiovascular, blood, lymph, immune, and musculoskeletal systems.
Prerequisites: MCH 4000.

4008 Medical Terminology 3 1-2-2
A continuation of MCH 4004. Topics include: basic root words, prefixes, and suffixes included in the genitourinary, female reproductive, endocrine, and nervous systems, and special senses.
Prerequisites: MCH 4004.

4805 Patient Care Skills 1-3-2
A course on basic health care concepts and skills for students planning a career in health care. Topics include: basic body mechanics, caregiver/client relationships, infection control, basic assessment skills, team building skills, and problem solving techniques.
Prerequisites: None.

4806 Medical Terminology 1 3-0-3
A systematic study of the basic structure of medical words. Topics include: prefixes, suffixes, word roots, combining forms, and singulars and plurals.
Prerequisites: None.

4807 Medical Terminology 2 3-0-3
A systematic study of medical terminology and abbreviations associated with body organization, body systems, oncology, radiology, nuclear medicine, pharmacology, and other medical specialties. Topics include: defining, pronouncing, and spelling medical terms using prefixes, suffixes, roots, and combining forms.
Prerequisites: MCH 4806.

4810 Nurse Aide Training 4-6-6
A course on caring for the elderly in long-term care facilities. Topics include: communication and interpersonal skills, mental health and social service needs, resident rights, safety and emergency procedures, and basic restorative services. Successful course completion qualifies students to take the Ohio Board of Health Competency Evaluation Test.
Prerequisites: Current health records.

4811 Home Health Aide Training 2-0-2
A course on understanding and working with various client populations in the home. Topics include: home management, preventing spread of infectious disease and

identifying community resources.
Prerequisites: Current NATP Certificate or state tested.

4812 Introduction to the Patient Care Assistant Role 4-0-4
Prepares individuals for employment in acute care facilities as nursing assistive personnel. Topics include: role definition/clarification, communication, basic anatomy/physiology concepts with associated observations, overview of nutrition/diet therapy, introduction to common pathologies, and commonly delegated skills.
Prerequisites: State Tested Nurse Aide (MCH 4810).

4813 Restorative Aide Training 1-2-2
An overview of the restorative aide role and responsibilities for employment in acute care or long-term care environments. Topics include: rehabilitation services to return individuals to optimal mobility and functioning following various conditions.
Prerequisites: State Tested Nurse Aide or current NATP Certification.

4814 Direct Patient Care Experience 0-3-1
A clinical course providing direct patient care experience in either acute or long term care facilities. Depending on educational preparation, students function as nurse aides or patient care assistants under the direct supervision of an RN instructor.
Prerequisites: State Tested Nurse Aide.

4816 Health and Wellness Promotion 2-0-2
A course on consumer health and wellness issues. Topics include: self empowerment, stress reduction, physical fitness, healthy eating, addiction avoidance, reduction of risk factors in disease and alternative therapies, aerobic exercise, meditation, blood pressure and blood glucose screenings.
Prerequisites: None.

4817 Integrative Therapies for Holistic Health 3-2-4
A course on current holistic health care practices. Topics include: comparison of the philosophies and practices of Eastern to Western medicine with emphasis on the practice of Chinese, Ayurvedic, and naturopathic medicine, practice of basic skills such as therapeutic massage, acupressure, and other therapies common to integrative medical practices.
Prerequisites: MCH 4816.

4818 Survey of Alternative and Complementary Medicine 3-0-3
An introduction to alternative and complementary medicine. Topics include: alternative medical practices such as mind-body interventions, bioelectromagnetic applications in medicine, community-based health care practices, manual healing methods, pharmacologic and biologic treatments, diet and nutrition in the prevention and treatment of disease.
Prerequisites: None.

4819 Problem-Solving for the Health Care Professional 2-0-2
A course on improving problem-solving skills by applying clinical reasoning to health related situations. Uses an interdisciplinary approach.
Prerequisites: Admitted to a Health Technologies Division degree or certificate program.

4820 Medical Transcription 1 3-2-4
An introduction to medical transcription. Topics include: information on word processing and dictation equipment, medical ethics, legal matters, advanced medical terminology related to diseases and operations in medical reports.
Prerequisites: MCH 4000, OT 3058.

4821 Medical Transcription 2 3-2-4
A continuation of MCH 4820. Topics include: advanced terminology and transcription of medical reports, including operative reports, consultations, and discharge summaries.
Prerequisites: MCH 4820.

4822 Medical Transcription 3 3-2-4
A continuation of MCH 4821. Topics include: more difficult medical reports, marketing and managing a transcription service and voice recognition dictation equipment.
Prerequisites: MCH 4821.

4825 Medical Transcription-Distance 9-6-12
An accelerated certificate in Medical Transcription for students who have a health care degree or certificate. Students must have access to a computer and the Internet. Successful completion of this course is equivalent to completing MCH 4820, MCH 4821, and MCH 4822.
Prerequisites: ENG 1001, OT 3058, MCH 4000, MCH 4004, BIO 4073, BIO 4074, or instructor consent.

4840 Orientation to the Health Record and Legal Issues 2-2-3
A course on the content and format of the health record. Topics include: standard health record forms, legal issues that relate to the health record, basic rules of health record maintenance, and filing and retrieving diagnostic reports.
Prerequisites: None.

4841 Unit Coordinator Procedures 1 2-2-3
Topics include: the processing of patient charts for admission, transfer, and discharge; transcription of nursing treatment orders, medication orders, respiratory and physical therapy orders; and the use of relevant computer software.
Prerequisites: MCH 4840.

4842 Unit Coordinator Procedures 2 2-4-4
A continuation of MCH 4841. Topics include: X-ray procedures, MRI scan, nuclear medicine, ultrasound, and endoscopy. Course is parallel to a field experience in an area health care facility.
Prerequisites: MCH 4841.

4846 Introduction to Therapeutic Massage 1-2-2
Introduction to the use of therapeutic massage in the health care system. Lab includes scientific application of soft tissue manipulation.
Prerequisites: MCH 4855.

4849 Unit Coordinator Practicum and Seminar 3-18-6
Clinical practice in an area health care facility performing functions related to health unit coordinating. Includes an

on-campus seminar.
Prerequisites: Successful completion of first and second term.

4870 Basic Electrocardiography & Arrhythmia Recognition 3-2-4
An introduction to the principles of electrocardiography. Topics include: the electrical conductive system of the heart, patient preparation, setting up the ECG machine, recognizing and correcting distortion problems, basic arrhythmias, and special procedures.
Prerequisites: BIO 4073, college level reading and writing skills.

4871 Advanced Arrhythmia Recognition 3-0-3
An advanced course in electrocardiography. Topics include: recognizing arrhythmias; review of basic ECG principles; interpretation of various types of atrial, function and ventricular dysrhythmias; and various measurements and calculations to aid in interpretation.
Prerequisites: MCH 4870 or instructor consent.

4880 MCH Health Care Settings 3-0-3
A course on the interdisciplinary relationship between various health care professionals. Students visit selected health care settings.
Prerequisites: MCH 4840 or instructor consent.

4881 Current Issues in Health Economics 3-0-3
A study of current trends and issues in health care systems economics. Topics include: the differences between medical care and other commodities in the study of economics.
Prerequisites: MCH 4001.

4882 Law and Ethics for Health Care 3-0-3
Topics include: legal and ethical issues that face the interdisciplinary health care team. Students evaluate case studies relevant to their academic discipline.
Prerequisites: MCH 4000 or instructor consent.

4883 General X-ray Machine Operation 3-0-3
A course that prepares students for Ohio Licensure as a General X-ray Machine Operator. Topics include: instruction on radiation physics, radiographic techniques, darkroom processing and film handling, radiation health safety and protection, and radiation biology.
Prerequisites: None.

4885 Health Care Team-Based Management 3-0-3
Prepares health care supervisors and managers for their changing role in high-performance environments. Topics include: developing skills in enhancing trust levels, coaching team-based problem-solving and decision-making, and developing partnerships.
Prerequisites: PSY 1502.

4886 Quality Issues in Health Care 3-0-3
Topics include: governmental and quasi-governmental organizations responsible for health care accreditation and regulation, health care provider departments charged with addressing regulation, and major issues and trends affecting the delivery of quality health care services.
Prerequisites: None.

4890 Introduction to Medical Insurance and Billing 3-0-3
A course that provides exposure to the many types of health care insurance carriers. Topics include: an overview of billing practices and completion of claims forms.
Prerequisites: MCH 4000, MCH 4840 or instructor consent.

4897 Massage Therapy Special Studies Var-Var-Var
Study and special projects concerning integrative massage therapy open to licensed massage therapists for Associate of Technical Studies degree in integrative massage therapy.
Prerequisites: Licensed Massage Therapist (State of Ohio).

4898 Special Studies - MCH Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4899 Special Studies - MCH Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: Instructor consent.

9377 Parallel Cooperative Education - Multi-Competency Health Technician 1-20-1
Multi-Competency Health Technician students participate in part-time paid field learning experience while completing other program requirements. This experience provides an opportunity to apply knowledge and skills acquired in classes. Students must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the MCH program, coordinator consent, 2.0 minimum GPA.

MET Mechanical Engineering Technologies

7002 Engineering Graphic Concepts 1-2-2
An introduction to basic drafting techniques such as line quality, lettering and geometric construction; prepares students for success in ET 7008 and CET 7024. Required for all Engineering Technology pre-tech students unless specifically waived by the Dean of the Engineering Technologies.
Prerequisites: None.

7005 Introduction to Blueprint Reading 2-2-3
Topics include: machine-trades, blueprint reading, shop sketching, and technical terminology.
Prerequisites: None.

7008 Engineering Drawing 1 2-3-3
An introduction to the techniques and functions of drafting. Topics include: equipment, lettering, line quality, line types, orthographic projection, sectioning, dimensioning, and machined hole types.

Prerequisites: None.
Corequisites: MAT 1171.

7027 Beginning AutoCAD 2-3-3
An introduction to Computer Aided Design/Drafting. Topics include: AutoCAD drawing, editing, and display commands; creating various drawings on the computer; defining blocks; layering; and plotting techniques.
Prerequisites: EET 7035 or equivalent.

7028 Intermediate AutoCAD 2-3-3
A continuation of MET 7027. Topics include: CAD/D drawing techniques including external referencing and advanced features of CAD/D, creating drawings on the computer, block attributes, and prototype drawings.
Prerequisites: MET 7027.

7029 Advanced AutoCAD 2-3-3
A continuation of MET 7028. Topics include: CAD/D drawing techniques including isometric drawing, 3 dimensional drawing and surfacing on the computer, customizing the various types of AutoCAD menus, and working with slides to create a slide show for presentations.
Prerequisites: MET 7028.

7110 AutoCAD 1 (Mechanical) 2-3-3
A course on efficient CAD operation. Topics include: updated drafting and dimensioning techniques per the ANSI Y14.5M-1994 standard, and two-dimensional machine and component drawings.
Prerequisites: None.
Corequisites: MET 7008.

7111 Engineering Materials 3-2-4
A course on the basics of materials used in engineering today. Topics include: steel, steel alloys, cast iron, aluminum, polymers, ceramics, and composites; and manufacturing, strengthening, and materials testing procedures. Students use the materials testing laboratory to study physical and mechanical properties of materials.
Prerequisites: MAT 1191.

7120 AutoCAD 2 (Mechanical) 2-3-3
A course on building three-dimensional CAD models. Topics include: wireframe, surfaced, and solid models.
Prerequisites: MET 7110.

7121 Engineering Drawing 2 with AutoCAD 2-3-3
A course on advanced drawing techniques using AutoCAD. Topics include: secondary auxiliary views, sectioning, dimensioning, class of fits, surface finish designations, tolerancing, threads, fasteners, welding representations, stack-up analysis, and geometric feature controls dimensioning.
Prerequisites: MET 7008, MET 7110.

7122 MET CAD 3 2-3-3
Students produce complex three-dimensional models using advanced Computer Aided Design and Drafting software packages.
Prerequisites: MET 7120, MET 7121.

7125 Visual BASIC (MET) 3-2-4
A course on using Visual BASIC to write and code MET related software. Topics include: form layout and definition, labels and text boxes, command buttons, option buttons, variable types, arrays, for-next loops, and if statements. Students need experience in Microsoft Windows prior to taking this course.
Prerequisites: MET 7110.

7130 Engineering Mechanics-Statics 3-2-4
A course on how forces act on rigid structures. Topics include: using vector algebra to determine component forces and moments and their effects on machine parts, frames, and structures in static equilibrium; vector analysis; free body diagrams; evenly distributed loads; equilibrium; trusses and frames; friction; center of gravity; and moment of inertia.
Prerequisites: MAT 1191, PHY 2291.

7132 Hydraulics & Pneumatics 3-3-4
A course on applied hydraulics and pneumatics. Topics include: fluid transport, power systems, pumps, compressors, control logic, actuators, motors, reservoirs, piping, and safety. Using CAD, students create control schematics with ANSI symbols and test these systems in the lab.
Prerequisites: MAT 1191, PHY 2291.

7140 Strength of Materials 3-3-4
A course on the analysis of stresses and strains that occur within machine and structural elements subjected to various types of loads. Topics include: axial and bending stresses; direct, horizontal, and torsional shear; deflection; and combined stresses.
Prerequisites: MET 7110, MET 7130.

7141 Kinematics & Dynamics of Machines 3-2-4
A course on analyzing mechanisms. Topics include: linear and angular displacement, velocity, acceleration, work, force, horsepower, harmonic motion, mass moment of inertia, dynamic balance, and mathematical, computer aided design, and graphical solutions of machine kinematics and dynamics.
Prerequisites: MAT 1192, PHY 2292.

7145 Statics and Strength of Materials 2-3-3
A course on statics and strength of materials. Topics include: the effects of forces and stresses on materials in various forms; configurations found in manufacturing and mechanical engineering; and using mathematics to analyze forces, stresses, moments, equilibrium, centroids and moments of inertia.
Prerequisites: MAT 1192.

7148 Applied Thermodynamics 3-2-4
A course in the engineering study of energy. Topics include: first and second laws of thermodynamics, energy equation of gases, Mollier diagrams, energy utilization, heat transfer, specific heat, carnot cycle, entropy, enthalpy, adiabatic processes, steam generation and turbines, internal combustion engines, and refrigeration.
Prerequisites: PHY 2292.

7150 Machine Design 1 3-3-4
A course on applying the principles of engineering mechanics and strength of materials to the analysis and selection of mechanical components. Topics include: combined stresses, failure theories, shaft components, shaft design, and fasteners. Students complete a design project.
Prerequisites: MET 7125, MET 7140.

7155 Machine Design 2 3-3-4
A continuation of MET 7150. Topics include: springs; spur, helical, bevel, and worm gearing; belts and chains; plain surface and rolling contact bearings; power and ball screws; clutches and brakes.
Prerequisites: MET 7150.

7158 MET Design Project 2 2-3-3
A continuation MET 7198. Topics include: the manufacturing of the completed design and prototype of the assigned project from MET 7150.
Prerequisites: MET 7198.

7198 MET Design Project 1 2-3-3
A project-based course in which students participate in a team design project. Topics include: feasibility study, design concepts, detail and assembly drawings, bill of materials, commercial and fabricated parts, vendors, costs, and manufacturing.
Prerequisites: EET 7733 and (MET 7150 or MET 7340).

7199 Special Problems Seminar - Mechanical Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair.
Prerequisites: Varies.

7220 Plastic Materials and Processes 1 2-3-3
An introduction to the material properties, typical product applications, and manufacturing techniques for polymers. This course is an overview for all three of the advanced courses in plastics.
Prerequisites: None.

7230 Plastic Materials and Processes 2 2-3-3
A continuation of MET 7220. Topics include: advanced polymer materials; organic chemistry; macro molecular principles; material selection for plastic product design and thermoset, thermoplastic and elastomeric materials.
Prerequisites: MET 7220.

7240 Plastic Materials and Processes 3 3-2-4
A continuation of MET 7230. Topics include: process selection, control of variables, troubleshooting, injection molding, extrusion, blow molding and vacuum and pressure thermoforming.
Prerequisites: MET 7230.

7250 Plastic Materials and Processes 4 3-2-4
An advanced course on injection mold design. Topics include: complete mold design projects with a comprehensive treatment of fluid dynamics, stress analysis, heat transfer, and other mold design considerations.
Prerequisites: MET 7240.

7310 Manufacturing Processes with CNC Programming 1 2-3-3
A course on the principles of fabricating components. Topics include: turning, facing, milling, drilling; measuring techniques; materials considerations; feeds and speeds; tooling requirements; and manufacturing with plastics and composites. Students generate CNC programs and produce actual parts on CNC lab equipment.
Prerequisites: None.
Corequisites: MAT 1171, MET 7110.

7320 Manufacturing Processes with CNC Programming 2 2-3-3
A continuation of MET 7310. Topics include: mechanical and other methods of change of form, material joining, mechanical surface finishing, advanced CNC, and introduction to CAD/CAM. Students produce CNC programming of increasingly complex parts on 2 axis mills and lathes.
Prerequisites: MET 7310.

7330 CAD-CAM 1 2-3-3
An introduction to CAD/CAM. Topics include: CAM simulation, hands-on machining of lab parts, and prototyping techniques. Students use CAD files and CAM software to create a CNC program for producing the part on a CNC machine.
Prerequisites: MET 7110, MET 7320.

7340 CAD-CAM 2 2-3-3
A continuation of MET 7330. Topics include: CAM simulation, hands-on machining, prototyping, and an introduction to metal casting. Students generate multi-piece parts using CAD and use CAM software to create a CNC program for producing the parts on a CNC machine.
Prerequisites: MET 7330.

7345 Manufacturing Process Planning and Estimating 2-3-3
A course on planning and estimating. Students process and estimate the cost necessary to produce a finished product per drawing specifications. Topics include: manufacturing processes, sequencing of operations, tooling, materials, quality considerations, direct and indirect rates, burden, overhead, and basic time and motion concepts.
Prerequisites: MET 7320.

7346 Manufacturing Facility Layout and Material Handling 2-3-3
A project course on the techniques and procedures for developing an efficient facility layout. Topics include: collection, analysis and development of functional plant design.
Prerequisites: MET 7345.

7351 CAD-CAM 3 3-3-4
A continuation of MET 7340. Topics include: generating

3D contour parts using CAD, using CAM software to create a CNC program for producing the parts on a CNC machine, CAM simulation, hands-on machining, and prototyping.
Prerequisites: MET 7340, MET 7120.

7355 Quality Control with SPC 2-3-3
A course on control concepts in manufacturing. Topics include: quality history and evolution, product requirements, continuous improvements, zero defects, sampling plans, total quality control, statistical process control, total quality management, and ISO 9000 concepts.
Prerequisites: MAT 1192, MET 7320.

MGT Management

1832 Human Resource Management 3-0-3
A broad overview of the traditional functions of a personnel office. Topics include: job evaluation, recruitment, interviewing, training, employee and union relations, employee services, and concepts concerning human relations and organizational behavior.
Prerequisites: None.

1833 Compensation Management 3-0-3
A course on the strategic relevance of compensation systems. Topics include: applicable regulations, management and administration of pay-for-performance, piece rates, commissions and other pay and incentive plans.
Prerequisites: MGT 1832.

1834 Employee Benefits 3-0-3
A course on the fundamental concepts of employee benefits. Topics include: social security benefits, group insurance, cafeteria plans, retirement plans, pension benefits and workers' compensation.
Prerequisites: MGT 1832.

2905 Contact Center Customer Service 2-0-2
An introduction to contemporary customer service issues in today's contact center businesses with a focus on improving individual performance and attaining strategic business imperatives. Students develop the knowledge and skills to communicate positively and professionally with customers in a contact center environment.
Prerequisites: None.

2906 Effective E-mail Communications 1-0-1
A course on the skills necessary to effectively, positively, and professionally communicate through e-mail in a customer service, direct marketing, or e-commerce relationship.
Prerequisites: None.

2907 Contact Center Coaching Skills 2-0-2
A course that provides prospective and current team leaders, supervisors, and managers with the knowledge and skills necessary to teach and reinforce service skills used in a contact center environment.
Prerequisites: None.

2908 Customer Service in Technical Support 2-0-2
A course in which students master skills for performing customer-focused technical support calls. This course is designed especially for technology-based industries. Students learn how to interact positively with both internal and external customers.
Prerequisites: MGT 2905.

2910 Employee Retention Systems 4-0-4
A course on employee retention systems. Topics include: understanding and applying eight employee retention systems and changing corporate culture related to front-line employee retention.
Prerequisites: None.

2929 Construction Business Practices 3-0-3
An overview of general business and construction practices. Topics include: business start-up, marketing, finance, insurance, taxes, management, accounting, hiring, bonding, overhead, and profit determination. Students prepare a business plan for a small construction company.
Prerequisites: None.

2965 Principles of Management 1 3-0-3
An in-depth course for management majors. Topics include: the history of management, the varied domestic and global environments for management, and the management functions of planning and organizing. Students apply these theories to case studies.
Prerequisites: None.

2966 Principles of Management 2 3-0-3
A continuation of MGT 2965. Topics include: the controlling function, techniques of motivation, leadership, and managing teams. Students apply these theories to case studies.
Prerequisites: MGT 2965.

2967 Introduction to Management 3-0-3
A course for non-management majors who assume supervision duties. Topics include: planning, organizing, influencing, and controlling for domestic and international businesses. Students apply these theories to case studies.
Prerequisites: None.

2970 Contemporary Management 3-0-3
A course on leadership, developing quality employees, innovation in the workplace, change in the workplace, and customer service management. Students learn how to apply these concepts in management situations.
Prerequisites: None.

2971 Small Business Start-Up 1 3-0-3
An introduction to the ownership and operation of a small business. Topics include: formation and start-up, basic sources of funding and financial management, location and layout. Students develop a business plan.
Prerequisites: None.

2972 Small Business Start-Up 2 3-0-3
A continuation of MGT 2971. Topics include: the elements of management and control, marketing, legal implications, and government regulations that affect a small business owner.
Prerequisites: MGT 2971.

2975 Business Management Seminar 2-3-3
An in-depth management course using case study and simulation methods. Topics include: the entire scope of management including all functional and decision-making areas.
Prerequisites: MKT 2902, ACC 2912, MGT 2966.

2977 Students in Free Enterprise 1 1-0-1
Students develop two projects completed during the term and one project continued in subsequent terms. Projects must follow SIFE mission to develop leadership, teamwork, and communication skills through learning/teaching free enterprise principles.
Prerequisites: None.

2978 Students in Free Enterprise 2 1-0-1
A continuation of MGT 2977. Students complete two projects during the term and continue project from previous term, emphasizing implementation. Projects must follow SIFE mission to develop leadership, teamwork, and communication skills through learning/teaching free enterprise principles.
Prerequisites: MGT 2977.

2979 Students in Free Enterprise 3 1-0-1
A continuation of MGT 2978. Students complete two projects during the term and continue projects from previous terms, emphasizing completing, evaluating and preparing for competition presentation. Projects must follow SIFE mission to develop leadership, teamwork, and communication skills through learning/teaching free enterprise principles.
Prerequisites: MGT 2978.

2986 Individual Performance Development 3-0-3
Students learn skills to ensure adequate performance of employees. Topics include: establishing clear expectations and utilizing motivational and coaching techniques to enhance employee performance. Students participate in structured experiences.
Prerequisites: MGT 2970.

2987 Change Management for Quality 3-0-3
Students learn how situational leadership styles foster work process and performance improvements. Topics include: change management strategies that lead to innovation and higher quality products and services. Students participate in structured experiences.
Prerequisites: MGT 2970.

2988 Total Quality for Managers 3-0-3
A course on establishing a total quality culture. Topics include: the concepts involved in focusing the resources in a manufacturing or service organization on continual improvement of both quality and productivity.
Prerequisites: None.

2989 Customer Service Systems 3-0-3
A course on the fundamentals of developing and keeping customers. Topics include: creating a customer-focused organizational framework, using customer feedback systems, and developing customer-driven reward systems.
Prerequisites: None.

2996 Project Management 2-2-3
An introduction to project management for various industries. Topics include: setting project goals, managing schedules and workloads, allocating resources, dealing with departmental issues, and delegating within a project team structure. Students use project management software.
Prerequisites: OT 1850 or equivalent.

MKT Marketing

1810 Principles of Sales 3-0-3
A course on the general principles and techniques of effective salesmanship. Topics include: requisite background information for successful sales and analysis of the selling process. Sales presentation required.
Prerequisites: None.

1844 Principles of Advertising 3-0-3
An introduction to the advertising field and to the sales message planning and production process. Topics include: research, media buying and planning, copywriting, art direction, print and broadcast production, media sales, sales promotion and product publicity, budgeting, and scheduling.
Prerequisites: None.

1845 Principles of Retail Management 3-0-3
An introduction to the retailing field. Topics include: the technical and theoretical knowledge necessary for retail mid-management employment. Students use case studies to gain practical operating experience.
Prerequisites: None.

1873 E-Commerce Business Strategy 2-2-3
An overview of electronic commerce. Topics include: differences and similarities between E-commerce and traditional commerce and goals and experiences in communicating, gathering information, shopping, and maintaining relationships
Prerequisites: None.

1874 Web Site Selling 2-2-3
A course on choosing and positioning the right product or service for a commercial Web site. Topics include: building traffic to the site and strategies for selling on the Internet.
Prerequisites: OT 1850, MKT 2901, MKT 2902.

1878 Internet Advertising 2-2-3
A course on the principles of advertising as they relate to the unique challenges of advertising on the Web.
Prerequisites: None.

1879 E-Commerce Project 2-4-4
Students design a Web business for a real product including developing a business and marketing plan. Projects must include all areas of e-business.
Prerequisites: Instructor consent.

1883 Search Engine Strategies 2-2-3
A course on strategies for improving search engine rankings of Web sites on the major search engines. Topics include: the study of how people search online and how

the major search engines find and rank pages.
Prerequisites: IT 5453, MKT 1873.

2901 Principles of Marketing 1 3-0-3
A course on the fundamentals of the marketing mix - promotion, distribution, price and product, and how they relate to business operations in satisfying domestic and international customers.
Prerequisites: None.

2902 Principles of Marketing 2 3-0-3
A continuation of MKT 2901, including competitive strategies for attracting, retaining and growing customers. Topics include: strategic planning, market research, new product development, pricing consideration, personal selling and sales management, retailing, wholesaling and direct and online marketing.
Prerequisites: MKT 2901.

2909 Principles of Telephone Sales 2-0-2
A course on the strategies and skills needed to prospect, sell, and manage accounts when telephone selling in a contact center environment.
Prerequisites: None.

2923 Marketing Concepts & Applications 3-0-3
Students apply marketing theory and simulate actual business situations through projects and case simulations. Successful completion of OT 1850 or equivalent is recommended.
Prerequisites: MKT 2902.

2990 Entrepreneurial Marketing 3-0-3
A course for potential new or small business owners. Topics include: selecting marketing strategies, managing marketing efforts, and successful marketing methods.
Prerequisites: None.

MRDD Mental Retardation & Developmental Disabilities

1220 Interviewing & Counseling for the MR/DD Professional 3-0-3
A course on case management/service coordination for interviewing and counseling persons with MR/DD and their families. Topics include: methods of interviewing/counseling, confidentiality, and documentation; identifying need for crisis intervention; conflict management skills; and implementing and reinforcing professional boundaries.
Prerequisites: Employed by a County Board of MR/DD or instructor consent.

1221 Team Process for the MRDD Professional 3-0-3
A course on the effective development of Professional Service Teams to provide services to the MR/DD population. Topics include: MR/DD team development, roles and responsibilities within MR/DD teams, and managing conflict within teams and with individuals served.
Prerequisites: Employed by a County Board of MR/DD or instructor consent.

1222 Behavior Management for the MR/DD Professional 3-0-3
A course on positive reinforcement behavior management techniques used with the MR/DD population. Topics include: defining and monitoring behaviors, identifying appropriate reinforcements, determining if crisis intervention is needed, and applying appropriate ethical and legal standards.
Prerequisites: Employed by a County Board of MR/DD or instructor consent.

1223 Introduction to MR/DD for the MR/DD Professional 3-0-3
A course on the needs of persons with MR/DD and providing quality services to meet those needs. Topics include: definition and diagnosis of MR/DD, prevention, requirements for services, therapies/treatments/services, rights and responsibilities, laws, and resources.
Prerequisites: Employed by a County Board of MR/DD or instructor consent.

1224 Habilitation Programming for the MR/DD Professional 3-0-3
A course on habilitation, vocational, and recreational alternatives for persons with MR/DD. Topics include: assessment tools, transitioning methods; alternatives to the traditional workshop; inclusion in the community; and use of technology, materials, and aids to develop or expand skills.
Prerequisites: Employed by a County Board of MR/DD or instructor consent.

1225 Principles of Work for the MR/DD Professional 3-0-3
A course on work and employment principles for individuals with MR/DD. Topics include: MR/DD system's role in employment skill development; work designs and settings; job development, placement, and retention; production and motivational techniques; documentation; community/customer relations; marketing; and employment service resources.
Prerequisites: Employed by a County Board of MR/DD or instructor consent.

MUS Music

1665 Introduction to Music 1 3-0-3
An introduction to major periods in Western musical history from the Middle Ages to the early nineteenth century. Topics include: major composers of the Western musical tradition and development of perceptive listening habits through analysis of compositional styles and techniques.
Prerequisites: None.

1666 Introduction to Music 2 3-0-3
A continuation of MUS 1665; covers major periods in Western musical history from the nineteenth century Romantic period to the twentieth century. Topics include: jazz, American musicals, early rock, and developing perceptive listening habits through analyzing compositional styles and techniques.
Prerequisites: MUS 1665 or instructor consent.

1667 Introduction to Music 3 3-0-3
A continuation of MUS 1666; introduces musical styles. Topics include: voices and the musical stage in Western culture including jazz, ragtime, blues, swing, and other styles presented in American musicals and operettas of Broadway and Hollywood. Emphasizes development of perceptive listening habits.
Prerequisites: MUS 1666 or instructor consent.

NUR Nursing

4920 Applied Nursing Theory Concepts 0-2-1
A course on the application of nursing process and teaching/learning concepts for LPNs admitted to the Alternative Track.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: NUR 4921, NUR 4945, BIO 4016.

4921 Nursing Skills (NURP) 0-2-1
Designed for the LPN admitted to the Alternative Track. The focus of this course is the student's ability to demonstrate competency in selected psychomotor skills and math calculations. Students have the opportunity to test out of portions of this course.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: BIO 4016, NUR 4920, NUR 4945.

4922 Role Transition in Nursing 1 4-4-6
A course for the LPN admitted to the Alternative Track. Topics include: wellness across the life span and review of common health problems. Students apply content in selected community and hospital settings. With successful completion of this course, LPNs apply for ASC for NUR 4943, 8 credits.
Prerequisites: BIO 4016, NUR 4920, NUR 4921, NUR 4945.
Corequisites: NUR 4955.

4923 Role Transition in Nursing 2 4-4-6
A course for the LPN admitted to the Alternative Track. Topics include: emotionally distressed clients and directed review of care for older adults. Students apply content in mental health and gerontological nursing settings. With successful completion of the course, LPNs apply for ASC for NUR 4954, 5 credits.
Prerequisites: NUR 4922, NUR 4955.
Corequisites: PSY 1508.

4924 Nursing of Children (NURP) 3-4-5
A course for the LPN admitted to the Alternative Track. Topics include: nursing care of the infant through adolescent within the family unit, effective communication, development issues, childhood illnesses and their impact on the family. Clinical experiences occur in a variety of settings.
Prerequisites: PSY 1508, NUR 4923.
Corequisites: NUR 4925.

4925 Perinatal Nursing and Women's Health Issues (NURP) 3-4-5
A course for the LPN admitted to the Alternative Track. Topics include: nursing care of the childbearing family, women's health and reproductive issues, sexually transmitted infections, and perinatal experiences. Clinical experiences occur in a variety of settings.
Prerequisites: PSY 1508, NUR 4923.
Corequisites: NUR 4924.

4926 Adult Nursing (NURP) 6-8-10
A course for the LPN admitted to the Alternative Track. Topics include: holistic nursing responses to medical/surgical health problems, continuity of care and collaboration. Clinical experiences occur in a variety of acute care settings.
Prerequisites: ENG 1010 or ENG 1003, SPE 1022 or SPE 1024.

4927 Role Transition in Nursing 3 6-12-12
For the LPN admitted to the Alternative Track. Course focuses on transition to professional nursing. Achievement of a predetermined score on a national standardized nursing achievement exam is a requirement for completion.
Prerequisites: NUR 4926.

4931 Nursing Skills Laboratory 1 0-3-1
The first of two skills lab courses. Topics include: selected psychomotor nursing skills, medical math skills, medical terminology, and basic computer skills.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: NUR 4933.

4933 Introduction to Nursing 4-3-5
A technical course on the role of nursing in health care. Topics include: critical thinking, professional behavior, nursing process, effective communication, teaching/learning principles, and cultural diversity. Includes laboratory/clinical experiences.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: NUR 4931.

4937 Nutrition and Diet Therapy in Nursing 2-2-3
Fundamental principles of normal and therapeutic nutrition for individuals throughout the lifespan. Lab activities include a variety of application processes including alternative methods for provision of nutrients. Team taught by an RD and an RN.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946.

4941 Nursing Skills Laboratory 2 0-3-1
The second of two skills lab courses. Students practice and demonstrate competency in the performance of selected intermediate level psychomotor and math skills.
Prerequisites: PSY 1508, BIO 4016, NUR 4931, NUR 4933.
Corequisites: NUR 4943, NUR 4946.

4943 Common Health Problems in Nursing 6-6-8
Planning and administration of basic nursing care for adults. Topics include: nursing response to common health problems such as diabetes, pain, the perioperative experience, immune responses, and cardiovascular and respiratory diseases.
Prerequisites: PSY 1508, BIO 4016, NUR 4931, NUR 4933.
Corequisites: NUR 4941, NUR 4946.

4945 Health & Physical Assessment 1 (NURP) 1-2-2
The first of two health assessment courses for LPN to RN students. Topics include: interviewing and documentation skills and physical assessment of the skin, thorax, lungs, heart, and peripheral vascular system.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: NUR 4920, NUR 4921.

4946 Health Assessment in Nursing 1 1-3-2
A course on health assessment. Topics include: assessment of thorax, lungs, heart, blood vessels, abdomen, and skin; interviewing; documentation; and physical assessment skills. Students apply skills in clinical settings.
Prerequisites: PSY 1508, BIO 4016, NUR 4931, NUR 4933.
Corequisites: NUR 4943, NUR 4941, BIO 4018.

4953 Mental Health Nursing 3-6-5
Nursing care of the emotionally distressed client. Topics include: theories of human behavior, major psychiatric disorders, and professional and sensitive use of self to effectively communicate and provide care. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946.
Corequisites: NUR 4954, NUR 4956.

4954 Gerontological Nursing 3-6-5
A course on nursing care of the older adult. Topics include: aging processes; special concerns for older adults; promotion, maintenance, and restoration of health; and coping with chronic illness. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946.
Corequisites: NUR 4953, NUR 4956.

4955 Health & Physical Assessment 2 (NURP) 1-2-2
The second health assessment course for LPN to RN students. Topics include: physical assessment of the eye, ear, nose and throat; head and neck; breast; musculoskeletal and neurological systems. Upon completion of this course, students are able to perform and document a comprehensive health assessment.
Prerequisites: BIO 4016, NUR 4920, NUR 4921, NUR 4945.
Corequisites: NUR 4922.

4956 Health Assessment in Nursing 2 1-3-2
The second of two health assessment courses. Topics include: assessment of head, neck, breast, neurological, and musculoskeletal systems.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946.
Corequisites: NUR 4954, NUR 4953.

4963 Perinatal Nursing and Women's Health Issues 3-6-5
Nursing care of the childbearing family. Topics include: effective communication with families, women's health and reproductive issues, sexually transmitted infections, and the perinatal experience. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946.
Corequisites: NUR 4964.

4964 Nursing Care of Children 3-6-5
A course on nursing care of the infant through adolescent within the family unit. Topics include: effective communication, developmental issues, childhood illnesses and their impact on the family. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946.
Corequisites: NUR 4963.

4973 Adult Nursing 6-12-10
A course on holistic nursing responses to medical-surgical health problems. Topics include: continuity of care and collaboration. Clinical experiences occur in a variety of acute care settings.
Prerequisites: NUR 4953, NUR 4954, NUR 4956, NUR 4963, NUR 4964 and completion of speech and nursing electives.

4981 Transitional Clinical Experience 0-18-6
Application of nursing curriculum in a variety of settings. Topics include: care planning, supervision and delegation. Achievement of a predetermined score on a national standardized nursing achievement exam is a requirement for completion.
Prerequisites: NUR 4973, ENG 1010 or ENG 1003.
Corequisites: NUR 4982.

4982 Management of Client Care 6-0-6
Provision of care for a group of clients in a variety of settings and the transition from the role of student to that of professional nurse. Topics include: role definition, delegation, management, coordination, decision-making, and the Ohio law regulating the practice of nursing.
Prerequisites: ENG 1010 or ENG 1003, NUR 4973.
Corequisites: NUR 4981.

4993 Special Topics in Nursing 1-2-2
Special topics reflecting dynamic trends in nursing and special client, diagnostic or other related issues.
Prerequisites: BIO 4018, NUR 4941, NUR 4942, NUR 4943, NUR 4946.

4997 Special Studies in Nursing 1 Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member, carried on outside the classroom. Before registration, students must have the plan of study approved by a supervising faculty member and the Nursing program chair.
Prerequisites: Program chair consent.

4998 Special Studies in Nursing Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member, carried on outside the classroom. Before registration, students must have the plan of study approved by a supervising faculty member and the Nursing program chair.
Prerequisites: Program chair consent.

4999 Special Studies in Nursing Var-Var-Var
An student-initiated academic pursuit, mutually agreed upon by the student and faculty member. Before registration, students must have the plan of study approved by a supervising faculty member and the Nursing program chair.
Prerequisites: Program chair consent.

9372 Cooperative Education in Nursing Settings 1-16-2
Work experience for application of knowledge and skills verified by successful nurse aide state testing. Classroom activities focus on work issues.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946, State Tested Nurse Aide on Ohio Registry.

OPT Ophthalmic Optics Technology

6810 Ophthalmic Optics 1 3-3-4
Topics include: the electromagnetic spectrum, ultra-violet and infrared radiation, laws of reflection, plain and curved mirrors, laws of refraction and total internal reflection, refraction through prism, refraction at a single spherical surface, refraction through lenses, and cylindrical/toric surfaces.
Prerequisites: MAT 1171.

6812 Ocular Anatomy and Physiology 3-3-4
A course on the structure and function of the eye. Topics include: corneas, tear film, sclera, uveal tract, retinas, optic nerves, lenses, vitreous bodies, eyelids, and orbits.
Prerequisites: None.

6820 Ophthalmic Optics 2 3-3-4
A continuation of OPT 6810. Topics include: thin lens image formation and magnification, multiple lens systems, thick lens equation, lens aberrations, concave and convex mirrors, optical instruments, magnifiers, microscopes and telescopes, characteristics of light, interference, diffraction, and polarization.
Prerequisites: OPT 6810.
Corequisites: MAT 1172.

6830 Ophthalmic Optics 3 3-3-4
A continuation of OPT 6820. Topics include: emmetropia and ametropia of the eye; spectacle and contact lens corrections, accommodation, and ranges of clear vision; equivalent power, principal planes, and vertex distance; and bifocal, sphero-cylindrical, and induced prism lenses.
Prerequisites: OPT 6820.

6831 Ophthalmic Dispensing 1 2-3-3
Topics include: basic ophthalmic frame parts; types of frames; selection of style and type of frame for a given prescription; alignment, adjustment, and repair of eyewear; and measuring interpupillary distance.
Prerequisites: OPT 6820.

6833 Contact Lenses 1 3-3-4
An introduction to the historical development of contact lenses. Topics include: care and handling of various types of contact lenses; instruction on insertion, removal and hygiene; and contact lens materials.
Prerequisites: None.

6841 Ophthalmic Dispensing 2 2-3-3
A continuation of OPT 6831. Topics include: verifying prescription; ordering proper lens type; record keeping; lens materials, characteristics, tints, and coatings; and fitting bifocal lenses.
Prerequisites: OPT 6831.

6843 Contact Lenses 2 3-3-4
A continuation of OPT 6833. Topics include: contact lens fitting techniques, fitting rules, wearing schedules, contact lens optics, and hard and soft contact lenses.
Prerequisites: OPT 6833.

6845 Mechanical Optics 1 3-3-4
Topics include: surfacing and finishing of spherical and cylindrical lenses; lens power analysis; and surfacing, neutralization, layout, and edging of single vision and multifocal lenses.
Prerequisites: OPT 6820.

6851 Ophthalmic Dispensing 3 2-3-3
A continuation of OPT 6841. Topics include: fitting of cataract lenses, progressive lenses, fitting procedures for special situation dispensing, contact lens dispensing and after care problems for soft and rigid contact lenses.
Prerequisites: OPT 6841.

6855 Mechanical Optics 2 3-3-4
A continuation of OPT 6845. Topics include: prismatic lenses; and surfacing, neutralization, layout, and edging of moderating advanced assignments including cataract, trifocal, prismatic, and other special lenses.
Prerequisites: OPT 6845.

6857 Ophthalmic Clinical Procedures 1 3-3-4
Topics include: case history; visual acuity; refractive errors such as myopia, hyperopia, and astigmatism; retinoscopy; keratometry; and ophthalmometry.
Prerequisites: OPT 6830.

6867 Ophthalmic Clinical Procedures 2 3-3-4
Topics include: low vision and low vision aids, autorefraction, ophthalmic surgical procedures, tonemetry, the visual field, testing binocular vision, and visual therapy techniques.
Prerequisites: OPT 6857.

6899 Ophthalmic Special Problems Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair. Students receive grades of S or U for this course.
Prerequisites: Program chair consent.

OT Information Management

1850 Introduction to Computer Applications 3-2-4
An introductory course on computer concepts and theory, emphasizing business applications. Laboratory work

includes operating PCs using Microsoft Word, PowerPoint, and Excel application software. Distance learning students must provide their own software.
Prerequisites: OT 3007 or keyboarding skill level at 20 wpm.

1852 Advanced Computer Applications 3-2-4
An advanced course on computer applications and techniques using Microsoft FrontPage, Publisher, and Outlook. Distance Learning students must provide their own software.
Prerequisites: OT 3007 or a computer concept course in high school or college, keyboarding skill level at 20 wpm.

1861 Electronic Spreadsheets (Lotus 1-2-3) 2-2-3
A course on Lotus 1-2-3 application software. This software combines the benefits of an electronic spreadsheet, a graphics chart generator, and file manager in one integrated package. PC experience and keyboarding recommended.
Prerequisites: DE 0024 or equivalent test score.

1862 Advanced Electronic Spreadsheets 2-2-3
A continuation of BUS 1861. Topics include: macros, command language, advanced data commands, advanced graph commands, transferring files, advanced functions, and Lotus add-ins.
Prerequisites: OT 1861.

1863 Electronic Spreadsheets (Excel) 2-2-3
A course on basic spreadsheet operations, commands, formula writing, functions, and graphing using Microsoft Excel.
Prerequisites: DE 0024 or equivalent test scores.

1864 Advanced Electronic Spreadsheets (Excel) 2-2-3
A continuation of OT 1863. Topics include: three- dimensional spreadsheets, advanced formula writing, advanced functions, database construction and manipulation, and introduction to macros.
Prerequisites: OT 1863.

3001 Introduction to Keyboarding/Formatting 2-3-3
A beginning course on keyboarding and formatting. Topics include: developing accurate keyboarding skills and basic formatting of business letters and memos. Enrollment in OT 3006 is recommended for students who keyboard fewer than 30 wpm at the conclusion of this course.
Prerequisites: None.

3002 Document Formatting 1 2-3-3
A continuation of OT 3001. Topics include: review of keyboard and techniques; improving speed and accuracy and progress through personal documents, basic business communications, unbound reports, and tables.
Prerequisites: OT 3001.

3003 Document Formatting 2 2-2-3
A continuation of OT 3002. Topics include: developing skills, knowledge, techniques, and problem solving applicable to production keyboarding and composition.
Prerequisites: OT 3002 and/or keyboarding skill level at 40 wpm.

3006 Keyboarding: Skill Development 2-3-3
A keyboarding course for students who have had previous instruction on the computer and know the keyboard, but who have not achieved proficiency in speed and/or accuracy to continue on to OT 3002 or OT 3003.
Prerequisites: Keyboarding knowledge.

3007 Introduction to Keyboarding 3-0-3
A course on keyboarding on computers for students who need to learn basic keyboarding skills.
Prerequisites: None.

3016 Introduction to Legal Environment 3-0-3
An introductory course on the legal environment. Topics include: areas of practice, structure of law firms, administrative functions, court systems and procedures, legal terminology.
Prerequisites: None.

3017 Legal Formatting 2-3-3
A course on developing legal formatting speed and accuracy. Topics include: formatting documents and forms found in common areas of law, legal terminology, and Bluebook citations.
Prerequisites: OT 3003, OT 3016.

3018 Legal Transcription 3-2-4
A course on developing proficiency with transcribing equipment while continuing to enhance legal formatting and terminology skills. Dictation includes letters, memos, and a variety of legal documents with attorney instructions regarding preparation and filing.
Prerequisites: OT 3017.

3019 Law Office Practice 3-2-4
A capstone course that utilizes a project-based approach to completing activities relevant to the administrative duties of the Legal Assistant.
Prerequisites: OT 3018, LAW 1830.

3021 Office Procedures 1 2-3-3
An introduction to the development of personal qualities essential to the office worker and the development of principles and procedures fundamental to basic office duties and activities.
Prerequisites: None.

3022 Proofreading and Editing 2-2-3
A continuation of OT 3035. Students proofread and edit documents online and manually that contain errors in formatting, numbers, capitalization, word division, grammar, pronoun agreement, punctuation, abbreviation, spelling, synonyms. Students also proofread for content, conciseness and clarity.
Prerequisites: OT 3035 and OT 3058 or OT 3059.

3023 Advanced Machine Transcription and Dictation 2-3-3
An integrated approach to machine transcription and dictation combined with intensive instruction in English usage and grammar. Topics include: operating dictation/transcription equipment and applying language usage and other skills to the production of various types of written

communications.
Prerequisites: OT 3022.

3024 Office Procedures 3 2-2-3
A continuation of OT 3032. Topics include: composing, editing and handling business communications; setting priorities; researching and preparing reports; making travel arrangements; and using office financial and graphics presentation software. Student must have proficiency with word processing software.
Prerequisites: OT 3022, OT 3032.

3032 Office Procedures 2 2-3-3
A continuation of OT 3021. Topics include: oral and written office communications and professional development including self discovery, goal setting, problem solving, decision making, stress management, negotiating, and assertiveness.
Prerequisites: OT 3021.

3035 Essential Business Correspondence 2-3-3
An intensive, competency-based business correspondence course. Topics include: grammar, punctuation, proofreading, spelling, vocabulary building, and office correspondence origination. Students must reach an 80% competency level to pass the course.
Prerequisites: ENG 1001.

3036 Project Management Applications 2-3-3
A hands-on course in which students use Microsoft Project software to develop skills and understanding of the project management process.
Prerequisites: Keyboarding skill level at 20 wpm.

3058 Microsoft Word for Windows 2-3-3
A course on the practical application of Microsoft Word for Windows. Students complete hands-on exercises and problems using a PC.
Prerequisites: Keyboarding skill level at 30 wpm.

3059 WordPerfect for Windows 2-3-3
A course on the beginning and intermediate capabilities of WordPerfect for Windows. Students prepare documents of varying complexity.
Prerequisites: Keyboarding skill level at 30 wpm.

3062 Database/Spreadsheet Applications 2-3-3
A course on the basic concepts of database management software using Microsoft Access and of electronic spreadsheet software using Microsoft Excel.
Prerequisites: OT 3001 or keyboarding skill.

3064 Introduction to PowerPoint 2-3-3
An introduction to the basics of business presentation graphics using Microsoft PowerPoint presentation graphics software. Keyboarding skill required.
Prerequisites: OT 3001.

3066 Integrated Information Processing 2-3-3
A course on sharing data between applications using the Microsoft Office Suite which includes word processing, database, spreadsheet, and graphics applications.
Prerequisites: OT 3062, OT 3058, OT 3064, OT 1863, OT 3068.

3068 Database Management: Access 1 2-3-3
A course on database management using Microsoft Access software. Topics include: defining, designing, creating, and maintaining a database.
Prerequisites: Keyboarding skill level at 30 wpm.

3069 Advanced Microsoft Word 2-3-3
A continuation of OT 3058. Topics include: advanced character/line formatting; advanced page formatting; advanced document formatting; using templates, macros, frames, pictures, Microsoft Draw, tables, and columns; and merging and sorting documents.
Prerequisites: OT 3058.

3070 Administrative Office Management 1 3-0-3
An upper-level office management course that emphasizes managing office environments, employees, systems, and functions.
Prerequisites: MGT 2967.

3071 Administrative Office Management 2 3-0-3
A continuation of OT 3070. Topics include: the practical application of managing office environments, employees, systems, and functions.
Prerequisites: OT 3070.

3073 Microsoft Word Certification 2-2-3
A course that reviews and teaches skills for Word Expert Level certification. Topics include: formatting documents with special features; merging documents; sorting and selecting data; working with shared documents; creating tables and indexes; recording, running, and editing macros; and creating fill-in forms.
Prerequisites: OT 3058, OT 3069.

3074 Database Management: Access 2 2-3-3
An advanced course on database management using Microsoft Access software. Students use the advanced features of Access to customize, integrate, and automate applications.
Prerequisites: OT 3068 or equivalent.

3075 Advanced PowerPoint 2-2-3
A continuation of OT 3064. Topics include: adding visuals to presentations, importing and exporting data, customizing and creating slide shows, creating output and delivering presentations, and linking and embedding objects and files.
Prerequisites: OT 3064.

3076 Information Systems for Managers 2-2-3
A course on basic principles of information systems. Topics include: use of the Internet, e-mail, and database software.
Prerequisites: OT 1850.

3080 Speedwriting 1 2-3-3
An introduction to speedwriting. Topics include: rapid reading of plate material, mastery of principles of theory including brief forms, and transcribing on the computer

from speedwriting notes.
Prerequisites: None.

3092 Desktop Publishing with Microsoft Publisher 2-2-3
A course on producing professional-looking documents using the desktop publishing tools in Microsoft Publisher software. Students must be proficient in keyboarding.
Prerequisites: Keyboarding at 30 wpm.

3095 Introduction to Computers, Windows, Internet 2-3-3
An introduction to the tools available to perform tasks effectively using Windows and the Internet. Students become acquainted with terminology and receive ample hands-on lab time. This course is specifically for new users.
Prerequisites: None.

3096 Internet/Office Communications 2-2-3
A course on accessing the Web and getting the most from the resources, services, and information available on the Internet; research concepts; e-mail management; and terminology.
Prerequisites: Keyboarding skill level at 20 wpm.

9227 Cooperative Education Information Management 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to an Information Management program, 2.0 minimum GPA.

9247 Cooperative Education Information Management-Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to an Information Management program, 2.0 minimum GPA.

OTA Occupational Therapy Assistant

4600 Introduction to Occupational Therapy 2-3-3
An introduction to the history, philosophy, and development of occupational therapy. Topics include: relationship to other allied health professions, role and function of Occupational Therapists and Occupational Therapy Assistants, and team approach. Students observe current practice in community occupational therapy settings.
Prerequisites: Admitted to the Occupational Therapy Assistant program. Completion of approved First Aid course or EMS 4731.

4610 Theory of Occupational Therapy 5-0-5
Topics include: an introduction to the developmental process of human performance; exploration of occupational tasks and roles from birth to death; instruction in age-appropriate balance of work, self-care, play/leisure; introduction to the impact of disease and function in human occupation; and development of the therapeutic use of self.
Prerequisites: OTA 4600.
Corequisites: OTA 4620.

4611 Occupational Therapy Concepts and Skills - Psychosocial 3-0-3
The role of occupational therapy in the treatment of adults in a mental health setting. Topics include: development of analysis and observational skills, use of self and group for therapeutic intervention, application of group process, documentation, communication, and interpersonal skills.
Prerequisites: OTA 4612, OTA 4622.
Corequisites: OTA 4621, OTA 4651.

4612 Occupational Therapy Concepts and Skills - Infants and Children 3-0-3
The role of occupational therapy in the treatment of children with physical and/or psychological dysfunction. Topics include: normal development, developmental disabilities, the selection of functionally significant, age-appropriate treatment interventions, documentation skills, and the team approach.
Prerequisites: OTA 4610, OTA 4620.
Corequisites: OTA 4622, OTA 4652.

4613 Occupational Therapy Concepts and Skills - Physical Disabilities 3-0-3
The role of occupational therapy in the treatment of adults with physical dysfunction including acute care and rehabilitation. Topics include: treatment techniques utilized for various diagnoses, treatment planning and implementation, and documentation skills. Emphasizes adolescence through adulthood.
Prerequisites: OTA 4611, OTA 4621.
Corequisites: OTA 4623, OTA 4633, OTA 4653.

4614 Occupational Therapy Concepts and Skills - Gerontology 3-0-3
The role of occupational therapy with the elderly population. Topics include: the aging process and function pertinent to the elderly. Students explore the role of the OT Assistant in non-traditional settings.
Prerequisites: OTA 4613, OTA 4623.
Corequisites: OTA 4624.

4620 Techniques of Occupational Therapy 0-4-2
The use of crafts and activity as therapeutic modalities in treatment toward function. Topics include: the concepts of activity analysis and therapeutic adaptations, problem-solving, and critical thinking skills.
Prerequisites: OTA 4600.
Corequisites: OTA 4610.

4621 Occupational Therapy Media - Psychosocial 0-4-2
Therapeutic intervention for adults in a mental health setting. Topics include: development of leadership skills necessary for a group setting, application of group process and use of purposeful activity and crafts as therapeutic

tools, problem solving, and critical thinking skills. Emphasizes adolescence through adulthood.
Prerequisites: OTA 4622.
Corequisites: OTA 4611, OTA 4651.

4622 Therapeutic Media - Infants and Children 0-4-2
Therapeutic intervention with infants and children. Topics include: the use of play as a therapeutic tool; evaluation of other occupational performance skills; adaptive equipment; therapeutic techniques for positioning, handling, and feeding; basic developmental screening; problem solving, and critical thinking skills.
Prerequisites: OTA 4620.
Corequisites: OTA 4612, OTA 4652.

4623 Therapeutic Media for Occupational Therapy-Physical Disabilities 0-6-3
A course on therapeutic intervention for physically disabled adults in acute care and rehabilitation settings. Topics include: techniques for activities of daily living, therapeutic adaptations, orthotics, using adaptive/assistive equipment, problem solving and critical thinking skills.
Prerequisites: OTA 4621.
Corequisites: OTA 4613, OTA 4623, OTA 4633, OTA 4653.

4624 Occupational Therapy Therapeutic Media - Gerontology 0-4-2
Therapeutic intervention for elderly individuals in a geriatric setting. Topics include: selection of role and age-appropriate occupational performance, use of recreational/leisure activity, application of group process, problem solving, and critical thinking skills. Students explore occupational therapy treatment approaches in non-traditional settings.
Prerequisites: OTA 4623, OTA 4614.

4625 Survey of Therapeutic Media for Occupational Therapy 0-6-3
The use of various crafts and activities, cost analysis, and application in various clinical settings. Students develop teaching and in-servicing skills.
Prerequisites: OTA 4624, OTA 4614.
Corequisites: OTA 4631.

4631 Occupational Therapy Fundamentals Practice 3-0-3
A course on professional concerns for the practicing Occupational Therapy Assistant. Topics include: licensure, liability, professionalism, continuing education, national registration and promoting occupational therapy. Students prepare for Level 2 Field Work Experience.
Prerequisites: OTA 4614, OTA 4624.
Corequisites: OTA 4625.

4633 Kinesiology for Occupational Therapy 2-2-3
A study of the movement of body parts, stressing the relationship to rehabilitation therapy.
Prerequisites: OTA 4611, OTA 4621.
Corequisites: OTA 4613, OTA 4623, OTA 4653.

4635 Static Hand Splinting 0-1-1
A course that prepares students for fieldwork experience as an Occupational Therapy Assistant. Topics include: static hand splint fabrication and use of several forms of splinting media.
Prerequisites: OTA 4600.

4651 Occupational Therapy Assisting Field Work 1 (Level 1) 0-9-2
Directed observation and participation in a community occupational therapy setting. Students must provide proof of current CPR and First Aid.
Prerequisites: OTA 4612, OTA 4622, OTA 4652.
Corequisites: OTA 4611, OTA 4621.

4652 Occupational Therapy Assisting Field Work 2 (Level 1) 0-9-2
Directed observation and participation in a community occupational therapy setting. Students must provide proof of current CPR and First Aid.
Prerequisites: OTA 4610, OTA 4620.
Corequisites: OTA 4612, OTA 4622.

4653 Occupational Therapy Assisting Field Work 3 (Level 1) 0-9-2
Directed observation and participation in a community occupational therapy setting. Students must provide proof of current CPR and First Aid.
Prerequisites: OTA 4612, OTA 4622, OTA 4652.
Corequisites: OTA 4613, OTA 4623.

4660 Occupational Therapy Assisting Field Work 4 (Level 2) 0-40-6
A clinical practicum in occupational therapy settings. An 8-week period of full time work experiences under the supervision of a registered occupational therapy practitioner provides the student with in-depth experience in the delivery of occupational therapy services to a variety of ages and conditions.
Prerequisites: Completion of all 46xx level courses and instructor consent.

4661 Occupational Therapy Assisting Field Work 5 (Level 2) 0-40-6
A clinical practicum in occupational therapy settings. An 8-week period of full time work experience under the supervision of a registered occupational therapist provides the student with in-depth experience in the delivery of occupational therapy service to a variety of ages and conditions.
Prerequisites: Completion of all 46xx level courses.

4670 Creative Activity for Children 2-2-3
Instruction for the childcare provider in the skills necessary to select, plan, and implement creative activities with children. The course focuses on activities of the child's work in attaining a wide range of skills.
Prerequisites: None.

4680 Introduction to Activities for Geriatrics 3-2-4
A course on providing diversional activities to geriatric clients. Topics include: concepts of wellness and illness for geriatric clients and using group and individual diversional activity in geriatric settings.
Prerequisites: None.

4681 Activity Planning for Geriatrics 3-3-4
A course on concepts of activity analysis for geriatric clients. Topics include: effective program planning, development and implementation.
Prerequisites: OTA 4680.

4682 Geriatric Activity Coordinator Practicum 1-10-2
A 90-hour supervised practicum experience that provides students with the necessary patient interaction and documentation of experience required for NCCAP-BEC certification.
Prerequisites: OTA 4681.

4698 Special Studies - OTA Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4699 Special Studies - OTA Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: Instructor consent.

PBA Pre-Business Administration

9228 Cooperative Education
Pre-Business Administration 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the PBA program, 2.0 minimum GPA.

9248 Cooperative Education
Pre-Business Administration - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the PBA program, 2.0 minimum GPA.

PE Physical Education

4050 Pilates Mat Class 0-2-1
A course based on Joseph Pilates' concepts of body conditioning. Topics include: the effects of posture, flexibility, strength, and breathing techniques on increased body awareness and movement sense.
Prerequisites: None.

4051 Movement in Dance 0-2-1
A course on modern dance combining warm-up, stretch, and jazz combinations to attain flexibility and knowledge of jazz dance. The dance technique includes deep core strengthening.
Prerequisites: None.

4052 Deepwater Aerobics 0-2-1
A course in which students attain a level of fitness through a variety of resistive and aerobic activities performed primarily in deep water with assistive flotation devices.
Prerequisites: Ability to swim in deep water.

4055 Basic Swimming 0-2-1
A course for students having little or no previous swimming experience. Basic skills to meet requirements for the American Red Cross Learn-to-Swim courses I, II, III.
Prerequisites: Health questionnaire, informed consent.

4056 Intermediate Swimming 0-2-1
A course on developing and refining basic swimming strokes. Topics include: strokes, turns, diving and water safety skills. Meets the requirements for the American Red Cross Learn-to-Swim levels IV and V.
Prerequisites: Ability to swim 25 yards on stomach and back and swim in deep water; health questionnaire; informed consent.

4057 Advanced Swimming 0-2-1
Topics include: all styles of swimming, endurance, board diving, speed skills, and safety skills. Meets the requirements for the American Red Cross Learn-to-Swim levels VI and VII.
Prerequisites: Deep water swimming ability and 500 yard continuous swim; health questionnaire; informed consent.

4062 Water Aerobics 0-2-1
A course in which students attain a level of fitness through a variety of resistive and aerobic activities performed in shallow water. No swimming ability is required.
Prerequisites: Health questionnaire, informed consent.

4063 Aerobics 0-2-1
A course involving vigorous dance routines and basic exercise forms for cardiovascular conditioning.
Prerequisites: Health questionnaire, informed consent.

4064 Soccer 0-2-1
A course on basic soccer skills. Topics include: techniques and concepts of soccer, rules, terminology and individual improvement. For men and women.
Prerequisites: Health questionnaire, informed consent.

4065 Golf 0-2-1
A course on basic golf skills. Topics include: techniques and concepts of golf, rules, terminology and individual improvement. For men and women.
Prerequisites: Health questionnaire, informed consent.

4066 Resistance and Cardiorespiratory Training 0-2-1
A course on techniques for building and retaining muscle mass. Topics include: techniques for cardiorespiratory training resulting in a workout for body sculpting, fitness and good health. Students learn and practice basic exercise principles.
Prerequisites: Health questionnaire, informed consent.

4067 Basketball 0-2-1
A course on fundamental skills and techniques of basketball. Topics include: dribbling, shooting, passing, team strategy, rules, terminology, and individual improvement. For men and women.
Prerequisites: Health questionnaire, informed consent.

4068 Volleyball 0-2-1
A course on basic volleyball skills, techniques, concepts, and an appreciation of the sport as a lifetime activity. For men and women.
Prerequisites: Health questionnaire, informed consent.

4069 Hiking the Local Trails 0-2-1
A course on hiking basics and safety. Topics include: trip planning, conditioning, minimizing environmental impact, safety precautions and equipment needs. Activities include local area hikes, personal goal setting and a related project.
Prerequisites: Health questionnaire, informed consent.

4070 Advanced Hiking Skills 1-4-3
A continuation of PE 4069. Activities include: longer day hiking and backpacking situations, local area hikes, personal goal setting, a related project, and orienting using map and compass.
Prerequisites: PE 4069, health questionnaire, informed consent.

4076 Advanced Golf 0-2-1
Student drill and practice on all facets of the golf game. Topics include: refining the golf swing and increasing power, distance, and accuracy.
Prerequisites: Health questionnaire, informed consent.

4077 Yoga 0-2-1
A course on yoga that combines deep breathing and stretching exercises to gain muscle tone and flexibility. Topics include: de-stressing the mind while energizing the body, and improving circulation, balance, concentration and clarity of mind.
Prerequisites: None.

4078 Scuba Diving 1-3-2
A course on knowledge and skills needed for eligibility for YMCA certification in scuba diving. Topics include: physics and physiology of underwater environment, and classroom and pool sessions.
Prerequisites: Demonstrated ability to swim 200 yards, swim underwater for 25 feet on one breath, and ability to remain afloat for 10 minutes.

PHI Philosophy

1620 Critical Thinking 3-0-3
An introduction to principles of philosophy. Topics include: developing thinking skills used to solve abstract and practical problems, and reviewing standard methods and terminology used to ask philosophical questions (i.e., logic).
Prerequisites: ENG 1001.

1621 Introduction to Philosophy 3-0-3
An introduction to philosophical investigation, covering problems and methods of knowledge, reasoning and morality. Includes survey and analysis of notable Western and Eastern philosophers and their concepts.
Prerequisites: None.

1625 Ethics 3-0-3
An introduction to philosophical principles of ethics and moral reasoning. Through reading and research, students develop understanding of how ethics is applied in practical situations. This course emphasizes making practical decisions about issues that have ethical or moral implications, using examples that are related to students' major field of study.
Prerequisites: ENG 1001.

1628 Special Topics in Philosophy Var-Var-Var
Topics include: study and discussion of selected topics in philosophy. Content and emphasis may vary from term to term.
Prerequisites: ENG 1001.

1630 Comparative World Religions: Asia 3-0-3
An introduction to the comparative study of major religions of Asia. Topics include: the historical development, cultural function, and religious traditions of Hinduism, Buddhism, Taoism, Confucianism, Jainism, Shinto and Sikhism.
Prerequisites: ENG 1001.

1631 Comparative World Religions: Middle East 3-0-3
An introduction to the comparative study of the major religions of the Middle East. Topics include: the historical development, cultural function, and religious traditions of Indigenous Religions, Judaism, Christianity, Islam and New Religious Movements.
Prerequisites: ENG 1001.

PHY Physics

2220 Automotive Physics 2-3-3
A course on mechanics, fluids mechanics and heats as they apply to automobiles. Topics include: the kinematics and dynamics of moving objects including rotational motion and machines, temperature scales, expansion, energy, specific heat, heats of combustion, the gas laws, engines and refrigerators.
Prerequisites: MAT 1161.

2221 Technical Physics 1 2-3-3
A course on electrical fundamentals primarily for students in the Aviation and Automotive Service Management programs. Topics include: basic electricity, circuit building analysis, VOM instruments, and the fundamentals of analog and digital electronics.
Prerequisites: MAT 1161.

2222 Technical Physics 2 2-3-3
An introductory course for students in the Aviation program. Topics include: the kinematics and dynamics of moving objects including rotational motion and machines, pressure, density, the hydraulic lift, and Bernoulli's Principle.
Prerequisites: None.

2223 Technical Physics 3 **2-3-3**
A continuation of PHY 2222. Topics include: the structure of matter, heat, the laws of thermodynamics, energy conversion, heat engines, ideal gases, properties of waves, sound, electromagnetic waves, and geometrical optics.
Prerequisites: PHY 2222, MAT 1191 or equivalent knowledge.

2224 Fire Service Physics **2-3-3**
A course on physics for students in the Fire Service program. Topics include: forces and torque, one and two dimensional kinematics and dynamics, work, energy, power, machines, fluid mechanics, temperature and thermal energy, heat transfer, gas laws, and laws of thermodynamics.
Prerequisites: MAT 1161.

2244 Health Physics 1 **3-2-4**
A physics course for students in the Health Technologies Division. Topics include: work, energy, and machines; pressure, forces, volume, temperature, and density; ideal gases; fundamentals of basic electricity including current, resistance, voltage, power, and safety.
Prerequisites: MAT 1105.

2245 Health Physics 2 **3-2-4**
A second course on physics for specific Health Technologies programs. Topics include: describing motion and its causes; work, energy, and machines; thermometers; heat and its transfer; evaporation; the physics of hearing; and the physics of vision and light.
Prerequisites: College-level math skills.

2270 Introduction to Physics **2-3-3**
An introductory course for students with limited exposure to physics. Topics include: fundamentals of physics, laboratory procedures, the controlled experiment, methods of measurement, data collection and analysis techniques, and interpreting experimental results.
Prerequisites: None.

2291 Physics 1
(Algebra and Trigonometry Based) **3-2-4**
A course on algebra and trigonometry-based college physics. Topics include: measurement, vector quantities, motion on the level and on an incline, trajectory motion, acceleration and gravity, Newton's Laws of motion, friction forces, field forces, work, energy, and power and circular motion.
Prerequisites: MAT 1191.

2292 Physics 2
(Algebra and Trigonometry Based) **3-2-4**
A continuation of PHY 2291. Topics include: vector quantities; force addition by scaling and component methods; concurrent equilibrium; non-concurrent equilibrium; impulse, momentum and collisions; rotational motion; mechanical energy and heat energy; specific heat capacity; latent heat; heat transfer; and gas laws. Students need a competency of at least MAT 1191.
Prerequisites: PHY 2291 or PHY 2295.

2293 Physics 3
(Algebra and Trigonometry Based) **3-2-4**
An advanced course on algebra and trigonometry-based college physics. Topics include: electromagnetic radiation, nature of light, refraction, geometrical optics, physical optics, spectra, color, photometry, and the basic forces in physics. Students need a competency of at least MAT 1191.
Prerequisites: None.

2294 Modern Physics **4-2-5**
A calculus-based course on modern physics that follows either PHY 2293 or PHY 2297. Topics include: special theory of relativity and its modifications of classical physics, photoelectric and Compton effects, quantum mechanics, cosmology, and basic principles of atomic and nuclear physics.
Prerequisites: PHY 2293 or PHY 2297, MAT 1193 or MAT 1154.

2295 Physics 1 (Calculus-Based) **4-2-5**
A course on calculus-based college physics. Topics include: measurement, vector quantities, one and two-dimensional kinematics and dynamics using Newton's Laws, work, energy, power, impulse, momentum, and the conservation laws.
Prerequisites: None.
Corequisites: MAT 1154 or MAT 1193.

2296 Physics 2 (Calculus-Based) **4-2-5**
A continuation of PHY 2295. Topics include: rotational kinematics and dynamics, oscillatory motion, gravity, fluid mechanics, waves, temperature and thermal energy, heat transfer, the gas laws, and the laws of thermodynamics.
Prerequisites: PHY 2295.

2297 Physics 3 (Calculus Based) **4-2-5**
A continuation of PHY 2296. Topics include: mechanical and electromagnetic waves, electromagnetic radiation and the nature of light, geometrical and physical optics, electric and magnetic fields and their interactions.
Prerequisites: PHY 2296.

2298 Workshops in Physics **Var-Var-Var**
Study of selected topics in physics designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

PM Property Management

2931 Introduction to Property Management **3-0-3**
A course on the property management profession and property types. Topics include: economics, planning, owner relations, marketing, lease administration and negotiations, tenant relations, maintenance and construction management, office procedures, life safety and environment management. Practical guidelines for managing residential real estate at the on-site level will be presented including personnel and resident policies, accounting, budgeting, legal aspects and leasing.
Prerequisites: None.

2933 Executive Level Property Management 3-0-3
A course on techniques for successful management of property at the executive level. Topics include: objectives of ownership; use of data and statistics; analysis of regions, neighborhoods and markets; cash flow projections and financial analysis; and developing and managing apartments, offices, shopping centers, condominiums and cooperatives. Using the case study approach, students create a management plan for a specific property in the area.
Prerequisites: None.

POL Political Science

1531 Introduction to American Government 1 3-0-3
A survey of the American political system at the national level. Topics include: the basis of democratic theory and principles, examination of the Constitution, issues of civil liberties, and citizen rights.
Prerequisites: None.

1532 Introduction to American Government 2 3-0-3
A survey of the American political system at the national level. Topics include: structure and function of the legislative, executive, and judicial branches; citizen participation; and interest groups.
Prerequisites: None.

1533 Introduction to Comparative Governments and Political Systems 3-0-3
A survey of political systems and structures. Topics include: the relationship between political ideologies and governments; and comparing international examples of alternative structures of executive leadership, legislatures, bureaucracy, and judicial systems.
Prerequisites: POL 1531 or POL 1532.

PSC Physical Science

2264 Astronomy 1 - The Solar System 3-2-4
A course on the history of astronomy and the instruments used by astronomers. Topics include: how to make observations, planetary evolution, the solar system, and the nature of light. The course includes lectures, demonstrations and lab experiments. Students need an understanding of algebra.
Prerequisites: None.

2265 Astronomy 2 - The Universe 3-2-4
A course on the universe beyond our solar system and the instruments used to observe it. Topics include: stellar evolution, the Sun, the Milky Way, galaxies, and other extragalactic objects. The course includes lectures, demonstrations, and lab experiments. Students need an understanding of algebra.
Prerequisites: None.

2267 Energy 3-2-4
A course on the different types of energy available throughout history, concentrating on their physics and chemistry. Topics include: the efficiency, environmental impact, and cost associated with using different types of energy. Students need an understanding of algebra.
Prerequisites: None.

2269 Hydrology and Meteorology 3-2-4
A course on the hydrology and meteorology of the Earth. Topics include: the evolution of the Earth's oceans and streams, the evolution and physics of the atmosphere, and a study of environmental and climatic changes. Includes lectures, demonstrations, and lab experiments. Students need an understanding of algebra.
Prerequisites: None.

2277 Geology 3-2-4
A course on the evolution of the Earth from a historical and physical perspective. Topics include: the internal and surface mechanisms shaping the Earth's interior and surface; and a study of rocks, minerals, and fossils. Students need an understanding of algebra.
Prerequisites: None.

2299 Special Studies-Science Var-Var-Var
A personal academic pursuit related to the student's technical field of study mutually agreed upon by the student and supervising faculty member. The Dean of Humanities and Sciences must approve the plan of study prior to registration.
Prerequisites: None.

6699 Technical Laboratory Problems Var-Var-Var
Special problems, projects, seminars, and individual study assignments pertinent to technical laboratory areas. Arranged with approval of coordinator and Dean of Humanities and Sciences.
Prerequisites: None.

PSY Psychology

1502 Human Relations-Applied Psychology 3-0-3
A course on applying psychological principles to every day life. These applications help students understand themselves better, change their behaviors, and enhance their relationships.
Prerequisites: None.

1503 Psychology of Deafness 3-0-3
A course on the psychological issues of hearing impaired persons. Topics include: personality issues, social adjustment issues, and family dynamics.
Prerequisites: None.

1505 Introduction to Psychology 1 3-0-3
A study of psychology as the scientific study of behavior and mental processes. Topics include: research methods, the biology of behavior, sensation/perception, consciousness, learning, memory, intelligence, motivation, and emotion.
Prerequisites: None.

1506 Introduction to Psychology 2 3-0-3
A continuation of PSY 1505. Topics include: personality, psychological disorders, therapies, development, and social psychology.
Prerequisites: PSY 1505 or equivalent.

1507 Abnormal Psychology 3-0-3
A survey of behavioral, emotional and mental disorders. Topics include: identification, diagnosis, classification, and

treatment utilizing the concepts of the DSM-IV-R; past and present views of abnormal behavior; role of medical/psychiatric community; research; and prevention.
Prerequisites: PSY 1506.

1508 Psychology: Child Development 3-0-3
A course on the child's life beginning with genetic and environmental influences. Topics include: the physical, intellectual, language, social, moral, and abnormal growth of the child.
Prerequisites: PSY 1506 or equivalent.

1509 Psychology: Adult Development 3-0-3
A course on the principles and theories governing human growth and development from adolescence through aging. Topics include: a comparison of the major contemporary theories, the identity struggle of adolescence, career selection and development, marriage, parenting, mid-life crises, retirement, and death and dying.
Prerequisites: PSY 1506 or equivalent.

1510 Psychology: Adolescent Development 3-0-3
A course on the developmental issues of adolescence. Topics include: self concept, sex roles and identity, hazards such as alcohol and drug abuse, relating to parents and peers, achieving independence, value formation, and choosing and preparing for an occupation.
Prerequisites: PSY 1506 or equivalent.

1511 Social Psychology 3-0-3
A study of the individual within the social environment. Topics include: understanding the social behavior of individuals in interactions with others, social interaction, social influence, perception, attraction, aggression, altruism, and influence.
Prerequisites: PSY 1506.

QCC Quality Control Certificate

6270 Introduction to Statistical Process Control 3-2-4
A comprehensive introduction to statistical quality control/process control. Topics include: definitions and philosophies of Deming, ASQ, and others; a review of basic statistics; and SPC techniques/charts including Ishikawa, Pareto, histograms, run charts, and control charts.
Prerequisites: MAT 1179.

6272 Introduction to Design of Experiments 3-2-4
A statistically based course emphasizing Taguchi methods. Topics include: one- and two-sample procedures, analysis of variance, interactions, receptions, randomization, orthogonal arrays, linear graphs, signal-to-noise ratios and computer/graphical techniques.
Prerequisites: MAT 1179.

6273 Advanced Design of Experiments 3-2-4
A continuation of QC 6272. Topics include: correlation, simple linear regression and multiple regression emphasizing selecting and fitting models to data using diagnostic tools. Students develop response surface methods, contour plotting, and process optimization using graphical and analytical (computer) procedures.
Prerequisites: QCC 6272.

6274 Introduction to Reliability 3-2-4
A statistically based approach to reliability emphasizing practical applications. Topics include: reliability definitions, exponential and Weibull models, plotting techniques, confidence intervals, stress-strength, safety factors, FMEA, repairable vs. non-repairable parts and systems, and human factors. Course content is oriented to ASQ Reliability Engineer certification standards.
Prerequisites: MAT 1179.

6275 Introduction to ISO Quality Systems 3-0-3
A course on the background and development of the ISO 9000 Series Standards. Topics include: requirements and guidelines, establishing a quality management system, documenting and auditing a quality system, comparing ISO 9000 to other continuous improvement systems, costs of certifcation, and the future of ISO 9000 in the global marketplace.
Prerequisites: None.

6276 Implementing ISO Quality Systems 3-0-3
A course on implementation of a quality system. Topics include: preparing for certification, forming a steering committee, setting a schedule, employee awareness training, the quality system manual, work instructions, and training internal auditors.
Prerequisites: QCC 6275.

6277 Statistics for Quality 1 3-2-4
A course on Pareto and Ishikawa charts, histograms, boxplots, scatter plots (correlation and regression), normal distribution, SPC control charts, quality costing, and acceptance sampling. Students develop a working knowledge of these skills although a mastery of statistical methods is not required.
Prerequisites: MAT 1124.

6278 Statistics for Quality 2 2-2-3
A continuation of QC 6277. Topics include: hypothesis testing, confidence and prediction intervals, ANOVA, experimental design, Taguchi methods, response surfaces, reliability, and FMEA. Students develop a working knowledge of these skills although a mastery of statistical methods is not required.
Prerequisites: QCC 6277.

6279 Tools & Techniques for Improving Service Quality 3-0-3
A course on assessing service quality gaps. Topics include: determining service quality requirements; assessing service perceptions; measurement tools in service; identifying the cause of service quality gaps; determining the cause of service quality gaps; tools for designing, analyzing, and synthesizing data; and reporting service quality measurements.
Prerequisites: None.

6298 Workshops in Quality Control Var-Var-Var
Study of selected topics in Quality Control designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

6299 QC/QA Project 0-3-1
Individual study and special projects pertaining to the student's area of concentration. This course is open to students wishing advanced standing or independent study and requires advisor approval.
Prerequisites: None.

RE Real Estate

2951 Real Estate Principles & Practices 4-0-4
An introduction to real estate economics. Topics include: principles of contracts, civil rights, ethics, financing, brokerage, appraisal, and Ohio practices. This course is required by the State of Ohio prior to taking the sales license exam.
Prerequisites: None.

2953 Real Estate Law 4-0-4
A course on law of agency as applied to real estate. Topics include: law of fixtures; estates including leases, conveyancing of real estate, the sales contract, the mortgage, deeds, recording, real estate brokers and managers; license laws of Ohio; civil rights; housing discrimination; desegregation; zoning; cooperatives; and condominiums. Required by the State of Ohio prior to taking the sales license exam.
Prerequisites: None.

2954 Real Estate Finance and Appraisal 4-0-4
A course on methodology of financing and appraising residential property. Topics include: types of Ohio lenders; types of conventional and government financing (FHA/VA); the loan process including qualifying the buyer and property, loan application, documentation, underwriting, closing, servicing and possible foreclosure; and applicable state and federal regulations. Appraisal topics include: theory of appraisal techniques; and basic approaches of appraising: market comparison, cost of replacement, and income capitalization. Required by the State of Ohio prior to taking the sales license exam.
Prerequisites: None.

2956 Real Estate Appraisal 2 - Income Producing Properties 3-0-3
Topics include: comprehensive analysis of theory and practical application of preparing an appraisal on investment property, appraisal techniques unique in the area of income producing properties. Students complete a term case study project that provides practical experience in using the income approach.
Prerequisites: RE 2955.

2959 Real Estate Appraisal 3 3-0-3
A course on mathematical problems in analyzing data to arrive at value estimates for income-producing properties. The course outlines the uniform standards of professional practices of the Appraisal Standards Board of the Appraisal Foundation. This course is required prior to taking the State of Ohio Residential and General Appraisal Certification exam.
Prerequisites: RE 2955.

9229 Cooperative Education Real Estate/Property Mgt. 1-40-2
Students seeking an Associate degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the RE program, 2.0 minimum GPA.

9249 Cooperative Education Real Estate/ Property Mgt. - Parallel 1-20-1
Students seeking an Associate degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the RE program, 2.0 minimum GPA.

RT Respiratory Care

4701 Respiratory Care Science 1 3-2-4
Topics include: physics; concepts of pressure, flow, and gas laws as they relate to the field of respiratory care; patient assessment; an introduction to common pulmonary diseases; and procedures, equipment, and assessment relating to oxygen therapy and humidity therapy.
Prerequisites: PHY 2244, BIO 4014, MAT 11XX, MCH 4805, 2.5 minimum GPA.
Corequisites: RT 4720.

4702 Respiratory Care Science 2 3-3-4
A continuation of RT 4701. Topics include: respiratory care procedures; assessment; use of equipment involved in aerosol therapy, hyperventilation therapy, chest physiotherapy, non-invasive monitoring and other procedures related to routine care; and pharmacology applicable to the respiratory care patient.
Prerequisites: RT 4701, RT 4720, BIO 4015.
Corequisites: RT 4711.

4703 Respiratory Care Science 3 3-2-4
A continuation of RT 4702. Topics include: X-rays, infection control, positive pressure, non-invasive devices, airway management, manual resuscitators, oxygen analyzers, and hyperbaric oxygenation.
Prerequisites: RT 4702, RT 4711, BIO 4016, BIO 4009.
Corequisites: RT 4712, RT 4718.

4704 Respiratory Care Science 4 4-3-5
A continuation of RT 4703. Topics include: respiratory care of the critically ill patient including the assessment, equipment, monitoring, and care of the mechanically ventilated patient.
Prerequisites: RT 4703, RT 4712, RT 4718.
Corequisites: RT 4713, RT 4719.

4705 Respiratory Care Science 5 3-2-4
A continuation of RT 4704. Topics include: equipment maintenance, quality control, interpretation and testing protocols for performing pulmonary function testing at the bedside and in the laboratory, and pulmonary care of the

newborn and pediatric patient.
Prerequisites: RT 4704, RT 4713, RT 4719.

4706 Respiratory Care Science 6 5-0-5
A continuation of RT 4705. Topics include: hemodynamic monitoring and cardiopulmonary pharmacology of the critically ill patient, care of the trauma patient, and a review of principles of cardiopulmonary physiology.
Prerequisites: RT 4714, RT 4705.

4707 Respiratory Care Science 7 3-0-3
A continuation of RT 4706. In-depth study of specialized areas of respiratory care including: pulmonary rehabilitation, pulmonary function testing, and sleep studies. These areas are subject to change each year to correspond to the changing job description of the Respiratory Therapist.
Prerequisites: RT 4706, RT 4714.
Corequisites: RT 4715, RT 4020.

4711 Respiratory Care Clinical Practice 1 0-9-1
An introduction to respiratory care in the hospital environment. Topics include: practical application of oxygen delivery systems, aerosol therapy, incentive spirometry, patient positioning and patient assessment.
Prerequisites: RT 4701, RT 4720.
Corequisites: RT 4702.

4712 Respiratory Care Clinical Practice 2 0-9-1
Topics include: practical application of IPPB, humidity, aerosol therapy, chest physiotherapy, and incentive spirometry.
Prerequisites: RT 4702, RT 4711, BIO 4016, BIO 4009.
Corequisites: RT 4703, RT 4718.

4713 Respiratory Care Clinical Practice 3 0-17-3
A continuation of RT 4712. Topics include: airway management, sterilizing equipment, introduction to ventilator care and the operating room.
Prerequisites: RT 4703, RT 4712, RT 4718.
Corequisites: RT 4704, RT 4719.

4714 Respiratory Care Clinical Practice 4 0-22-4
A continuation of RT 4713. Topics include: all phases of respiratory care emphasizing care of patients requiring mechanical ventilation. Includes special rotations in pulmonary functions, equipment and pediatrics.
Prerequisites: RT 4713, RT 4719, RT 4704.

4715 Respiratory Care Clinical Practice 5 0-18-3
A continuation of RT 4714. Topics include: applying advanced respiratory care techniques emphasizing care of patients in the critical care setting. Includes specialized areas of practice and use of computerized clinical simulations.
Prerequisites: RT 4706, RT 4714.
Corequisites: RT 4707, RT 4020.

4716 Respiratory Care Clinical Practice 6 0-20-3
A continuation of RT 4715.
Prerequisites: RT 4707.

4718 Pulmonary Diseases 1 3-0-3
An in-depth study of pulmonary disease. Topics include: pathophysiology, diagnosis and treatment. The course emphasizes the role of respiratory therapy in managing patients with pulmonary disease.
Prerequisites: RT 4702, RT 4711, BIO 4016.
Corequisites: RT 4703, RT 4712.

4719 Pulmonary Diseases 2 3-0-3
A continuation of RT 4718. Topics include: diseases of the heart, trauma, and neurological conditions affecting the pulmonary system.
Prerequisites: RT 4718, RT 4703, RT 4712.
Corequisites: RT 4704, RT 4713.

4720 Cardiopulmonary Anatomy & Physiology 4-2-5
A course on detailed anatomy and physiology of the respiratory and circulatory systems. Emphasizes topics relevant to respiratory therapy: ventilation, diffusion, oxygen and carbon dioxide transport, red cell physiology, and acid-base balance.
Prerequisites: Admitted to the Respiratory Care program, BIO 4014.
Corequisites: RT 4701.

4723 Respiratory Care Seminar 2-2-3
A capstone course for Respiratory Care students. Topics include: a discussion of special issues pertaining to the field of respiratory care and preparation for the national credentialing exams.
Prerequisites: RT 4707.
Corequisites: RT 4716.

4794 Workshops in Respiratory Therapy Var-Var-Var
Selected issues and topics in the respiratory therapy area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

4795 Workshop in Respiratory Therapy 2 Var-Var-Var
Selected issues and topics in the respiratory therapy area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

4798 Special Studies - Respiratory Care Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4799 Special Studies - Respiratory Care Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: None.

9376 Parallel Cooperative Education - Respiratory Care 1-20-1
Respiratory Care students participate in a part-time paid

field learning experience while completing other program requirements. This experience provides an opportunity to apply knowledge and skills acquired in classes. Students must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the RT program, coordinator consent, 2.0 minimum GPA.

9386 Internship - Respiratory Care 1-20-1
Students participate in an unpaid field learning experience l6 to 20 hours per week. Students must adhere to the Health Technologies Division Student Handbook and program requirements.
Prerequisites: Admitted to the RT program, coordinator consent, 2.0 minimum GPA.

SCM Supply Chain Management

1817 Purchasing 1 3-0-3
A course on the purchasing process. Topics include: supply chain organization, purchasing policy and procedures, insourcing/outsourcing, supplier evaluation and selection, and supplier quality management.
Prerequisites: None.

1818 Purchasing 2 3-0-3
A continuation of SCM 1817. Topics include: strategic cost management, negotiations, managing contracts, purchasing law and ethics, inventory systems, transportation services, and electronic commerce.
Prerequisites: SCM 1817.

1877 Supply Chain Management 3-0-3
A course on maximizing return on investment by managing raw materials and finished inventory. Topics include: the interrelationship of obtaining materials, working on and storing product, order fulfillment, and customer delivery in both traditional and e-commerce environments.
Prerequisites: None.

1880 Transportation Logistics 3-0-3
A course on the role of transportation logistics in business enterprises. Topics include: the efficient flow of raw materials, in-process inventory, finished goods from point of origin to point of consumption, and transportation modes focusing on the relationships between suppliers, producers, and consumers.
Prerequisites: SCM 1818, SCM 2939.

2937 Fundamentals of Resource Planning 4-0-4
An introductory course on the principles of effective resource planning. Topics include: the concepts of planning of resources at each level, from strategic to tactical. Students work together to solve problems, develop plans, build teams, and present solutions.
Prerequisites: SCM 1877.

2938 Fundamentals of Inventory Control 4-0-4
A course on identifying and applying the basic principles of inventory management. Topics include: essential vocabulary and basic methods of planning and controlling inventory in manufacturing, institutional, distribution, and retail environments.
Prerequisites: None.

2939 Fundamentals of Manufacturing Control 4-0-4
A course on executing production plans and master production schedules, reactions to capacity constraints, and maintaining individual order control. Topics include: dealing with priority and capacity management by using material requirements planning, capacity management, capacity requirements planning, production activity control, and Just-in-Time.
Prerequisites: SCM 2938.

2940 Operations Management 4-0-4
A course on designing and operating systems to produce goods and services. Topics include: relationships within the company environment, particularly with marketing and product design; facilities planning; total quality management; cost analysis; project planning; and operations resource management.
Prerequisites: None.

SOC Sociology

1270 Introduction to Social Work 3-0-3
An introduction to the social welfare institution and the field of social work. Topics include: a core of concepts, skills, and activities to prepare for the profession. Students obtain a beginning level of knowledge and value orientation to pursue a career in social work.
Prerequisites: SOC 1521.

1271 Social Welfare and Policies 3-0-3
An introduction to the historical development and organization of social welfare policy including analyzing and evaluating policy effectiveness and impact on populations, particularly minorities.
Prerequisites: SOC 1270.

1272 Social Problems 3-0-3
An overview and systematic study of major social problems in modern society using various sociological methods and theories. Topics include: ageism, poverty, urban life, racism, violence, and crime.
Prerequisites: SOC 1521.

1273 Drugs in Society 3-0-3
An introduction to issues of use and abuse of drugs and alcohol in today's society. Topics include: prevention, early intervention, and treatment programs.
Prerequisites: None.

1520 Orientation to Deafness 3-0-3
A course on the culture of the American Deaf community. Topics include: the education and legal status of the community and the philosophical and political forces affecting the hearing impaired.
Prerequisites: None.

1521 Introduction to Sociology 1 3-0-3
A course on sociology as a science occupied with classifying and defining group behavior including the basic institutions necessary to the processes of socialization and acculturation.
Prerequisites: None.

1523 Introduction to Sociology 2 **3-0-3**
A course on the five major social institutions in society: the family, religion, education, the economy, and government.
Prerequisites: SOC 1521.

1524 Stress Management **3-0-3**
A course on theory and coping techniques for use in dealing with physical, social, and psychological stressors. Topics include: nutrition, time management, and assertiveness. Students practice relaxation techniques in class.
Prerequisites: None.

1525 Changing Roles for Men and Women **3-0-3**
An interdisciplinary course on the processes through which sex roles develop. Topics include: the ways in which sex roles affect individuals and society and analysis of changing sex role patterns in the U.S. and elsewhere.
Prerequisites: 3 hours of psychology or sociology.

1526 Sociology: Marriage and The Family **3-0-3**
A course on the social institutions of marriage and the family. Topics include: the historical perspective of marriage, male and female roles, society's impact on marital roles, and the impact of the family on the individual.
Prerequisites: SOC 1521.

1528 The African-American Family **3-0-3**
A course on issues confronting contemporary African-American families. Topics include: the realities, myths, structures, and dynamics that surround and affect today's African-American family; historical background; male/female and parent/child relationships; social, economic, health, and lifestyle issues; public policy issues; and the role of the church.
Prerequisites: SOC 1526.

SPB Spanish for Business

1077 Spanish 1 for Business and Finance **4-0-4**
Students learn and practice vocabulary for business, finance, and business travel.
Prerequisites: None.

1078 Spanish 2 for Business and Finance **4-0-4**
A continuation of SPB 1077. Students learn and practice vocabulary for business, finance, and business travel.
Prerequisites: SPB 1077.

1079 Spanish 3 for Business and Finance **4-0-4**
A continuation of SPB 1078. Students learn and practice vocabulary for business, finance, and business travel.
Prerequisites: SPB 1078.

SPE Speech

1020 Public Speaking **3-0-3**
A course on the preparation and effective delivery of various types of speeches. Topics include: improved listening techniques, audience participation, and evaluation.
Prerequisites: ENG 1001.

1022 Professional Presentations **2-2-3**
A course on preparation and delivery of oral presentations for business and professions. Topics include: analysis, management, styles, and evaluation of various forms of presentational communication. Includes a variety of interpersonal, group, and public communication situations using audio or visual aids.
Prerequisites: ENG 1001.

1023 Interpersonal Communication **3-0-3**
Study and practical application of principles of communication in face-to-face human interactions. Topics include: self-awareness, perception, conflict, listening, interviewing, verbal and nonverbal codes, cultural expectations and their effects on communication in family, classroom, work and intercultural settings.
Prerequisites: None.

1024 Group Dynamics & Problem Solving **3-0-3**
A course on understanding peoples' roles as communicators, improving small group communication skills, developing problem-solving strategies as group members and applying theories to work (i.e. Quality circles) and personal relationships.
Prerequisites: None.

1027 Team Building and Group Facilitation **3-0-3**
A course on team development and function in a work setting. Topics include: group presentations, team building, group development, and team/meeting facilitation. Students work in problem-solving teams and present team project results. Successful completion of SPE 1024 or experience working with groups recommended.
Prerequisites: None.

SPN Spanish

1076 Spanish Conversation and Composition **2-0-2**
A course emphasizing conversational and written Spanish. Students increase Spanish proficiency through interviews, discussion of articles, role-plays, communicative games, and watching and discussing Spanish TV.
Prerequisites: SPN 1081 or spoken proficiency.

1080 Elementary Spanish 1 **4-0-4**
An introduction to the Spanish language, providing a foundation for understanding, speaking, reading, and writing Spanish. Topics include: fundamentals of Spanish intonation, grammar, and syntax. Laboratory work may be required.
Prerequisites: None.

1081 Elementary Spanish 2 **4-0-4**
A continuation of SPN 1080, providing a foundation for understanding, speaking, reading, and writing Spanish. Topics include: fundamentals of Spanish intonation, grammar, and syntax; and advanced readings. Laboratory work may be required.
Prerequisites: SPN 1080 or 1 year high school Spanish or equivalent.

1082 Elementary Spanish 3 **4-0-4**
A continuation of SPN 1081, providing a foundation for understanding, speaking, reading, and writing Spanish. Topics include: fundamentals of Spanish intonation, more complex grammar, syntax, more advanced readings, and

basic composition. Laboratory work may be required.
Prerequisites: SPN 1081 or 2 years high school Spanish or equivalent.

1083 Intermediate Spanish 1 4-0-4
Review and extension of basic principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and short literary pieces. Laboratory work may be required.
Prerequisites: SPN 1082 or 3 years high school Spanish or equivalent.

1084 Intermediate Spanish 2 4-0-4
A continuation of SPN 1083 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: SPN 1083 or equivalent.

1085 Intermediate Spanish 3 4-0-4
A continuation of SPN 1074 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition and longer literary pieces. Laboratory work may be required.
Prerequisites: SPN 1084 or equivalent.

SSC Social Sciences

1598 Topics in Social Sciences Var-Var-Var
A study of selected topics in the social sciences, which may be drawn from one field within the social sciences or may be interdisciplinary. Content and emphasis vary from term to term.
Prerequisites: None.

1599 Special Problems in Social Science Var-Var-Var
Individual study and special projects pertaining to one or more areas of the social sciences. Open to students wishing to conduct independent study and/or research. Enrollment requires prior approval of the supervising instructor and the Dean of Humanities and Sciences.
Prerequisites: None.

ST Surgical Technology

4505 Introduction to Surgery 1 5-0-5
An introduction to the surgical technology profession. Topics include: hospital and operating room environment; care of surgical patients; health and wellness; alternative modalities; death and dying; infection control; reprocessing of patient care items; asepsis and sterile technique; and legal, moral, and ethical issues.
Prerequisites: Admitted to the technical courses of the Surgical Technology program.

4506 Introduction to Surgery 2 5-0-5
A continuation of ST 4505. Topics include: special equipment used in the operating room such as robotics, lasers, endoscopes, sponges, needles, and surgical instruments; general and regional anesthesia; and wound healing, sutures, and surgical staplers.
Prerequisites: ST 4505.
Corequisites: ST 4541.

4531 General Surgery 1 5-0-5
An introduction to general surgery operative procedures. Topics include: upper gastrointestinal, laparotomy, and hernia procedures of the abdominal region; steps of the procedures; hemostasis; operative drains; specimens; layers of the abdominal wall; and abdominal incisions.
Prerequisites: ST 4506.
Corequisites: ST 4542.

4532 General Surgery 2 5-0-5
A continuation of ST 4531. Topics include: lower gastrointestinal procedures, breast surgery, gynecological operative procedures, obstetrical procedures and plastic/reconstructive surgery.
Prerequisites: ST 4531.
Corequisites: ST 4543.

4533 Surgical Specialties 1 5-0-5
A course on selected specialty surgical procedures. Topics include: introduction to ophthalmic, genitourinary, and orthopedic surgery.
Prerequisites: ST 4532.

4534 Surgical Specialties 2 5-0-5
A continuation of ST 4533. Topics include: introduction to neurosurgery procedures; pediatric procedures; head and neck procedures; and ear, nose, and throat surgery.
Prerequisites: ST 4533.
Corequisites: ST 4551.

4535 Surgical Specialties 3 5-0-5
A continuation of ST 4534. Topics include: introduction to oral surgery (including maxillofacial operative procedures), perivascular, thoracic, cardiac, and transplant surgery.
Prerequisites: ST 4534.
Corequisites: ST 4552.

4538 Surgical Technology Seminar 3-0-3
A comprehensive review of surgical technology.
Prerequisites: ST 4534.

4541 ST Surgery Lab 0-3-1
A lab experience in which students integrate theory with skills in the operating room environment. Topics include: patient transportation and transfer, attachment of surgical bed accessories, patient positioning, operation of electrosurgery and suction and dispensing supplies to the sterile field.
Prerequisites: ST 4505.
Corequisites: ST 4506.

4542 ST Clinical & Lab Integration 1 1-6-3
A course consisting of clinical and lab components, including a weekly seminar. Clinical topics include: performing beginning-level circulating skills on a surgical patient. On-campus lab topics include: skin preparation, urinary catherization, surgical scrub, gowning, and gloving skills.
Prerequisites: ST 4506, ST 4541.

4543 ST Clinical & Lab Intregration 2 0-7-3
A course consisting of clinical and lab components. Clinical topics include: performing beginning level scrub skills learned in ST 4542. On-campus lab topics include: development of additional scrub skills to progress students into the scrub role.
Prerequisites: ST 4542.

4544 Introduction to Clinical Practice 0-6-2
Students perform all previously learned scrub skills during assigned operative procedures at an affiliated hospital and practice instrumentation skills required for each step of the procedure. Employability skills of students will be evaluated.
Prerequisites: ST 4543.

4551 ST Clinical Practice 1 0-25-5
Practical application of previously learned surgical skills at an assigned affiliate hospital. Students demonstrate basic competency in scrub skills relating to general and gynecological operative procedures. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: BIO 4016, ST 4544.

4552 ST Clinical Practice 2 0-25-5
A continuation of ST 4551; emphasizes specialty operative procedures. Students rotate, as needed, to another affiliate hospital for OB experience and pediatric experience. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: ST 4551.

4553 ST Clinical Practice 3 0-25-5
A continuation of ST 4552. Students must attend a one-hour weekly seminar on campus relating to the field experience. For satisfactory course completion, students must pass a mandatory program exit exam.
Prerequisites: ST 4552.

4565 RN First Assisting 9-0-9
A course that prepares the registered nurse to assume the expanded role of the RN First Assistant. Topics include: the preoperative, intraoperative and postoperative role of the RN First Assistant. The course is accepted by the Certification Board Perioperative Nursing (CBPN).
Prerequisites: RN, 2 years experience in perioperative nursing, CNOR or eligible.

4566 RN First Assisting Clinical 0-21-3
A self-directed, individualized, supervised clinical practice. Students demonstrate manual and behavioral skills under the preceptorship of a surgeon at a student-selected clinical site.
Prerequisites: ST 4565.

4567 Certified Surgical Technologist First Assisting 9-0-9
A course on the basic knowledge and skills required to assist surgeons intraoperatively. Topics include: asepsis, infection control, patient safety, surgical anatomy and procedures, the role of the first assistant, and intraoperative functions.
Prerequisites: ST Certification.

4580 Central Service Technology 1 5-0-5
A course on technical functions of Central Service related to providing quality patient care items. Topics include: packaging materials; methods of sterilization; preparation of sterile solutions; quality assurance; and care, handling, and processing of surgical instruments and supplies.
Prerequisites: MCH 4000, ST 4590.
Corequisites: ST 4585.

4581 Central Service Technology 2 5-0-5
A continuation of ST 4580. Topics include: total quality management, risk management, case cart development, regulatory agencies, material management concepts, information technology, human relations, and trends in Central Service.
Prerequisites: ST 4580.
Corequisites: ST 4586.

4584 Introduction to CS Clinical Practice 1-10-2
An introduction to the Central Service environment at an affiliate hospital. Students integrate technical skills with didactic concepts. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: None.
Corequisites: ST 4590.

4585 Central Service Clinical Practice 1 1-15-3
Students rotate through the functional areas of a Central Service department and gain additional technical skills with a focus on quality patient services. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: ST 4584.

4586 Central Service Clinical Practice 2 1-15-3
A continuation of ST 4585. Students continue to perform highly technical functions in each area of a Central Service department. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: None.

4590 Introduction to Central Service 5-0-5
An introduction to the field of Central Service and its role in the hospital environment. Topics include: microbiology and infection control applicable to the Central Service discipline, decontamination procedures, disinfection, and anatomy and physiology.
Prerequisites: DE 0011 or college level reading ability.
Corequisites: MCH 4000.

4592 Principles of Material Management in Health Care 1 3-0-3
An introductory course on material management operations in today's health care environment. Topics include: organizational structure, inventory management, systems operation, distribution, and product standardization.
Prerequisites: None.
Corequisites: ST 4590.

4593 Principles of Material Management in Health Care 2 3-0-3
A continuation of ST 4592. Topics include: purchasing and procurement procedures, total quality management, opera-

tional functions, financial management, and legal issues applicable to material.
Prerequisites: ST 4592.
Corequisites: ST 4580.

4594 Fundamentals of Operating Room Practice 3-2-4
Provides nurses with a basic foundation for OR practice. In lab, students learn beginning level skills performed by the scrub and the circulation nurse.
Prerequisites: Previous coursework in anatomy, microbiology.

4598 Special Studies - Surgical Technology Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies.
Prerequisites: Instructor consent.

4599 Special Studies - Surgical Technology Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health Technologies. Students receive grades of S or U for this course.
Prerequisites: None.

TC Technical Communication

5001 Introduction to Multimedia Information Design Careers 2-0-2
An introduction to career requirements and options for various professions related to multimedia information design. Topics include: career skills assessment; and directed research, reading, and writing to determine professional pathways and to understand employer expectations.
Prerequisites: None.

5010 Visual Literacy 2-2-3
A study of visual elements that affect print and multimedia communication. Topics include: perceiving and interpreting visual messages; fundamentals of page and graphical user interface (GUI) design; and selecting and using informational graphics, typography, and color. Word processing software competency recommended.
Prerequisites: None.

5020 Usability Assessment 2-2-3
An introduction to principles and techniques of human factors analysis, information design and usability testing. Students apply these principles to a variety of products with emphasis on Web sites. Basic computer application software competency recommended.
Prerequisites: TC 5010.
Corequisites: IT 5453.

5022 Technical Presentations 2-2-3
Study and practice of various forms of public communication for technical, business and professional environments. Topics include: assessing interpersonal, group and public communication situations; analyzing, organizing, selecting, and evaluating communication methods; and writing and designing presentation materials including various presentation media.
Prerequisites: ENG 1001 or ENG 1018.

5032 Developing Instructional Materials 3-2-4
A course on developing instructional materials for print and multimedia distribution. Topics include: audience and task analysis, elements of instructional content, and effective product design. Fluency in computer-assisted publishing is recommended.
Prerequisites: ENG 1010 or ENG 1019 or Technical Communication program chair consent.

5033 Developing Promotional Materials 3-2-4
A course on developing promotional materials for print and multimedia distribution. Topics include: assessing marketing communication tasks; audience and market analysis; elements of promotional content; and effective product design. Fluency in computer-assisted publishing is recommended.
Prerequisites: ENG 1010 or ENG 1019 or Technical Communication program chair consent.

5034 Planning and Developing Proposals 3-2-4
A course on developing effective proposals for project funding. Topics include: strategy and research; interpreting requirements and organizing, designing and writing proposals. Word processing competency recommended. Degree-seeking students must successfully complete all English composition requirements before enrolling in this class.
Prerequisites: ENG 1010 or ENG 1019 or Technical Communication program chair consent.

5035 Scriptwriting for Visual Media 2-3-3
A course on fundamental concepts and techniques of narrative and informational scriptwriting for visual media including film, video, Web, and interactive multimedia.
Prerequisites: 6 credits of English composition or instructor consent.

5037 Writing and Designing Newsletters 2-2-3
A course on essential aspects of newsletter preparation. Topics include: journalism fundamentals; writing news and feature stories; planning content; effective designs for print and online newsletters; and relevant business and legal issues. Students use desktop publishing software to prepare newsletters.
Prerequisites: ENG 1001 or ENG 1018, and IT 5116, IT 5456, or GC 1422.

5041 Technical Editing Methods 1 2-2-3
A course on editorial concepts and techniques. Topics include: editor's role, editorial assessment process, levels of edit, proofreading, copy marking, stylebooks, and resource materials. Word processing, desktop publishing and basic Web site design competency recommended. Multimedia Information Design students must successfully complete all English composition requirements before enrolling.
Prerequisites: ENG 1019 or Technical Communication program chair consent.

5042 Technical Editing Methods 2 2-2-3
A continuation of TC 5041. Topics include: expanding editorial roles and responsibilities, editing large and complex materials, and performing special editorial tasks such as preparing abstracts and indexes.
Prerequisites: TC 5041.

5071 Technical Communication Project 3-3-4
As members of an interdisciplinary team working for an external client, students write or edit content for print, Web or multimedia products for information, education, business or entertainment. Activities include: audience, client and market analysis; product design, planning, production and testing; and project management. Students present projects to internal and external reviewers.
Prerequisites: Successful completion of all other Technical Communication program requirements.

5089 Technical Communication Seminar: Portfolio Presentation 2-3-3
A course in which students prepare a comprehensive professional portfolio documenting academic and work achievements. Students present portfolios to professional technical communicators for assessment.
Prerequisites: Successful completion of all other Technical Communication program requirements.

5098 Workshop in Technical Communication Var-Var-Var
Group study and discussion of selected topics in technical communication. Course content and emphasis may vary from year to year.
Prerequisites: None.

5099 Special Problems in Technical Communication Var-Var-Var
Individual studies and special projects pertaining to technical communication are assigned to students who are seeking advanced standing or implementing independent research or specialized technical communication projects. Enrollment requires prior approval of TC program chair and Dean of Information Technologies. May be repeated for credit.
Prerequisites: None.

TET Telecommunications Engineering Technology

7743 Analog Communications 1 3-2-4
An introduction to radio communications theory. Topics include: the transmission and reception of amplitude and frequency modulated radio signals and fundamentals of noise and radio wave propagation. Students design and build working transmitters and receivers as laboratory exercises. This course prepares students to pass the technical portion of the FCC Amateur Radio License Examination and FCC General Radio Operators Exam.
Prerequisites: EET 7730.

7762 Telecommunications 1 2-3-3
An introduction to basic telephone systems. Topics include: telecommunication history, the operation of the basic telephone set, local offices, telephone switching concepts, analog and digital signal transmission, local loops, and interoffice trunk lines.
Prerequisites: EET 7701 or EET 7710, CPET 7705 or EET 7707 or CPET 7728.

7772 Telephony 1 2-3-3
A course on large enterprise telephone systems and the connection to local carriers. Topics include: PBX systems, integration of phone and computer networks, setup and troubleshooting of integrated phone-computer networks, and on-site customer equipment needed to connect to local carriers for ISDN, T1, T3, and fiber service.
Prerequisites: CPET 7738, CPET 7762.

THE Theater

1670 Theater Appreciation 3-0-3
Study of theater as a mode of human expression. Topics include: developing awareness as an audience member; script analysis, acting styles, directing and design elements, and how these elements contribute to a successful production. Attendance at one live production during the term is required.
Prerequisites: None.

1671 History of the Theater 3-0-3
A course on the history of Western theater from classical antiquity through contemporary times that explores each period's contribution to modern theatrical practices. Course work includes regular written assignments and out-of-class screenings of plays from various periods.
Prerequisites: 6 credits of English composition.

1678 Special Topics in Theater Var-Var-Var
A course involving study and discussion of selected topics in theater. Content and emphasis may vary from term to term.
Prerequisites: None.

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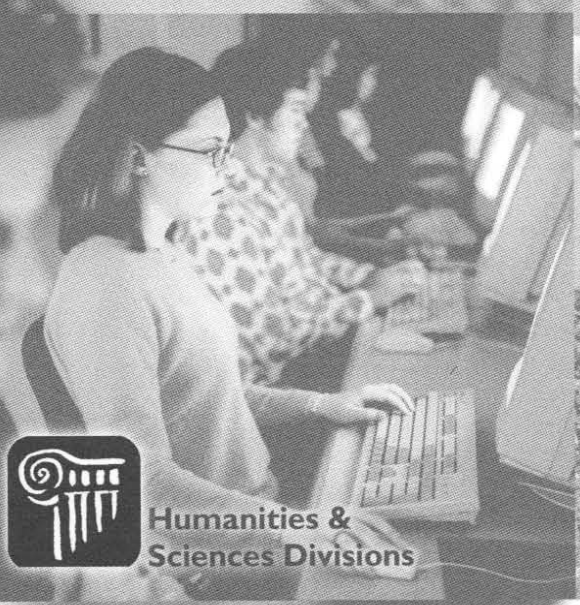
Faculty & Staff

Business Technologies Division

Information Technologies Division



Humanities & Sciences Divisions

Engineering Technologies Division

Health Technologies Division

Faculty/Staff

Airaghi, JoAnn, RD, LD . . . . . .Program Director,
Health Technologies Division
B.A., Webster College
M.Ed., University of Cincinnati
R.D., University of Chicago Hospital

Allen, Charalee, RD, LD . . . . . .Program Chair,
Business Technologies Division
Health Technologies Division
B.S., Ohio State University
M.Ed., University of Cincinnati

Armstrong, George, P.S., P.E. . . . . .Instructor,
Engineering Technologies Division
B.S.E., University of Cincinnati

Attenborough, Laura . . . . . .Instructor,
Humanities Division
B.A., Case Western Reserve University
M. Ed., Antioch University

Bacher, Susan, RN, CNOR, CRNFA . . . . . .Instructor,
Health Technologies Division
B.S.N., Memphis State University

Baker, Yvonne, CPA . . . . . .Instructor,
Business Technologies Division
B.B.A., Morehead State University

Barnes, Thelma . . . . . .Library Specialist - Periodicals,
Berry Library
B.S., Alabama State University

Barrett, Debra . . . . . .Instructor,
Sciences Division
B.S., Ohio University
M.Ed., Xavier University

Baskind, Marc A. . . . . .Instructor,
Business Technologies Division
B.A., Washington University
M.A., Indiana University

Batra, Prem N., Ph.D. . . . . .Program Chair,
Engineering Technologies Division
M.S., Ph.D., University of Cincinnati

*** Battistone, Carmen . . . . . .Professor Emeritus,**
Humanities Division
B.A., Kent State University
M.Ed., Xavier University

Battistone, John . . . . . .Instructor,
Humanities Division
B.A., Rutgers College

Bell, Athealia, RDH, Ed.D., ... Advisor,
Enrollment and Student Development
A.A.S., R.D.H., Raymond Walters College
B.S.Ed., M.Ed., Ed.D., University of Cincinnati

Bogenschutz, Debbie B. . . . . .
Coordinator, Information Services,
Berry Library
A.B., Thomas More College
M.S.L.S., University of Kentucky
M.A., Xavier University

Bookser, Mary, S.C., Ph.D. . . . . .Counselor,
Enrollment and Student Development
B.M.Ed., College of Mount St. Joseph
M.Ed., M.A., Xavier University
Ph.D., Union Institute and University

Bossard, Crystal . . . . . .Program Chair,
Humanities Division
B.A., College of Mount St. Joseph
M.S.W., University of Cincinnati

Boswell, Mary C. . . . . .Instructor,
Humanities Division
B.A., M.A.T., George Washington University
M.A., University of Cincinnati

Bowling, Doug . . . . . .Assistant Dean,
Information and Engineering Technologies Divisions
B.S., Wright State University
M.S., University of Cincinnati

Bronstrup, James . . . . . .Program Chair,
Sciences Division
A.A.S., Cincinnati Technical College
A.B., M.Ed., Xavier University

Brosz, Martha . . . . . .Program Chair,
Engineering Technologies Division
B.S., College of Mt. St. Joseph

Brougham, Thomas . . Academic Coordinator/Counselor,
Student Support Services
B.S., University of Cincinnati
M.Ed., Xavier University

Brown, David M. . . . . .Instructor,
Humanities Division
B.A., Miami University
M.A., Utah State University

Brown, Sharon L. . . . . .Program Coordinator,
Corporate & Community Services
B.A., Howard University

Brown, Sharon S. . . . . .Instructor,
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Bryan, Dave . . . . . Instructor,
Health Technologies Division
B.A., M.A., Miami University

Burns, Mary, RNC . . . . . .Instructor,
Health Technologies Division
B.S.N., D'Youville College
M.S.N., Boston University

Burns, Tom, P.E. . . . . .Program Chair,
Engineering Technologies Division
B.S.C.E., M.S.C.E., University of Cincinnati

Buschmann, Sandra, ... Instructor,
Humanities Division
B.S., American International College
M.Ed. (Reading Specialist), Xavier University
M.Ed. (School Administration), Xavier University

Buttelwerth, John W. . . . . .Instructor,
Engineering Technologies Division
B.S.C.M., University of Cincinnati
M.Ed., Xavier University

Callahan, Patrick . . . . . Instructor,
Information Technologies Division
B.S.C.S., University of Cincinnati

Callahan, Paul . . . . . Instructor,
Business Technologies Division
B.S., University of Cincinnati
M.Ed., Xavier University

Campbell, Connie L. . . . . .Program Chair,
Business Technologies Division
B.S., Campbellsville College
M.Ed., University of Cincinnati

Canteel, Brian . . . . . .Trainer,
Corporate & Community Services
B.S., State University of New York
M.B.A., Oklahoma City University

Carroll, Michael T. . . . . .Instructor,
Engineering Technologies Division
A.A.S., Cincinnati Technical College

Cartwright, Dawn . . . . . .Program Chair,
Humanities Division
B.S., Cincinnati Bible College
Interpreter Certification,
Northeast Florida Educational Consortium
RID & NAD Certifications

Caudill, Jason . . . . . .Instructor,
Information Technologies Division
B.A., Eastern Kentucky University
M.S., East Tennessee State University
AWIC, AliaslWavefront

Caulton, Marcia . .Media Specialist - Production Services,
Berry Library
B.S., Ohio University

Cayse, Dan A., CPA . . . . . .Dean,
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Chaney-Land, Pamela . . . . . .Instructor,
Humanities Division
B.A., College of New Rochelle

Cheng, Andrea . . . . . .Instructor,
Humanities Division
B.A., M.S., Cornell University

Cisle, Tina, R.T.(R), RDMS, RDCS, RVT . . . . . Clinical Coordinator,
Health Technologies Division
B.A., Wilmington College
M.Ed., Xavier University

Clark, Meg . . . . . .Instructor,
Business Technologies Division
B.B.A., University of Cincinnati
M.B.A., Xavier University

Clark, Rosemary V., RRA . . . . . .Professor Emeritus,
Health Technologies Division
B.A., Edgecliff College
M.A., Xavier University
R.R.A., St. Louis University

Coil, Robert, Ph.D. . . . . .Instructor,
Information Technologies Division
A.A.S., Cincinnati Technical College
B.M., M.B.A., University of Cincinnati
Ph.D., The Union Institute

Conroy, Brad . . . . . .Library Specialist - Circulation,
Berry Library
B.A., University of Cincinnati

Cotton, Wyatt D., Ph.D. . . . . .Instructor,
Sciences Division
B.S., California State University at Los Angeles
Ph.D., University of California at Los Angeles

Cover, David W. . . . . .Special Needs Counselor,
Disability Services
Enrollment and Student Development
B.A., M.H.Ed., Morehead State University

Craig, Ronald, Ph.D. . . . . .Program Chair,
Humanities Division
B.A., Cedarville College
M.A., University of Dayton
Ph.D., Ohio State University

Craigo, Robert W. . . . . .Dean Emeritus,
Engineering Technologies Division
B.S., West Virginia Institute of Technology
M.S., University of Cincinnati

Crossley, Connie . . . . . .Instructor,
Business Technologies Division
B.S., B.A., University of Cincinnati
M.Ed., University of Cincinnati

Curry, Janice, RNC . . . . . .Instructor,
Health Technologies Division
B.S.N., M.S.N., University of Cincinnati

Dadey, Donald . . . . . .Professor Emeritus,
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Daniels, Richard, Ed.D., ...Advisor,
Enrollment and Student Development
A.A.S., Moberly Comm. College
B.A., University of Missouri
M Div., MEd., Southern Baptist Theological Seminary
Ed.D., University of Cincinnati

Dantzler, Wanda, RN . . . . . .Program Chair,
Health Technologies Division
B.S.N., University of Cincinnati
M.Ed., Xavier University

Davis, Paul . . . . . .Instructor,
Business Technologies Division
B.A., M.A., University of Cincinnati

Davis, Sharon . . Assistant Dean for Student Development,
Enrollment and Student Development
B.S., M.Ed., Kent State University

Deacon, S. Mark . . . . . .Program Co-Chair,
Business Technologies Division
B.S., Eastern Kentucky University
M.S., University of Kentucky

Decker, James, P.S. . . . . .Instructor,
Engineering Technologies Division
A.A.S., Cincinnati Technical College
B.S.C.E., University of Cincinnati
Registered Professional Surveyor, State of Ohio

Dees, Sandra . . . . . .Student Retention Specialist,
Student Support Services
B.S., Wilberforce University

DeNu, Paul A., P.S. . . . . .Dean,
Information and Engineering Technologies Divisions
B.S.C.E., University of Cincinnati
M.S.C.E, Purdue University

DeSimone, Anthony . . . . . .Instructor,
Humanities Division
B.A., Pennsylvania State University
M.A., Ohio University

DeVore, Michael E., P.E. . . . . .Program Chair,
Engineering Technologies Division
B.S., University of Cincinnati
M.B.A., University of North Carolina

DeZarn, Cathy, RN . . . . . .Lab Manager,
Health Technologies Division
A.A.S., Cincinnati State
B.S., Northern Kentucky University

DiPilla, Ray A. . . . . .Professor Emeritus,
Engineering Technologies Division
B.S.A.E., Parks College of St. Louis University
M.S.A.E., Air Force Institute of Technology

Dolan, Sue . . . . . .Co-op Coordinator,
Information and Engineering Technologies Divisions
B.S., Edgecliff College
M.Ed., Xavier University

Donley, Jan, Ph.D.
Director of Organizational Effectiveness
B.A., University of Cincinnati
M.Ed., Xavier University
Ph.D., The Union Institute
Ohio Award for Excellence State Examiner

Donohue, Florence, RNC, PNP . . . . . .Instructor,
Health Technologies Division
Diploma, Bellevue Hospital
B.A., Columbia University
B.S.N., Long Island University
M.A., New York University
M.S.N., University of Cincinnati

Dunigan, Jane, LPC, MAC . . . . . Program Coordinator,
Corporate & Community Services
B.A., University of Cincinnati
M.Ed., Xavier University
Certified Chemical Dependency Counselor, IIIE
Certified Criminal Justice Specialist

Dunlevy, Crystal, RRT, Ed.D. . . . . Instructor,
Health Technologies Division
B.A., M.S., University of Akron
Ed.D., Rutgers University

DuVall, Donna . . . . . .Assistant Dean,
Business Technologies Division
B.A., M.B.E., Morehead State University

Ecker, Pamela S. . . . . .Program Chair,
Information Technologies Division
Instructor,
Humanities Division
B.A., Hanover College
M.A., Bowling Green State University

Eilers, Al . . . . . Instructor,
Business Technologies Division
B.S., B.S.Ed., M.Ed., University of Cincinnati
M.B.A., M.H.A., Xavier University

Elmer, Robert V. . . . . .Professor Emeritus,
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Epperson, Kathleen . . . . . .Adjunct,
Berry Library
B.S., Northern Kentucky University
M.S.L.S., University of Kentucky

Eveslage, Robert W., RRT . . . . . .Program Chair,
Health Technologies Division
B.S., University of Cincinnati
M.S., Indiana University

Ewing, Bari . . . . . .Director,
Student Support Services
B.A., Westhampton College, University of Richmond
M.A., Bowling Green State University

Faessler, Judith, RN, ANP . . . . . .Program Chair,
Health Technologies Division
B.S.N., M.S.N., University of Cincinnati

Fallon, Ann . . . . . .Instructor,
Engineering Technologies Division
B.S., University of Dayton
M.S., University of Cincinnati

Feghali, Elias . . . . . .Instructor,
Engineering Technologies Division
College of "FRERES" des Ecoles Chretiennes,
Beirut-Lebanon
B.A. in Secondary Education
College of Architectural Engineering, Lebanese University,
Beirut-Lebanon
Diploma in Architectural Engineering

Feld-Brockett, Andrea . . . . . .Co-op Coordinator,
Information Technologies Division
B.A., Indiana University

Fox, Ann E. . . . . .Program Co-Chair,
Business Technologies Division
B.A., Nazareth College

Fraley, Charles Sean, ... Instructor,
Humanities Division
M.A., University of Cincinnati

Freed, Kathleen . . . . . .Instructor,
Business Technologies Division
B.F.A., College of Mount St. Joseph

Frey, Mary J. . . . . .Program Chair,
Sciences Division
B.A., Xavier University
M.S., University of Cincinnati

Funk, Hal G. . . . . .Professor Emeritus,
Engineering Technologies Division
B.S., Ohio State University
M.Ed., University of Cincinnati

Gache, Larry . . . . . .Instructor,
Sciences Division
B.S.P.E., Marietta College
M.S., University of Cincinnati

Geers, Michele, CPA . . . . . .Program Chair,
Business Technologies Division
B.B.A., University of Cincinnati

Gesell-Streeter, Carla . . . . . .Instructor,
Humanities Division
B.A., Monmouth College
M.A., Indiana State University

Gibbs, Jack . . . . . .Trainer,
Corporate & Community Services
B.S., University of Cincinnati

Glenn, Terrence J., Ed.D. . . . . Vice President Emeritus
B.S., M.Ed., Xavier University
Ed.D., University of Cincinnati

Gohn, A. Janelle, MT (ASCP), SM . . . . . .Program Chair,
Health Technologies Division
B.S., Indiana University
M.A., College of Mt. St. Joseph

* **Gratton, Alfred . . . . . .Professor Emeritus,**
Business Technologies Division
B.S., Clarkson College
M.B.A., Xavier University

Green, Marcus M. . . . . .Instructor,
Humanities Division
B.S., M.Ed., University of Cincinnati

Grogan, Thomas J., Ed.D. . . . . .Instructor,
Sciences Division
B.S., Xavier University
M.A., Ohio State University
M.Ed., University of Cincinnati
Ed.D., University of Cincinnati

Grome, Noelle . . . . . .Co-op Coordinator,
Engineering Technologies Division
B.S., Northern Kentucky University
M.Ed., Xavier University

Grundy, E. Paul . . . . . Instructor,
Information Technologies Division
B.A. Xavier University

Gunkel, Ann M., Ph.D. . . . . .Program Chair,
Engineering Technologies Division
A.A., B.A., Thomas More College
M.S., Colorado State University
Ph.D., University of Cincinnati

Guntzelman, Sue, RNC . . . . . .Instructor,
Health Technologies Division
Diploma, Good Samaritan (Dayton)
B.S.N., University of Cincinnati
M.S., Wright State University

Hackworth, Jamilah . . . . . HCOP Counselor,
Health Technologies Division
B.A., Kentucky State University

Haensel, Angela . . . . . .Assistant Dean,
Humanities and Sciences Divisions
B.A., Universidade PUC-RS, Brazil
M.A., University of Missouri-Columbia

Haft, Jill . . . . . .Instructor,
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Hammond, Ocie . . . . . .Co-op Coordinator,
Information Technologies Division
B.A., University of North Texas

Hancox, Jerelen, RN, ARNP . . . . . .Program Chair,
Health Technologies Division
B.S.N., Ohio State University
M.S.N., University of Cincinnati
Family Nurse Practitioner, Northern Kentucky University

Harrier, Peggy . . . . . Assistant Dean,
Business Technologies Division
B.A., St. Mary's College
M.Ed., Xavier University
Real Estate Broker, Ohio

Hatton, John L. . . . . .Instructor,
Business Technologies Division
A.A.B., Cincinnati State
Master Certification, National Institute for Automotive Service Excellence

Heck, Brenda, RN . . . . . .Instructor,
Health Technologies Division
B.S.N., University of Cincinnati
A.A.S., M.S.N., University of Kentucky

Heesten, Stephanie, RN . . . . . .Program Coordinator,
Health Technologies Division
Nursing Diploma, Massillon City Hospital

* **Heink, Harry R. . . . . .Professor Emeritus,**
Humanities Division
A.B., Eastern Kentucky State College
M.Ed., Xavier University

Hendrix, Richard E., C.H.A. . . . . .Co-op Coordinator,
Business Technologies Division
B.S., Bowling Green State University
M.Ed., Xavier University

Hill, Soni . . . . . .Assistant Dean,
Humanities and Sciences Divisions
B.S., University of Cincinnati
M.Ed., Miami University

Hils, Neal C. . . . . .Professor Emeritus,
Business Technologies Division
B.S., University of Cincinnati

Hochmuth, Roberta, RN . . . . . .Instructor,
Health Technologies Division
B.S.N., Capital University
M.S.N., University of Cincinnati

Hoctor, David . . . . . .Instructor,
Information Technologies Division
B.S., University of Illinois
M.A., DePaul University

Hoeweler, Janice L. . . . . .Instructor,
Sciences Division
B.S., University of Illinois
M. Ed., Xavier University

Hollstegge, Linda S. . . . . .Instructor,
Engineering Technologies Division
A.A.S., Cincinnati Technical College
B.A., University of Cincinnati

Howes, Mary Lee, ...Professor Emeritus,
Humanities Division
B.A., Edgecliff College

Hubbard, John H., P.E. . . . . .Professor Emeritus,
Engineering Technologies Division
B.S.C.E., Tufts University
M.S., University of Pittsburgh

Huffman, Elodie, RD . . . . . .Professor Emeritus,
Health Technologies Division
B.S., Cornell University
M.Ed., University of Cincinnati
R.D., Oklahoma State University

Huge, Terrence . . . . . .Instructor,
Sciences Division
B.S., M.S., University of Cincinnati
A.S.Q.C. Certified Quality Engineer
A.S.Q.C. Certified Reliability Engineer

Huller, Patricia . . . . . Instructor,
Business Technologies Division
B.S., University of Kentucky
M.Ed., Xavier University
Certified Culinary Educator

Hunley, Marcha . . . . . .Honors Program Chair,
Humanities Division
B.S.Ed., M.A.I.R., University of Cincinnati

Hying, Debra, RNC . . . . . .Instructor,
Health Technologies Division
B.S.N., Ohio State University
M.S.N., University of Cincinnati

Iacobucci, Frank A. . . . . .Professor Emeritus,
Sciences Division
B.S., United States Military Academy
M.Ed., Xavier University

Jackson, Joan . . . . . .Instructor,
Sciences Division
A.B., DePauw University
M.Ed., Virginia Commonwealth University

Jakubovic, Robert, ...Instructor,
Humanities Division
B.A., M.A., Youngstown University

Johnson, Joanne, RNC . . . . . .Nursing Program Coordinator/Asst. Director,
Health Technologies Division
Diploma Good Samaritan Hospital
B.S.N., University of Cincinnati
M.S.N., University of Kentucky

Johnson, Viola . . . . . .Co-op Coordinator,
Business Technologies Division
B.S., West Virginia Institute of Technology

Jones, Michael H. . . . . .Instructor,
Humanities Division
B.F.A., University of Cincinnati

*** Keenan, Joseph N. . . . . .Professor Emeritus,**
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Kelley, Mary Ellen, RN, APN, CNS . . . . .Assistant Dean,
Health Technologies Division
B.S.N. College of Mount Saint Joseph
M Ed. Xavier University
M.S.N. University of Cincinnati

Kief, Cynthia, COTA/L, AP . . . . . .Instructor,
Health Technologies Division
Certificate Columbus Adult Health Career Center
A.A.S., Cincinnati Technical College
B.S., Clayton College of Natural Health

Kinsella, John . . . . . .Instructor,
Business Technologies Division
A.T.S., Cincinnati Technical College
American Culinary Federation Certified Master Chef
Fellow of Epicurean World Master Chefs Society
Certified Master Chef, City & Guilds of London Institute
Certified Culinary Educator
Certified Hospitality Educator

Kinzie, Paul W. . . . . .Professor Emeritus,
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Knepp, Linda . . . . . .Program Chair,
Sciences Division
B.S., B.Ed., Capital University

Kobberdahl, Clyde . . . . . .Professor Emeritus,
Business Technologies Division
B.S., University of North Dakota
M.Ed., University of Cincinnati

Kober, Thomas E., Ph.D. . . . . .Instructor,
Health Technologies Division
B.A., Earlham College
M.S., Ph.D., University of Cincinnati

Krismer, Marianne, RD, LD . . . . . .Dean,
Health Technologies Division
B.S., Edgecliff College
M.Ed., University of Cincinnati
R.D., University of Cincinnati General Hospital

*** Kuehn, Irvin C. . . . . .Professor Emeritus,**
Business Technologies Division
B.S., M.A., Eastern Kentucky University

Kuranga, Abraham Akanbi, Ph.D. . . . . Instructor,
Humanities Division
B.A., M.A., Andrews University
B.A., Elmhurst College
Ph.D., Miami University

Laemmle, Carolyn G., MT (ASCP), Ed.D. . .Program Chair,
Health Technologies Division
B.A., Edgecliff College
M.T. (ASCP), St. Mary's Memorial Hospital
School of Medical Technology
M.S., College of Mt. St. Joseph
Ed.D., University of Cincinnati

Lalley, John . . . . . .Professor Emeritus,
Sciences Division
B.S., Thomas More College

Leeks, Kelli Prather, COTA/L, OT/L Clinical Coordinator,
Health Technologies Division
B.S., University of Findlay
MOT, University of Findlay

Leicht, Albert G. . . . . .Instructor,
Business Technologies Division
B.S., West Virginia Institute of Technology
M.S., South Dakota State University

Lepley, Peggy L. . . . . .Instructor,
Health Technologies Division
B.A., Thomas More College
M.S., University of Cincinnati

Lierl, Debbie, RRT . . . . . .Program Chair,
Health Technologies Division
B.S., University of Cincinnati
M.Ed., Xavier University

Lipscomb, Sherri, RN . . . . . Instructor,
Health Technologies Division
B.S.N., New York University
M.S., Wright State University

Lockett, Janice, RN, RCVT . . . . . .Instructor,
Health Technologies Division
B.S.N., M.S.N., University of Cincinnati

Lower, Joe R. . . . . .Professor Emeritus,
Business Technologies Division
B.S., M.A., Ohio State University

Lozier, Dan, RN . . . . . .Health Excel Coordinator,
Health Technologies Division
B.S.Ed., Xavier University

Macke, James . . . . . .Co-op Coordinator,
Business Technologies Division
B.S., B.A., M.B.A., Xavier University

Mains Sr., Keith G. . . . . .Program Chair,
Business Technologies Division
A.T.S., Cincinnati State College
Master Certification, National Institute for Automotive Service Excellence

Mason, Gregory K. . . Special Assistant, Strategic Planning
B.A., Eastern Kentucky University
MCP, University of Cincinnati

McClusky, Kathleen M. . . . . .Co-op Coordinator,
Engineering Technologies Division
B.S., Barry University
M.Ed., Xavier University

McKamey, Jon . . . . . .Head, Media Services,
Berry Library
B.A., M.S., Indiana State University

McLaughlin, Julie . . . . . Advisor,
Enrollment and Student Development
B.S., M.A., Eastern Michigan University

McLain, Robert, P.E. . . . . .Instructor,
Engineering Technologies Division
B.S.E.E., M.B.A., University of Cincinnati

Meador, Linda . . . . . .Counselor,
Enrollment and Student Development
B.S., M.S., Tuskegee University

Mellinger, Daniel O. . . . . .Professor Emeritus,
Humanities Division
A.B., University of Tennessee
M.Ed., University of Cincinnati

Merchinsky, Anthony . . . . . Instructor,
Humanities Division
B.S., Gallaudet University

Merten, Karen . . . . . Library Specialist - Acquisitions,
Berry Library
B.A., Denison University

Meyer, Colleen, CIW-CI . . . . . Instructor,
Information Technologies Division
B.S., Northern Kentucky University
M.Ed., Xavier University
Computer Endorsement, Purdue University
CIW Associate

Meyer, Jan, RN, CCM . . . . . Advisor,
Health Technologies Division
B.S.N., Xavier University

Miller, Claudia, MHS, OTR/L . . . . . .Program Chair,
Health Technologies Division
MHS, University of Florida
Cert. OT, University of Florida
B.S., Florida State University

Mindhardt, Katye L. . . . . .Instructor,
Business Technologies Division
A.A.B., B.S., M.Ed., University of Cincinnati

Moreno, Rosa-Maria . . . . . .Instructor,
Humanities Division
B.A., M.A., Ohio State University
M.A., Ohio University

Morganroth, Patricia, RN, CDE . . . . . .Program Chair,
Health Technologies Division
B.S.N., Villanova University
M.S.N., University of Cincinnati

Morman, Carol L., P.E., P.S. . . . . .Instructor,
Engineering Technologies Division
A.A.S., Cincinnati Technical College
B.S.C.E., B.S.L.S., Purdue University

Morris, Larry A., P.E., Ed.D. . . . . .Instructor,
Engineering Technologies Division
A.A., Tacoma Community College
B.S.E.E., Ohio State University
M.A., Webster University
M.S.E.E., University of Texas
Ed.D., Nova Southeastern University

Myatt, James F. . . . . .Instructor,
Business Technologies Division
Certified Culinary Educator
St. Helen's Technical College
American Culinary Federation Certified Master Chef
Certified Chef, City & Guilds of London Institute
Certified Working Pastry Chef
Member, World Master Chef's Society

Newton, Debbie . . . . . Interpreter Coordinator,
Humanities Division
A.A.S., Cincinnati State

Nields, Robert . . . . . .Instructor,
Information Technologies Division
A.A., A.S., B.S., Thomas More College
M.B.A., Xavier University

Nolan, Timothy . . . . . .Professor Emeritus,
Humanities Division
A.B., Xavier University

O'Gorman, Kathryn . . . . . .Director,
Berry Library
B.A., University of Vermont
M.A.T., M.L.S., Indiana University

Olubas, Paul E. . . . . .Instructor,
Humanities Division
B.A., M.A., Miami University

Orsini, Catherine . . . . . .Instructor,
Sciences Division
B.S., Saint Peter's College

Owen, Sandra . . . . . Instructor,
Humanities Division
B.A., Miami University
M.Ed., College of Mt. St. Joseph

Palmer, Alice, RN, ANP . . . . . .Program Chair,
Health Technologies Division
B.A., Earlham College
M.S., Pace University

Parrott, Carl L., M.D. . . . . .Medical Advisor,
Clinical Laboratory Program
Health Technologies Division
B.A., Yale University
M.D., Emory University

Penn, Leonard R. . . . . .Professor Emeritus,
Business Technologies Division
B.A., University of Cincinnati
M.Ed., Xavier University

Phillips, Verale W., CDP . . . . . .Instructor,
Information Technologies Division
A.A., B.S., University of Cincinnati
M.B.A., Xavier University
Certificate, Data Processing, Institute for Certification of Computer Professionals
Certificate, Data Education, Certification Council

Pitman, Lloyd . . . . . .Professor Emeritus,
Business Technologies Division
B.S., University of Cincinnati
M.Ed., Xavier University

Pitts, Bessie, L.P.C., L.S.W. . . . . .Assistant Dean,
Health Technologies Division
A.S., B.S., M.A., University of Cincinnati

Posey, Monica, Ed.D. . . . . Academic Vice President
B.S., Cornell University
M.B.A., University of Pennsylvania
Ed.D., University of Cincinnati

Powers, Deborah . . . .Media Specialist - Campus Services,
Berry Library
B.A., Morehead State University
M.S., University of Cincinnati

Prince, Bernell . . . . . .Advisor,
Enrollment and Student Development
B.S., The Union Institute

Pucke, Lawrence E. . . . . . **.Professor Emeritus,**
Sciences Division
B.S., M.Ed., Xavier University

Rahmes, Catherine M. . . . . . **.Program Co-Chair,**
Humanities Division
A.B., M.A., Miami University

*** Rhein, William G.** . . . . . **.Professor Emeritus,**
Engineering Technologies Division
B.S.I.M., M.B.A., University of Cincinnati

Richards, Kim, Ed.D. . . . . . **Co-op Coordinator,**
Engineering Technologies Division
B.S.I.E., Central State University
M.Ed., University of Cincinnati
Ed.D., University of Cincinnati

Rimlinger, Joyce . . . . . **.Program Chair,**
Humanities Division
B.A., Nazareth College
M.A., New York University

***Rinck, H. Anthony** . . . . . **.Professor Emeritus,**
Engineering Technologies Division
B.S., M.Ed., Xavier University

Roberts, Tim . . . . . **.Trainer,**
Corporate & Community Services
Experienced Training Instructor, AutoCAD

Robinson, Daphne T., RHIT . . . . . **.Program Chair,**
Health Technologies Division
A.A., B.S., University of Cincinnati

Roddy, Cheryl . . . . . **.Instructor,**
Humanities Division
A.A.S., Sinclair Community College
RID Certification

Romano, Robert, P.E. . . . . . **.Instructor,**
Engineering Technologies Division
B.S.E.E., Ohio State University

Romero, Linda S. . . . . . **.Co-op Coordinator,**
Humanities and Sciences Divisions
B.S., Saint Mary of the Plains College

Rosa, Effie, Ed.D. . . . . . **.Advisor,**
Enrollment and Student Development
B.S., Miami University
M.Ed., Ed.D., University of Cincinnati

Rose, Connie, RN . . . . . **.Instructor,**
Health Technologies Division
B.A., Miami University
B.S.N., St. Louis University
M.S., Wright State University

Roth, Eric . . . . . **.Instructor,**
Business Technologies Division
B.S., Miami University
M.B.A., Xavier University

Rowe, Samuel D. Jr., ... **.Program Chair,**
Humanities Division
B.S., Northern Kentucky University
M.Div., M.A., Southern Baptist Theological Seminary

Rugless, Katrina . . . . . **.Retention Specialist,**
Student Support Services
B.A., Daemen College
M.Ed., Xavier University
Certificate of Advanced Graduate Studies for Counseling
Licensure, University of Cincinnati

Rupp, Rodney . . . . . **.Program Chair,**
Sciences Division
B.S., B.Ed., University of Cincinnati

Salehi, Siamak . . . . . **Instructor,**
Humanities Division
B.S., Institute of Banking Sciences
M.A., Ohio University
M.A., University of Cincinnati

Scardina, Kathleen . . . . . **.Library Assistant,**
Berry Library

Schaffeld, Linda, CPA . . . . . **.Transfer Program Chair,**
Business Technologies Division
A.A.B., Cincinnati Technical College
B.B.A. University of Cincinnati
M.A., College of Mount St. Joseph

Schlueter, Ralph C. . . . . . **.Professor Emeritus,**
Sciences Division
B.S., M.Ed., Xavier University

Schmid, James E. . . . . . **.Program Chair,**
Engineering Technologies Division
B.S., Embry Riddle Aeronautical University
A&P License, Alabama Aviational Technical College
M.Ed., Xavier University

Sefton, Richard J. . . . . . **.Professor Emeritus,**
Business Technologies Division
B.S., M.Ed., University of Cincinnati

Sefton, Cindy . . . . . **.Library Specialist-Circulation,**
Berry Library
B.A., Baldwin Wallace College

Sheldon, Jeffrey A., C.C.E. . . . . . **.Program Chair,**
Business Technologies Division
A.A.B., Cincinnati Technical College
B.S., Miami University
M.Ed., University of Cincinnati
Certified Culinary Educator

Simmermon, David S. . . . . . **.Instructor,**
Engineering Technologies Division
A.A.S., Cincinnati Technical College
B.S., University of Houston

Sketch, Connie J. . . . . . **.Assistant Dean,**
Information and Engineering Technologies Divisions
A.A.S., Cincinnati Technical College
B.S., Tri State University
M.S., University of Cincinnati

Smith, David W., CMfgT . . . . . **.Instructor,**
Engineering Technologies Division
A.A.S., Cincinnati Technical College
B.S., Northern Kentucky University

Smith, Gail, RHIA, CCS-P . . . . . **.Program Chair,**
Health Technologies Division
A.A., Eastern Kentucky University
B.S., Ohio State University
M.A., College of Mount St. Joseph

Smith, Rayma E., Ph.D. . . . . . **.Dean,**
Humanities and Sciences Divisions
B.S., Miami University
M.A., Ph.D., Ohio State University

Speller, Sandra, RHIT . . . . . **.Instructor,**
Health Technologies Division
A.A. Cincinnati Technical College
B.A., St. Scholastica

Spencer, Kathleen L., Ph.D. . . . . . **.Instructor,**
Humanities Division
B.A., Wright State University
M.A., Miami University
Ph.D., University of California at Los Angeles

Stark, Thomas J. . . . . .Professor Emeritus,
Sciences Division
B.S., M.Ed., Xavier University

Steidley, V. Kenneth . . . . . .Professor Emeritus,
Engineering Technologies Division
B.S., Northeast Missouri State University

Stewart, Briggetta E. . . . . .Professor Emeritus,
Business Technologies Division
A.A.B., Cincinnati Technical College
Certified Protection Personnel,
American Society for Industrial Security

Stivers, Tracey . . . . . .Coordinator of Technical Services,
Berry Library
B.A., Northern Kentucky University
M.S.L.S., University of Kentucky

Stoll, Kenneth V. . . . . .Instructor,
Engineering Technologies Division
B.S., Miami University
M.Ed., University of Cincinnati

Stormer, Thomas, RRT . . . . . .Instructor,
Health Technologies Division
A.A.S., Sinclair Community College
B.S., University of Cincinnati

Stull, Clark . . . . . .Program Chair,
Information Technologies Division
B.S., University of Cincinnati

Stump, Diane S. . . . . .Counselor,
Enrollment and Student Development
B.A., M.A., Eastern Kentucky University

Suddendorf, Lawrence R., MT (ASCP), Ed.D. . .Instructor,
Health Technologies Division
B.S.M.T., University of Cincinnati
M.T. (ASCP), Cincinnati General Hospital
School of Medical Technology
M.Ed., Ed.D., University of Cincinnati

Sulek, Carl E. . . . . .Professor Emeritus,
Business Technologies Division
B.S., Ohio University
M.Ed., University of Cincinnati

Sunderhaus, Edward . . . . . .Instructor,
Sciences Division
B.S., Xavier University

Swanson, Richard . . . . . .Instructor,
Sciences Division
B.S., University of Cincinnati

Swinford, Margaret, R.N. . . . . .Professor Emeritus,
Health Technologies Division
Diploma, Bethesda Hospital School of Nursing
B.S.N., Edgecliff College
M.S.N., University of Kentucky

Tarhan, Sait, J.D. . . . . .Instructor,
Business Technologies Division
B.A., University of Kentucky
Juris Doctorate, University of Kentucky

Taylor, Russ . . .Media Specialist - Instructional Resources,
Berry Library
B.S., Miami University

Turner, Jackie, RDCS, RVT . . . . . .Program Chair,
Health Technologies Division
B.S., University of Dayton

Uffman, Phyllis, RN, OCN . . . . . .Lab Manager,
Health Technologies Division
B.S.N., Capital University
M.Ed., Xavier University

Van Camp, Clayton, M. . . . . .Professor Emeritus,
Engineering Technologies Division
A.A.S., Ohio College of Applied Science

Van de Hatert, Dale EMP/T . . . . . .Instructor,
Health Technologies Division

Varchol, Dorothy, RN, BC . . . . . .Instructor,
Health Technologies Division
Diploma, Nesbitt Memorial Hospital
B.S.N.Ed., Wilkes College
M.A., University of Scranton
M.S.N., University of Cincinnati

Vetter, Jeffery A. . . . . .Program Chair,
Information Technologies Division
A.A.B., Cincinnati Technical College
B.S., Xavier University

Vonderhaar, Kendra . . . . . .Co-op Coordinator,
Business Technologies Division
A.A.S., Cincinnati State College
B.B.A., Thomas More College

von Volborth, Elizabeth, RN . . . . . .Instructor,
Health Technologies Division
B.S.N., M.S.N., University of Cincinnati

Vossmeyer, Philip A. . . . . .Program Chair,
Health Technologies Division
A.A.B., Cincinnati Technical College
A.A.S., Northern Kentucky University
Certification, Paramedic/Firefighter,
American Heart CPR Instructor

Wagner, John P., L.P.C.C., N.C.C. . . . . .Counselor,
Enrollment and Student Development
B.S., M.Ed., University of Cincinnati

Waits, Adam . . . . . .Co-op Coordinator,
Information Technologies Division
A.A.B., Cincinnati State
B.A., Miami University

Waits, Carolyn . . . . . .Program Co-Chair,
Business Technologies Division
B.S., University of Cincinnati
M.Ed., Xavier University

Walters, Nancy L., MT (ASCP), CMA . . . . . .Instructor,
Health Technologies Division
A.B., Lindenwood College

Walton, Gary . . . . . Program Chair,
Business Technologies Division
A.A.B., Cincinnati Technical College
B.S., University of Cincinnati

Watson, Susan, RDMS . . . . . .Program Chair,
Health Technologies Division
B.S., Kettering College of Medical Arts

Watts, Olivia, RN . . . . . .Program Chair,
Health Technologies Division
B.S.N., University of Cincinnati

Webster, Gary M., P.E. . . . . .Program Chair,
Information & Engineering Technologies Divisions
B.S.E.E., Ohio State University
Registered Professional Engineer, State of Ohio

Weichold, A. Edward . . . . . .Instructor,
Engineering Technologies Division
A & P License, A.A.S., Cincinnati Technical College

Weingartner, Paul, P.E. . . . . . **.Instructor,**
Engineering Technologies Division
B.S.E.E.T., University of Cincinnati

Wells, Ralph . . . . . **.Instructor,**
Engineering Technologies Division
B.S., M. Eng.EE., University of Louisville

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Information Technologies Division
B.A., Fisk University
M.B.A., Xavier University

Wilson, Cornelius (Jack) . . . . . **.Instructor,**
Business Technologies Division
B.S., University of Cincinnati

Winkle, LaVerne . . . . . **.Professor Emeritus,**
Engineering Technologies Division
E.E., B.A., University of Cincinnati

Winter, Stephanie, ... **.Instructor,**
Humanities Division
B.A., M.A., Northern Kentucky University

Wolfer, Katherine, RN . . . . . **.Instructor,**
Health Technologies Division
Diploma, Christ Hospital School of Nursing
B.S.N., Northern Kentucky University

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Business Technologies Division
B.S., Eastern Kentucky University
M.A., Central Michigan University
ASQ Certified Quality Manager

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M.F.A., University of Iowa

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Sciences Division
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M.S.E.D., Xavier University
Registered Professional Engineer, Ohio

Wyatt, Walter W. . . . . . **.Professor Emeritus,**
Business Technologies Division
B.S., Ohio State University

Yelton, Steven J., P.E. . . . . . **.Program Chair,**
Information and Engineering Technologies Divisions
A.A.S., Cincinnati Technical College
B.S.E.E., Ohio State University
Registered Professional Engineer, State of Ohio

Youngpeter, Donald, P.E. . . . . . **.Program Chair,**
Information Technologies Division
B.S.M.E., M.S.M.E., University of Cincinnati
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Sciences Division

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Ed.D., University of Cincinnati

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Heather Morgan, M.D. . . . . .SHI Integrative Medical Massage School
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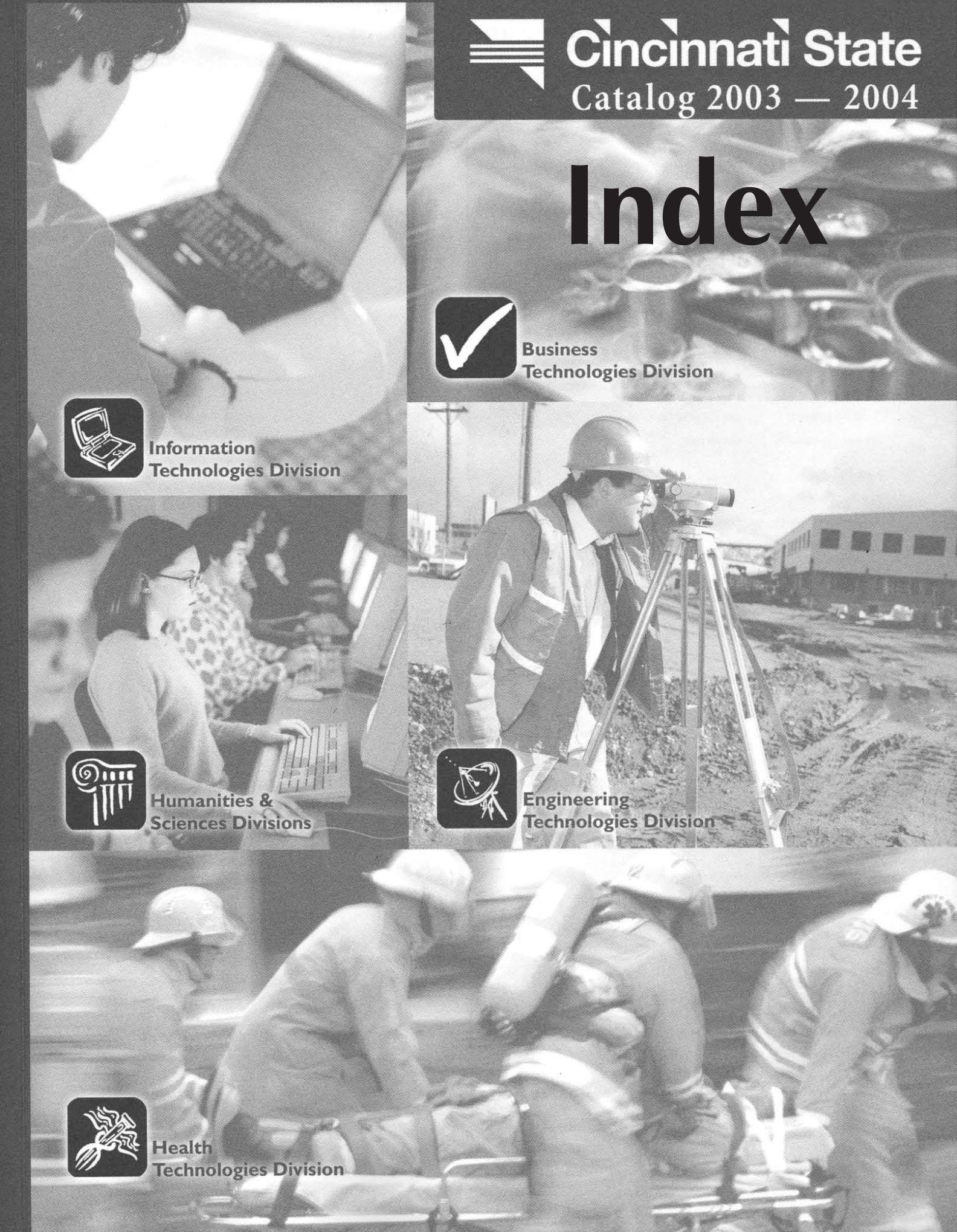

Cincinnati State
Catalog 2003 — 2004

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Business
Technologies Division

Information
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Technologies Division

Health
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2003 - 2004 Calendar

Early Fall 2003

Monday, September 1 -	Labor Day Observed - College Closed
Tuesday, September 2 -	Classes begin
Tuesday, September 2 – Monday, September 8 -	Instructor consent required to register for a course that has met
Monday, September 8 -	Last day to drop a course and receive a 100% refund of tuition
Tuesday, September 9 – Monday, September 15 -	Instructor and dean consent required to register for a course
Monday, September 15 -	Last day to drop a course and receive a 50% refund of tuition
	Last day to register or enter a course
	Last day to drop a course without a grade appearing on student's record
	Last day to declare an Audit in a course
Tuesday, September 16 -	First day to request a Withdrawal for a course
Monday, October 13 -	Columbus Day Observed - College Closed
Tuesday, October 21 -	Last day to Withdraw from a course
Tuesday, November 4 -	Classes end

Late Fall 2003

Monday, November 10 -	Veterans Day Observed - College Closed
Tuesday, November 11 -	Classes begin
Tuesday, November 11 – Monday, November 17 -	Instructor consent required to register for a course that has met
Monday, November 17 -	Last day to drop a course and receive a 100% refund of tuition
Tuesday, November 18 – Monday, November 24 -	Instructor and dean consent required to register for a course
Thursday, November 27 -	Thanksgiving Day Holiday Observed - College Closed
Friday, November 28–29 -	College Closed
Monday, November 24 -	Last day to drop a course and receive a 50% refund of tuition
	Last day to register or enter a course
	Last day to drop a course without a grade appearing on student's record
	Last day to declare an Audit in a course
Tuesday, November 25 -	First day to request a Withdrawal for a course
Wednesday, December 24 – Sunday, January 4, 2002 -	Winter Break - College Closed
Monday, January 12 -	Last day to Withdraw from a course
Monday, January 19 -	Martin Luther King Jr. Holiday Observed - College Closed
Tuesday, January 27 -	Classes end

Winter 2004

Monday, February 2 -	Classes begin
Monday, February 2 - Friday, February 6 -	Instructor consent required to register for a course that has met
Friday, February 6 -	Last day to drop a course and receive a 100% refund of tuition
Monday, February 9 – Friday, February 13 -	Instructor and dean consent required to register for a course
Friday, February 13 -	Last day to drop a course and receive a 50% refund of tuition
	Last day to register or enter a course
	Last day to drop a course without a grade appearing on student's record
	Last day to declare an Audit in a course
Monday, February 16 -	Presidents' Day Holiday Observed - College Closed
Tuesday, February 17 -	First day to request a Withdrawal for a course
Monday, March 22 -	Last day to Withdraw from a course
Monday, April 5 -	Classes end

Spring 2004

Monday, April 12 -	Classes begin
Monday, April 12 – Friday, April 16 -	Instructor consent required to register for a course that has met
Friday, April 16 -	Last day to drop a course and receive a 100% refund of tuition
Monday, April 19 – Friday, April 23 -	Instructor and dean consent required to register for a course
Friday, April 23 -	Last day to drop a course and receive a 50% refund of tuition
	Last day to register or enter a course
	Last day to drop a course without a grade appearing on student's record
	Last day to declare an Audit in a course
Monday, April 26 -	First day to request a Withdrawal for a course
Monday, May 31 -	Memorial Day Holiday Observed - College Closed
	Last day to Withdraw from a course
Monday, June 14 -	Classes end

Summer 2004

Monday, June 28 -	Classes begin
Monday, June 28 – Friday, July 2 -	Instructor consent required to register for a course that has met
Friday, July 2 -	Last day to drop a course and receive a 100% refund of tuition
Tuesday, July 6 – Friday, July 9 -	Instructor and dean consent required to register for a course
Monday, July 5 -	Independence Day Holiday Observed -College Closed
Friday, July 9 -	Last day to drop a course and receive a 50% refund of tuition
	Last day to register or enter a course
	Last day to drop a course without a grade appearing on student's record
	Last day to declare an Audit in a course
Monday, July 12 -	First day to request a Withdrawal for a course
Monday, August 16 -	Last day to Withdraw from a course
Monday, August 30 -	Classes end

Early Fall 2004

Tuesday, September 7 -	Classes begin

Degrees and Certificates

Business Technologies Division
Associate of Arts
Pre-Business Administration *
Associate of Applied Business
Accounting Technology *
Automotive Service Management Technology *
Business Financial Management Technology *
Business Management Technology *
Culinary Arts Technology
Executive Assistant Technology *
Graphics Imaging Technology *
Hotel Management Technology *
Information Processing Technology *
International Trade Management Technology *
Internet Marketing Technology •
Landscape Horticulture Technology *
Legal Assistant Technology *
Marketing Management Technology *
Office Management Technology *
Packaging & Advertising Technology *
Real Estate Technology •
Restaurant Management Technology *
Supply Chain Management Technology *
Turfgrass Management Technology *
Associate of Applied Science
Cemetery Management *
Dietetic Technician -
Certificates
Accounting *
Advertising Design •
Automotive Service Technician *
Culinary Arts •
Dietary Management •
Entrepreneurship •
Human Resource Management *
Internet Marketing •
Office Support *
Paralegal *
Printing Management •
Production Artist •
Quality Management •
Turfgrass Management *

Engineering Technologies Division
Associate of Applied Science
Aviation Maintenance Technology *
Chemical Technology *
Civil Engineering Technology
    Civil Engineering Technology - Architectural *
    Civil Engineering Tech. - Construction Management *
    Civil Engineering Technology - Surveying *
Electro-Mechanical Engineering Technology *
Electrical Engineering Technologies
    Biomedical Equipment & Information Systems Technology *
    Electronics Engineering Technology
    Laser Electro-Optics Engineering Technology -
Environmental Engineering Technology *
Environmental Engineering Technology -
    Water & Wastewater Major *
Industrial Design Technology *
Mechanical Engineering Technology *
    Mechanical Engineering Technology - Design *
    Mechanical Engineering Tech. - Manufacturing Management *
    Mechanical Engineering Technology - Plastics Option *
Certificates
Aviation Mechanics Airframe *
Aviation Mechanics Powerplant *
Avionics *
Computer Repair
Construction Materials Testing
HVAC and Energy Management •
Land Surveying
Manufacturing CNC •

Health Technologies Division
Associate of Applied Science
Clinical Laboratory Technician -
Diagnostic Medical Sonography
    DMS-Abdominal/Obstetric-Gynecological
    DMS-Cardiovascular
Dietetic Technician -
Emergency Medical Technician-Paramedic
Fire Service Technology
Health and Fitness Technology *
Health Information Management Technician *
Integrative Medical Massage Therapy *
Medical Assistant Clinical Specialist -
Multicompetency Health Technician *
Nursing (RN) -
LPN to RN Progression Program *
Occupational Therapy Assistant -
Respiratory Care Technology -
Surgical Technology -
Associate of Technical Studies
Integrative Medical Massage Therapy
Certificates
Aquatic Group Fitness Instructor -
Central Service Technology -
Clinical Assistant -
Coding Specialist
Diagnostic Medical Sonography
    DMS-Abdominal/Obstetric-Gynecological
    DMS-Cardiovascular
Dietary Management §
Electrocardiography (Advanced) Arrhythmia Recognition •
Electrocardiography (Basic) •
Emergency Medical Technician-Basic *
Emergency Medical Technician-Paramedic *
General X-Ray Machine Operation
Geriatric Activities Coordinator *
Group Fitness Instructor *
Health Unit Coordinator *
Medical Assistant -
Medical Transcriptionist *
Nurse Aide Training *
Patient Care Assistant *
Personal Fitness Trainer -
Resistance Training •
Restorative Aide

Humanities Division
Associate of Arts *
Associate of Individualized Study *
Associate of Technical Study *
Associate of Technical Study - Law Enforcement *
Associate of Applied Science
Early Childhood Care and Education -
Interpreter Training *
Certificates
Deaf Studies *
Early Childhood Care and Education -
Early Childhood Care and Education Leadership -
Employee and Labor Relations *
Human Services *

Information Technologies Division
Associate of Applied Business
Business Computer Programming Technology *
Computer Information Systems Technology *
Network Administration Technology *
Associate of Applied Science
Audio/Video Production
Computer Graphics
Computer Network Engineering Technology *
Database Management Systems Technology *
Database Management Systems - Administration Major *
PC Support and Administration Technology *
Software Engineering Technology *
Technical Communication
Web Design
Certificates
Electronic Publishing
Technical Communication

Sciences Division
Associate of Science *

* Day and evening program available • Only evening program available § Friday evenings & Saturdays - Only day program available † Pending Ohio Board of Regents approval