Every student is welcome at Heartland Community College! We are here to provide all of our students with an excellent, affordable education.

At Heartland Community College (HCC), you will experience small classes and first-rate teaching from highly qualified faculty. You will also find the support services students need to succeed, including financial aid, child care and a full range of academic support services—even if you have special learning needs.

The HCC campus is second to none as a learning environment. State-of-the-art classrooms and technology provide you an education for today and tomorrow.

Whether you are beginning or resuming your college career, experience the leading edge of education at HCC. Explore our Web site, give us a call, or, best of all, stop by and talk with one of our advisors. We look forward to seeing you.

Sincerely,

Jonathan M. Astroth
President
## FALL SEMESTER 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 17</td>
<td>Classes begin for 16 week and 1st 8 week session</td>
</tr>
<tr>
<td>September 4</td>
<td>Labor Day (College closed)</td>
</tr>
<tr>
<td>September 5</td>
<td>Classes begin for 12 week session</td>
</tr>
<tr>
<td>October 12</td>
<td>Classes End for 1st 8 week session</td>
</tr>
<tr>
<td>October 13</td>
<td>Midterm Break - no classes, College offices open</td>
</tr>
<tr>
<td>October 16</td>
<td>Classes begin for 2nd 8 week session</td>
</tr>
<tr>
<td>November 22</td>
<td>Thanksgiving Break begin - no classes - College offices open</td>
</tr>
<tr>
<td>November 23-26</td>
<td>Thanksgiving Break - College closed</td>
</tr>
<tr>
<td>December 1</td>
<td>Classes end for 12 week session</td>
</tr>
<tr>
<td>December 4-5</td>
<td>Final Exams for 12 week session Courses</td>
</tr>
<tr>
<td>December 8</td>
<td>Classes end for 16 week and 2nd 8 week session</td>
</tr>
<tr>
<td>December 9-15</td>
<td>Final Exam week for 16 week session</td>
</tr>
</tbody>
</table>

## SPRING SEMESTER 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 15</td>
<td>Martin Luther King Day (College closed)</td>
</tr>
<tr>
<td>January 16</td>
<td>Classes begin for 16 week and 1st 8 week sessions</td>
</tr>
<tr>
<td>January 29</td>
<td>Classes begin for 12 week session</td>
</tr>
<tr>
<td>March 10</td>
<td>Classes end for 1st 8 week session</td>
</tr>
<tr>
<td>March 12-17</td>
<td>Mid-Term Break (Spring Break)</td>
</tr>
<tr>
<td>March 19</td>
<td>Classes begin for 2nd 8 week session</td>
</tr>
<tr>
<td>April 21</td>
<td>Classes end for 12 week session</td>
</tr>
<tr>
<td>April 23-28</td>
<td>Final Exams for 12 week session</td>
</tr>
<tr>
<td>May 9</td>
<td>Classes end for 16 week and 2nd 8 week sessions</td>
</tr>
<tr>
<td>May 10</td>
<td>Optional Review Day - clinical course classes meet</td>
</tr>
<tr>
<td>May 11-17</td>
<td>Final Exam week for 16 week session</td>
</tr>
<tr>
<td>May 18</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

## SUMMER SESSIONS 2007

### 4 WEEK SESSION - 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 21</td>
<td>Classes begin</td>
</tr>
<tr>
<td>May 28</td>
<td>Memorial Day Holiday (College closed)</td>
</tr>
<tr>
<td>June 13 &amp; 14</td>
<td>Final Exams - 4 week session</td>
</tr>
</tbody>
</table>

### REGULAR 8 WEEK SESSION - 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 4</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday (College closed)</td>
</tr>
<tr>
<td>July 24 - 26</td>
<td>Final Exams</td>
</tr>
</tbody>
</table>

### 6 WEEK SESSION - 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 18</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday (College closed)</td>
</tr>
<tr>
<td>July 24 - 26</td>
<td>Final Exams</td>
</tr>
</tbody>
</table>
FALL SEMESTER 2007

August 16 (R) Classes begin for 16 week and 1st 8 week session
September 3 (M) Labor Day (College closed)
September 4 (T) Classes begin for 12 week session
October 11 (R) Classes end for 1st 8 week session
October 12 (F) Midterm Break - no classes, College offices open
October 15 (M) Classes begin for 2nd 8 week session
November 21 (W) Thanksgiving Break begin - no classes - College offices open
November 22 - 25 Thanksgiving Break - College closed
November 30 (F) Classes End for 12 week session
December 3 - 4 (M & T) Final Exams for 12 week session Courses
December 7 (F) Classes End for 16 week and 2nd 8 week session
December 8 - 14 (S-F) Final Exam week for 16 week session

SPRING SEMESTER 2008

January 14 (M) Classes begin for 16 week and 1st 8 week
January 21 (M) Martin Luther King Day (College closed)
January 28 (M) Classes begin for 12 week session
March 7 (F) Classes End for 1st 8 week session
March 10-15 (M-Sa) Mid-Term Break (Spring Break)
March 17 (M) Classes begin for 2nd 8 week session
April 26 (Sa) Classes End for 12 week session
April 28 - May 3 (M-Sa) Final Exams for 12 week session
May 7 (W) Classes End for 16 week and 2nd 8 week sessions
May 8 (R) Optional Review Day - clinical course classes meet
May 9-15 (F-R) Final Exam week for 16 week session
May 16 (F) Commencement

SUMMER SESSIONS 2008

REGULAR 8 WEEK SESSION - 2008
June 2 (M) Classes begin
July 4 (F) Independence Day Holiday (College closed)
July 28 - 31 (M - R) Final Exams
There’s no question that Michael is an animated guy. Michael’s goal is to create some animation himself. He’s taking his general education requirements at Heartland before transferring to a Chicago-area university where he wants to study computer animation. He hopes someday to work on gaming systems for Sony or Microsoft.
HCC History and Facts

Heartland Community College was founded in 1990 and began offering classes in fall of 1991. From Pontiac to Lincoln, Illinois, HCC serves a geographic corridor that includes parts of DeWitt, Ford, Livingston, Logan, McLean and Tazewell counties. This area, known as District 540, includes a population of more than 190,000 residents and includes 17 high schools (see page 9 for list).

HCC offers programs for transfer to a university and applied programs in a wide range of careers. The College offers Associate in Arts, Associate in Science, Associate in Engineering Science, Associate of Arts in Teaching and Associate in Applied Science degrees, as well as certificates.

Heartland is proud to offer high quality instruction by dedicated and knowledgeable instructors. HCC facilities provide an innovative and technologically progressive learning environment. In 2000, the permanent campus was opened in Normal, Illinois. Currently, the College is constructing a Workforce Development Center, with completion anticipated in 2007.

Vision and Philosophy

Heartland Community College responds to the lifelong learning needs of diverse students and is a vital, progressive community resource. The College is committed to student success as its fundamental measure of institutional success and believes that students who benefit from public education also accept a responsibility to society.
The Campus

HCC has centers in Pontiac and Lincoln, facilities in Bloomington, and a main campus in Normal, Illinois. The main campus in north Normal, is located on 160 acres at 1500 West Raab Road. The 240,000 square foot facility occupies three primary buildings attached with interior walkways on the second level.

Construction of an additional 100,000 square foot facility, the Workforce Development Center, is in progress to the north of the main campus on Raab Road. This facility will address community business and corporate training and educational needs, providing larger capacity classrooms and lab spaces to accommodate multiple technologies.

Accreditation

Heartland Community College is recognized by the Illinois Community College Board and is accredited by the Higher Learning Commission and a member of the North Central Association, 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602-2504, (800) 621-7440. The Nursing Program is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006, (212) 363-5555.

High Schools within District 540

Bloomington High School
Calvary Baptist Academy
Central Catholic High School
El Paso-Gridley High School **
Flanagan High School**
Hartsburg-Emden High School
Heyworth High School
Lexington High School
Lincoln High School
Normal Community High School
Normal Community West High School
Olympia High School
Pontiac Township High School
Prairie Central High School
Ridgeview High School
Tri-Valley High School
University High School

** In district by consortium agreement with Illinois Central College
After 15 years in the printing industry, John could see job opportunities dwindling. When he decided it was time for a change, Heartland was his next logical step. Now John is taking classes – some right here in Pontiac – to prepare for study in the CNA and Radiology programs. His plan is to get a job in health care so he can provide a secure future for his young sons.
Admission Policy

HCC is an open-admission institution. The College admits any student who can benefit from our programs, including:
- High school graduates
- GED certificate holders
- All persons 18 years of age or older
- Transfer students from other colleges and universities
- Current high school students recommended by an appropriate high school official.

Admission to the College does not ensure admission to a particular course or program of study. The Illinois Board of Higher Education has established minimum high school course requirements for admission into any public universities and community college transfer (A.A./A.S./A.E.S. degree) programs. Admission to certain programs may be limited and subject to specific requirements. Students should check with an academic advisor to determine their status regarding these requirements. In limited enrollment programs, the College will give preference to residents of District 540.

Admission / Enrollment Procedure

Students who want to enroll and pursue a degree or certificate should:
1) Submit an application for admission to Heartland Community College. If a high school graduate, have transcript from high school submitted directly to HCC; if a GED recipient, submit a copy of GED certificate scores to HCC.
2) Submit ACT scores if available.
3) Complete HCC Basic Skills Assessment.
4) If previous or current student from other college, submit official transcripts from other institution.
5) Make an appointment with an HCC academic advisor.
6) Pay tuition and fees.

An HCC admission application may be requested from a student’s high school or from Heartland. Applications online at www.heartland.edu/application are also available for download.

Admission of International Students

Heartland Community College welcomes international students. Prospective non-immigrant students may apply for admission in accordance with the following admission procedures for international students:

1. All required material in the International Student Application Packet is available online at www.heartland.edu/international/admission.html.
2. Original transcripts of schools attended (high school, college, university) accompanied by a certified translation into English, if not originally in English.
3. Official Test of English as a Foreign Language (TOEFL) score of at least 550 paper-based, 213 computer-based, 79 TOEFL iBT sent directly to HCC from the Educational Testing Service in New Jersey.
4. Affidavit of financial support.

Filing deadlines for international student applications are:
- June 15 for the fall semester
- November 15 for the spring semester
- April 15 for the summer session

Any exception to the admission requirements for international students must be approved in writing by the Dean of Student Services. All required admission materials must be received by the deadlines to be considered for admission. An I-20 form (certificate for eligibility for non-immigrant student status) will be issued upon acceptance for admission.

There is no application fee.
Acceptance of Military Credit

The College follows the recommendation of the American Council on Education in granting six (6) semester hours of military credit for DD214 and one (1) year of active duty.

Acceptance of Transfer Credit

Transfer credit may be accepted from another college or university accredited by one of the regional accrediting associations approved by the Council of Post-Secondary Accreditation. Transfer evaluations are based on the student’s program of study at HCC. An official transcript must be requested and directed to the Student Records Office at HCC. Transfer credit will not be posted to the HCC transcript until at least one semester of credit has been earned at HCC.

Accepted transfer credits will be entered on the student’s permanent record at HCC, but the grades earned in these courses will not be used in computing the student’s cumulative grade point average.

Assessments

Basic Skills Assessment
To increase the likelihood of student success, HCC uses the following guidelines in implementing a mandatory assessment of basic skills for degree-seeking students, transfer students and non-degree seeking students. Basic Skills scores will be used to determine placement into HCC courses.

For First-Time College Students
Each student in this category takes part in a complete assessment prior to enrollment. All students must assess in English, math and reading, however ACT subscores in English and reading may be used for placement if the ACT was taken within the last two years. (Note subscore exemption levels.)

An ACT English subscore of 21-36 exempts students from the English placement test. An ACT reading subscore of 21-36 exempts students from the reading placement test. ACT scores may be submitted to the college in one of the following three ways:
1) Request that ACT send scores directly to Heartland, or
2) Request that the student’s high school send a transcript that includes their ACT scores, or
3) Bring a student copy of the ACT score sheet to HCC.

For Transfer Students
Assessment requirements will be determined after review of the student’s transcripts.

Students With Special Testing Needs
Students with special testing needs or other considerations regarding the Basic Skills Assessment process should contact the Dean of Student Services or the Director of Disability Support Services prior to taking the assessment evaluation.

The Basic Skills Assessment is offered on a walk-in basis. A schedule for assessment times and dates is available in the current class credit schedule and on the HCC Web site. Guidelines and specific sample assessment questions are available online at www.heartland.edu/assessmentTesting. There are no fees for assessment.

Advanced Placement Program

The Advanced Placement Program is sponsored by the College Board. The examinations are administered at designated high school testing centers. Students will be awarded credit as indicated below. Official Advance Placement scores must be sent directly to HCC from the College Board.

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score for Credit</th>
<th>Course for which Credit is Allowed</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>4 or 5</td>
<td>POS 101</td>
<td>3 hours</td>
</tr>
<tr>
<td>American History</td>
<td>3, 4 or 5</td>
<td>HIST 135, 136</td>
<td>6 hours</td>
</tr>
<tr>
<td>Art Studio- General</td>
<td>3, 4 or 5</td>
<td>ART 102</td>
<td>3 hours</td>
</tr>
<tr>
<td>Art Studio- Drawing</td>
<td>3, 4 or 5</td>
<td>Art 104</td>
<td>3 hours</td>
</tr>
<tr>
<td>Art History</td>
<td>3, 4 or 5</td>
<td>ART 211, 212</td>
<td>6 hours</td>
</tr>
<tr>
<td>Biology</td>
<td>4 or 5</td>
<td>BIOL 161, 162</td>
<td>8 hours</td>
</tr>
<tr>
<td>Calculus Test BC</td>
<td>3, 4 or 5</td>
<td>MATH 161, 162</td>
<td>8 hours</td>
</tr>
<tr>
<td>Calculus Test AB</td>
<td>3, 4 or 5</td>
<td>MATH 161</td>
<td>4 hours</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>CHEM 161, 162</td>
<td>10 hours</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>CHEM 161</td>
<td>5 hours</td>
</tr>
<tr>
<td>Comparative Politics</td>
<td>4 or 5</td>
<td>POS 220</td>
<td>3 hours</td>
</tr>
<tr>
<td>Computer Science Test AB</td>
<td>4 or 5</td>
<td>CSCI 130, 131</td>
<td>8 hours</td>
</tr>
<tr>
<td>English Lang-Comp</td>
<td>5</td>
<td>ENGL 101, 102</td>
<td>6 hours</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>ENGL 101</td>
<td>3 hours</td>
</tr>
<tr>
<td>European History</td>
<td>3, 4 or 5</td>
<td>HIST 101, 102</td>
<td>6 hours</td>
</tr>
<tr>
<td>Macro &amp; Micro Economics</td>
<td>4 or 5</td>
<td>ECON 101, 102</td>
<td>6 hours</td>
</tr>
<tr>
<td>Physics Test B</td>
<td>3, 4 or 5</td>
<td>PHYS 161, 162</td>
<td>10 hours</td>
</tr>
<tr>
<td>Physics Test C, Part 1</td>
<td>3, 4 or 5</td>
<td>PHYS 171</td>
<td>4 hours</td>
</tr>
<tr>
<td>Physics Test C, Part II</td>
<td>3, 4 or 5</td>
<td>PHYS 172</td>
<td>4 hours</td>
</tr>
<tr>
<td>Psychology</td>
<td>4 or 5</td>
<td>PSY 101</td>
<td>3 hours</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>4 or 5</td>
<td>SPAN 102, 201, 202</td>
<td>12 hours</td>
</tr>
<tr>
<td>Statistics</td>
<td>4 or 5</td>
<td>MATH 141</td>
<td>4 hours</td>
</tr>
</tbody>
</table>
After Assessment

Course Placement
If assessment results indicate that developmental courses are necessary, students are required to take these courses upon initial enrollment and may not delay developmental course work. Refer to the Course Selection Guide on page 108 for a table of credit-bearing courses for developmental reading and writing. Students should work with an academic advisor to select appropriate courses to help them achieve academic success.

Course Icons
Icons in the Course Description section of this catalog indicate which credit-bearing courses are open to students in developmental courses (those below the 100 level) in accordance with the Course Selection Guide. To remain in the credit-bearing courses, developmental students must maintain concurrent enrollment in their developmental reading and writing courses.

Proficiency Credit
Up to 15 (25%) semester hours of proficiency credit may be accepted towards the completion of an Associate in Arts or Associate in Science degrees by HCC. Proficiency credit can be earned by taking locally developed and/or national proficiency examinations (i.e. CLEP, Advance Placement) or military credit. Associate in Applied Science degree programs should see specific program requirements for transfer proficiency credit information.

Proficiency credit will be granted after a student has established a transcript by completing at least one undergraduate college class at Heartland.

For information on the availability of locally developed proficiency exams, contact the Assessment Office at (309) 268-8057. A fee of $50 will be charged for each exam administered.

Academic Advisement
The professional assistance and guidance of full-time academic advisors at Heartland are available to help full and part-time students identify and set career goals, plan a program of study and select courses to fulfill their objectives. Advisors are also able to assist students in exploring careers and educational programs and help them understand and apply courses and skills in relevant decisions. Students may meet with academic advisors at the main campus and the Lincoln and Pontiac Centers.

Students are required to meet with an academic advisor prior to enrollment. An appointment to meet with an advisor should be made well in advance of each enrollment period. Students are encouraged to seek advisement services twice during each semester. Advisors should also be consulted before changing majors, transferring to another institution, withdrawing from HCC, when experiencing academic difficulty and regarding changes in an approved schedule.

Advisor Schedule:
Monday through Thursday, 8 AM to 8 PM, and Fridays 8 AM to 4:30 PM.
Summer and holiday hours may vary and are available online at www.heartland.edu/advisement and in the published schedule of classes.

Audit
Students may register to audit a class one week prior to the start of classes. Audit students pay full tuition and fees and are entitled to the same quality instruction and assistance given all students. Audit students are not required to take tests, write papers or complete other course assignments, but may do so if desired. No credit is granted for an audit. Students may not change from credit status to audit status or from audit to credit status.
Change of Address

It is the responsibility of the student to notify the College of any change in address. All official College information will be sent to the address on file. Failure to notify the college of changes of address will result in a restriction of future enrollments and the release of transcripts. Change of address forms may be completed in the Student Records Office located in the Student Services Center at the main campus.

Credit/No Credit

The purpose of the Credit/No Credit option is to encourage students to explore learning in a range of academic areas without rigid concern for the letter grade assigned to learning efforts. The following requirements apply to the Credit/No Credit Option:

- Students may take up to 25% of their course work on a Credit/No Credit basis.
- Credit/No Credit status cannot be changed after the end of the full refund period (the first 10 days of a 16-week class and the first 5 days of an 8-week class or summer session).
- Students on academic probation may not register for the Credit/No Credit option.
- Students must earn the equivalent of a grade of "C" or better to earn "CR".
- Students should be aware that some courses are offered only on a Credit/No Credit basis and should check with their Academic Advisor prior to enrolling.

Enrollment

Students may enroll at the main campus in Normal or at the Lincoln and Pontiac Centers. Dates, times and other details are published in the class schedule and are available online at www.heartland.edu/advisement.

Some restrictions for enrollment may occur due to academic probation/suspension, assessment results, course prerequisites, a delinquent financial account, outstanding obligations such as library fines or other valid reasons.

Maximum Course Load

The recommended maximum number of semester hours for a student during an academic semester is: 18 hours for a 16-week term, 9 hours for a summer term. Enrolling in more than the maximum load requires approval from the Dean of Student Services or the Director of Advisement and Enrollment Services. Granting of this request will depend on the student's academic record. Caution is advised for students concurrently enrolled at other institutions, to adhere to the maximum load policy.

Residency Requirements

Individuals are considered residents of Heartland’s District 540 if one of the following criteria is met for at least 30 days prior to the start of the academic term. (Documentation of residency must be provided at the time of enrollment.)

1. Residing with his/her parent or guardian within the District.
2. Emancipated minor, completely self-supporting and residing within the District.
3. Married and maintaining a family residence within the District.
4. Single and self-supporting as defined by the Federal Office of Education and maintains a residence within the District.
5. Resides outside the District, but working full-time within the District.

Valid documentation (issued within 30 days prior to the start of the academic term) which are acceptable for verification of residence include:

- Voter’s registration in District 540
- Tax, utility or rent receipts in District 540.
- Driver’s license or vehicle registration showing in-district address.
- Bank account in District 540.

Transcripts

To request an official transcript, a request form must be submitted to the Student Services Center. The transcript request form is also available for download online at www.heartland.edu/transcripts. The written request may be mailed to:

Heartland Community College
1500 W. Raab Rd.
Normal, IL 61761

or faxed to:

(309) 268-7992.

There is no fee to obtain transcripts; however, they will be withheld if a student has not met all financial obligations to the College. The College will not forward the original copy nor a copy of any transcript received by the College from another institution or agency to a third institution. Transcripts, test scores, etc., must be requested by the student directly from the originating institution or agency.

Tuition and Fees

See College Expenses on page 184 for complete tuition information.

Unit of Credit

A semester hour is the amount of credit usually earned by attending a non-laboratory class for one hour a week for 16 weeks. In laboratory courses, one semester hour of credit is granted for every two or three hours of laboratory work.
Cheryl started at Heartland in the Business Essentials program to obtain needed employment skills. After graduating from the 16-week intensive program, she decided that continuing at Heartland was the key to reaching her goals. Now she’s pursuing a 4-year degree with a major in social work and a minor in business.
Associate Degrees and Certificates
Graduation Requirements
Illinois Articulation Initiative
Student Learning Outcomes
Chargeback/Cooperative Agreements
Academic Divisions
Degree and Certificate Programs
GRADUATION REQUIREMENTS

It is the student’s responsibility to know all graduation requirements and complete the self-graduation check prior to applying to graduate. HCC is a participating Illinois Articulation Initiative (IAI) institution, and the general education core is in compliance with this statewide initiative.

Associate in Arts
Designed to provide two academic years of college study for transfer to a four-year university or upper-division college toward a Bachelor of Arts degree.

General Education Core Requirements
**Communication 9 Semester Hours
Social and Behavioral Sciences 9 Semester Hours
Humanities and Fine Arts 9 Semester Hours
Life and Physical Sciences 7 Semester Hours
Mathematics 3 Semester Hours
Emphasis/Concentration 12 Semester Hours
Electives 11 Semester Hours
Total Semester Hours 60

Associate in Science
Designed to provide two academic years of college study for transfer to a four-year university or upper-division college toward a Bachelor of Science degree.

General Education Core Requirements
**Communication 9 Semester Hours
Social and Behavioral Sciences 9 Semester Hours
Humanities and Fine Arts 9 Semester Hours
Life and Physical Sciences 8 Semester Hours (all labs required)
Mathematics 6 Semester Hours
Emphasis/Concentration 12 Semester Hours
Electives 7 Semester Hours
Total Semester Hours 60

Associate in Engineering Science

General Education Core Requirements
**Communication 6 Semester Hours
Social and Behavioral Sciences 3 Semester Hours
Humanities and Fine Arts 3 Semester Hours
Life and Physical Sciences 13 Semester Hours
Mathematics 16 Semester Hours
Computer Science 3 Semester Hours
Engineering 12 Semester Hours
Specialty Courses 6 Semester Hours
Total Semester Hours 62

See pages 22-26 for courses which apply to general education core.

See page 55 for specific A.E.S. requirements.

Emphasis courses and electives should be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability toward the student’s major and minor fields of study.

**A grade of "C" or better is required for ENGL 101 and ENGL 102.
Other Graduation Requirements

To be eligible for an Associate in Arts, Associate in Science, Associate in Engineering Science or Associate in Arts–Teaching degree at Heartland Community College, a student must fulfill the following requirements.

1. Complete a minimum of 15 semester hours of college-level credit at HCC; this excludes Advanced Placement, CLEP, proficiency or military credit.
2. Complete no fewer than 60 semester hours for A.A. & A.S. and no fewer than 62 for A.E.S. and A.A.T., not to include courses numbered below 100. Up to 15 semester hours (25 percent) may be earned through proficiency credit and military credit.
3. Compile a cumulative grade point average of 2.0 for all work attempted at HCC.
4. Satisfy School Code section 27-3 regarding national, state and local government; the United States Constitution; and Illinois Constitution in one of the following methods:
   a. Present evidence on a high school transcript that the constitution examination requirements were satisfactorily completed in an Illinois high school.
   b. Successfully pass the constitution examination administered by Heartland Community College Student Services.
   c. Successfully complete the following Heartland Community College course: POS 124.
   d. Submit a copy of a GED showing “constitution passed,” if taken in Illinois.
5. Complete at least one three-hour course that meets the state-mandated requirement of completion of human relations training in the areas of race, ethnicity, gender and other areas related to the improvement of human relations. The following courses meet the state-mandated requirement of education in human relations and at least one course must be completed as part of the course requirement for either an A.A. or A.S. degree: COMM 101, COMM 120, COMM 125, ENGL 111, ENGL 254, ENGL 255, ENGL 231, ENGL 232, HUMA 101, PHIL 114.
6. Fulfill all financial obligations to the College.
7. File an “Application to Graduate” form and pay the required graduation fee by the deadline stated in the class schedule.

Any exceptions to degree requirements must be approved in writing by the Vice President of Instruction.

To be eligible for an Associate in Applied Science degree at Heartland Community College, a student must fulfill the following requirements:

1. Complete the number of hours prescribed in the specific program of study.
2. Complete a minimum of 25 percent of course work applicable to the certificate at HCC.
3. Earn a 2.0 cumulative grade point in courses counted for the certificate.
4. Fulfill all financial obligations to the College.
5. File the “Application to Graduate” form and pay the required graduation fee by the deadline stated in the class schedule.

Any exceptions to certificate requirements must be approved in writing by the Vice President of Instruction.

To be eligible for an Certificate degree at Heartland Community College, a student must fulfill the following requirements:

1. Complete the number of hours prescribed in the specific program of study.
2. Complete a minimum of 15 semester hours of college-level work at HCC; this excludes CLEP, proficiency or military credit.
3. Earn a 2.0 cumulative grade point average in courses counted for the degree. Students enrolled in allied health curricula must complete required courses that are designated by the program with a minimum grade of “C”.
4. Satisfy School Code section 27-3 regarding national, state and local government; the United States Constitution; and Illinois Constitution in one of the following methods:
   a. Present evidence on a high school transcript that the constitution examination requirements were satisfactorily completed in an Illinois high school.
   b. Successfully pass the constitution examination administered by Heartland Community College Student Services.
   c. Successfully complete the following Heartland Community College course: POS 124.
   d. Submit a copy of a GED showing “constitution passed,” if taken in Illinois.
5. Fulfill all financial obligations to the College.
6. File the “Application to Graduate” form and pay the required graduation fee by the deadline stated in the class schedule.

Any exceptions to degree requirements must be approved in writing by the Vice President of Instruction.

Although academic program requirements may change with each edition of the College catalog, students with continual enrollment may graduate under the current program requirements or any program requirements in effect since first enrollment. Students who intend to graduate must meet with an Academic Advisor to complete an “Application to Graduate” form a full semester prior to graduation. This will help ensure that a student meets all graduation requirements.
Associate in Arts & Associate in Science Degree Requirements

Communication
Sem Hours: 9
ENGL 101, 102 ("C" or better is required)
COMM 101

Humanities and Fine Arts
Sem Hours: 9
Students must select at least one course from Humanities and at least one course from Fine Arts.
*HUMA courses may be counted as either Humanities or Fine Arts.

Humanities
ENGL 111, 112, 113, 114, 231, 232, 241, 242, 254, 255, 270 or 271 or 272
HUMA 101*, 201*, 202*, 203* or 213*, 250
JAPN 202
PHIL 101, 105, 111, 114, 201, 202
RELI 150, 215, 230, 260
SPAN 202

Fine Arts
ART 150, 195, 211, 212
FILM 101, 211
HUMA 101*, 201*, 202*, 203* or 213*
MUSI 150, 260
THEA 101

Social and Behavioral Sciences
Sem Hours: 9
Students must select courses from at least two disciplines.

ANTH 101
ECON 101, 102
GEOG 101, 110,
HIST 101, 102, 135, 136, 150, 261, 262
POS 101, 124, 145, 151, 220
PSY 101, 207, 209, 210, 215, 216 or 217
SOC 101, 102, 135

Life and Physical Sciences
Sem Hours: 7-8
For the AA, one course must include a lab component; for the AS, both courses must include lab components.
Students must select one from life science and one from physical science.

Life
BIOL 114, 116, 117, 121, 161, 181

Physical
ASTR 121
CHEM 120, 161
EASC 111, 121, 122, 151, 161, 162
PHYS 110, 161, 171

Mathematics
Sem Hours: 3-6
CSCI 115
MATH 111, 115, 131, 136, 141, 142, 151, 161, 162, 163

Emphasis/Concentration
Sem Hours: 12
Emphasis courses and electives are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability toward the student’s major and minor fields of study.

Electives
Sem Hours: 7-11

Total Semester Hours Required 60

Check with an Academic Advisor for an updated list of Heartland courses approved to meet IAI requirements.

TRANSFER PROGRAMS
To pursue a program leading to transfer to a university (A.A., A.S., A.E.S. or A.A.T. degree), students must meet the 1993 Illinois Board of Higher Education Admission requirements by having taken the following high school preparation or its equivalent:

English: 4 units emphasizing written and oral communication and literature
Math: 3 units including introductory through advanced algebra, geometry, trigonometry and fundamentals of computer programming
Science: 2 units of laboratory science
Social Science: 2 units emphasizing history and government
Electives: 2 units of foreign language, music, art and/or vocational education

A year-long high school course is one “unit.” Students who have completed more than the required number of units in the categories of math, science, social science and electives may apply up to three such units to the requirements of other categories.

The College provides additional means, such as testing, for students to demonstrate adequate preparation for transfer programs.
# Illinois Articulation Initiative (IAI)

Heartland Community College is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois General Education Core Curriculum between participating institutions. This agreement is in effect for students entering an associate or baccalaureate degree-granting institution as first-time freshmen in Summer 1998 (and thereafter).

The following Heartland courses have been approved to meet IAI **Communications** requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>IAI GECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Speech</td>
<td>C2 900R</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>C1 900R</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition II</td>
<td>C1 901R</td>
</tr>
</tbody>
</table>

The following Heartland courses have been approved to meet IAI **Fine Arts** requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>IAI GECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 150</td>
<td>Art Appreciation</td>
<td>F2 900</td>
</tr>
<tr>
<td>ART 195</td>
<td>History of Photography</td>
<td>F2 901</td>
</tr>
<tr>
<td>ART 211</td>
<td>History of Art I</td>
<td>F2 902</td>
</tr>
<tr>
<td>ART 212</td>
<td>History of Art II</td>
<td>F2 902</td>
</tr>
<tr>
<td>FILM 101</td>
<td>Introduction to Film Studies</td>
<td>F2 908</td>
</tr>
<tr>
<td>FILM 211</td>
<td>History of Film</td>
<td>F2 909</td>
</tr>
<tr>
<td>HUMA 101</td>
<td>Introduction to the Humanities</td>
<td>HF 900</td>
</tr>
<tr>
<td>HUMA 201</td>
<td>Western Humanities I</td>
<td>HF 902</td>
</tr>
<tr>
<td>HUMA 202</td>
<td>Western Humanities II</td>
<td>HF 903</td>
</tr>
<tr>
<td>HUMA 203</td>
<td>Non-Western Humanities</td>
<td>HF 904N</td>
</tr>
<tr>
<td>HUMA 213</td>
<td>Civilization &amp; Culture of Latin America</td>
<td>HF 904N</td>
</tr>
<tr>
<td>MUSI 150</td>
<td>Music Appreciation</td>
<td>F1 900</td>
</tr>
<tr>
<td>MUSI 260</td>
<td>Jazz, Blues, and Rock &amp; Roll</td>
<td>F1 905D</td>
</tr>
<tr>
<td>THEA 101</td>
<td>Introduction to Theatre</td>
<td>F1 907</td>
</tr>
</tbody>
</table>

The following Heartland courses have been approved to meet IAI **Humanities** requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>IAI GECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 111</td>
<td>Introduction to Literature</td>
<td>H3 900</td>
</tr>
<tr>
<td>ENGL 112</td>
<td>Understanding Fiction</td>
<td>H3 901</td>
</tr>
<tr>
<td>ENGL 113</td>
<td>Understanding Drama</td>
<td>H3 902</td>
</tr>
<tr>
<td>ENGL 114</td>
<td>Understanding Poetry</td>
<td>H3 903</td>
</tr>
<tr>
<td>ENGL 231</td>
<td>American Literature I</td>
<td>H3 914</td>
</tr>
<tr>
<td>ENGL 232</td>
<td>American Literature II</td>
<td>H3 915</td>
</tr>
<tr>
<td>ENGL 241</td>
<td>Survey of English Literature I</td>
<td>H3 912</td>
</tr>
<tr>
<td>ENGL 242</td>
<td>Survey of English Literature II</td>
<td>H3 913</td>
</tr>
<tr>
<td>ENGL 254</td>
<td>African American Literature</td>
<td>H3 910D</td>
</tr>
<tr>
<td>ENGL 255</td>
<td>Women in Literature</td>
<td>H3 911D</td>
</tr>
<tr>
<td>ENGL 270</td>
<td>African Literature</td>
<td>H3 908N</td>
</tr>
<tr>
<td>ENGL 271</td>
<td>Asian Literature</td>
<td>H3 908N</td>
</tr>
<tr>
<td>ENGL 272</td>
<td>Latin American &amp; Caribbean Literature</td>
<td>H3 908N</td>
</tr>
<tr>
<td>HUMA 101</td>
<td>Introduction to the Humanities</td>
<td>HF 900</td>
</tr>
<tr>
<td>HUMA 201</td>
<td>Western Humanities I</td>
<td>HF 902</td>
</tr>
<tr>
<td>HUMA 202</td>
<td>Western Humanities II</td>
<td>HF 903</td>
</tr>
<tr>
<td>HUMA 203</td>
<td>Non-Western Humanities</td>
<td>HF 904N</td>
</tr>
<tr>
<td>HUMA 213</td>
<td>Civilization &amp; Culture of Latin America</td>
<td>HF 904N</td>
</tr>
<tr>
<td>HUMA 250</td>
<td>Classical Mythology</td>
<td>H9 901</td>
</tr>
<tr>
<td>JAPN 202</td>
<td>Japanese IV</td>
<td>H1 900</td>
</tr>
<tr>
<td>PHIL 101</td>
<td>Introduction to Philosophy</td>
<td>H4 900</td>
</tr>
<tr>
<td>PHIL 105</td>
<td>Introduction to Non-Western Philosophy</td>
<td>H4 903N</td>
</tr>
<tr>
<td>PHIL 111</td>
<td>Logic</td>
<td>H4 906</td>
</tr>
<tr>
<td>PHIL 114</td>
<td>Ethics</td>
<td>H4 904</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>History of Philosophy I</td>
<td>H4 901</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>History of Philosophy II</td>
<td>H4 902</td>
</tr>
<tr>
<td>RELI 150</td>
<td>Understanding Religion</td>
<td>H5 900</td>
</tr>
<tr>
<td>RELI 215</td>
<td>Major World Religions</td>
<td>H5 904N</td>
</tr>
<tr>
<td>RELI 230</td>
<td>Religion in American Society</td>
<td>H5 905</td>
</tr>
<tr>
<td>RELI 260</td>
<td>Literature of the Bible</td>
<td>H5 901</td>
</tr>
<tr>
<td>SPAN 202</td>
<td>Spanish IV</td>
<td>H1 900</td>
</tr>
</tbody>
</table>

Check with an advisor for an updated list of Heartland courses approved to meet IAI requirements. Information may also be obtained on the IAI Web page: [www.ITransfer.org](http://www.ITransfer.org).
### Illinois Articulation Initiative (IAI)

The following Heartland courses have been approved to meet IAI Social and Behavioral Sciences requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>IAI GECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Cultural Anthropology</td>
<td>S1 901N</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Principles of Microeconomics</td>
<td>S3 902</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Principles of Macroeconomics</td>
<td>S3 901</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>World Geography</td>
<td>S4 900N</td>
</tr>
<tr>
<td>GEOG 110</td>
<td>Economic Geography</td>
<td>S4 903N</td>
</tr>
<tr>
<td>HIST 101</td>
<td>Western Civilization 1500</td>
<td>S2 902</td>
</tr>
<tr>
<td>HIST 102</td>
<td>Modern Western Civilization</td>
<td>S2 903</td>
</tr>
<tr>
<td>HIST 135</td>
<td>History of the US to 1865</td>
<td>S2 900</td>
</tr>
<tr>
<td>HIST 136</td>
<td>History of the US since 1865</td>
<td>S2 901</td>
</tr>
<tr>
<td>HIST 261</td>
<td>Non-Western Civilization I</td>
<td>S2 904N</td>
</tr>
<tr>
<td>HIST 262</td>
<td>Non-Western Civilization II</td>
<td>S2 905N</td>
</tr>
<tr>
<td>POS 101</td>
<td>American Government &amp; Politics</td>
<td>S5 900</td>
</tr>
<tr>
<td>POS 124</td>
<td>State &amp; Local Government</td>
<td>S5 902</td>
</tr>
<tr>
<td>POS 145</td>
<td>Politics of the Middle East, Central &amp; South America and Asia</td>
<td>S5 906N</td>
</tr>
<tr>
<td>POS 151</td>
<td>Introduction to International Relations</td>
<td>S5 904N</td>
</tr>
<tr>
<td>POS 220</td>
<td>Comparative Governments</td>
<td>S5 905</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>S6 900</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Introduction to Child Psychology</td>
<td>S6 903</td>
</tr>
<tr>
<td>PSY 209</td>
<td>Human Growth &amp; Development</td>
<td>S6 902</td>
</tr>
<tr>
<td>PSY 210</td>
<td>Social Psychology</td>
<td>S8 900</td>
</tr>
<tr>
<td>PSY 215</td>
<td>Introduction to Child &amp; Adolescent Psychology</td>
<td>S6 904</td>
</tr>
<tr>
<td>PSY 216</td>
<td>Adolescent Psychology</td>
<td>S6 904</td>
</tr>
<tr>
<td>PSY 217</td>
<td>Adult Development and Aging</td>
<td>S6 905</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Sociology</td>
<td>S7 900</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Social Problems</td>
<td>S7 901</td>
</tr>
<tr>
<td>SOC 135</td>
<td>Sociology of Marriage &amp; Family</td>
<td>S7 902</td>
</tr>
</tbody>
</table>

The following Heartland courses have been approved to meet IAI Life and Physical Sciences requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>IAI GECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 121</td>
<td>Introduction to Astronomy</td>
<td>P1 906L</td>
</tr>
<tr>
<td>BIOL 114</td>
<td>Contemporary Biology</td>
<td>L1 900</td>
</tr>
<tr>
<td>BIOL 116</td>
<td>Genes: Foundation of Life</td>
<td>L1 906</td>
</tr>
<tr>
<td>BIOL 117</td>
<td>Genes: Foundation of Life Lab</td>
<td>L1 906L</td>
</tr>
<tr>
<td>BIOL 121</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>L1 904L</td>
</tr>
<tr>
<td>BIOL 161</td>
<td>Principles of Biology I</td>
<td>L1 900</td>
</tr>
<tr>
<td>BIOL 181</td>
<td>Anatomy &amp; Physiology I</td>
<td>L1 904L</td>
</tr>
<tr>
<td>CHEM 120</td>
<td>Fundamentals of Chemistry</td>
<td>L1 902L</td>
</tr>
<tr>
<td>CHEM 161</td>
<td>General Chemistry I</td>
<td>L1 902L</td>
</tr>
<tr>
<td>EASC 111</td>
<td>Environment Earth</td>
<td>P1 905</td>
</tr>
<tr>
<td>EASC 121</td>
<td>Introduction to Earth Science</td>
<td>P1 905</td>
</tr>
<tr>
<td>EASC 122</td>
<td>Introduction to Earth Sciences Lab</td>
<td>P1 905L</td>
</tr>
<tr>
<td>EASC 151</td>
<td>Introduction to Weather</td>
<td>P1 905L</td>
</tr>
<tr>
<td>EASC 161</td>
<td>Physical Geology</td>
<td>P1 907L</td>
</tr>
<tr>
<td>EASC 162</td>
<td>Historical Geology</td>
<td>P1 907L</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Physics in Everyday Life</td>
<td>P1 901</td>
</tr>
<tr>
<td>PHYS 161</td>
<td>Physics I</td>
<td>P1 900L</td>
</tr>
<tr>
<td>PHYS 171</td>
<td>Mechanics</td>
<td>P2 900L</td>
</tr>
</tbody>
</table>

The following Heartland courses have been approved to meet IAI Mathematics requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>IAI GECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 115</td>
<td>Discrete Mathematics</td>
<td>M1 905</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Finite Math for Business &amp; Social Science</td>
<td>M1 906</td>
</tr>
<tr>
<td>MATH 131</td>
<td>Explorations in Mathematics</td>
<td>M1 904</td>
</tr>
<tr>
<td>MATH 136</td>
<td>Mathematics for Elementary Teachers II</td>
<td>M1 903</td>
</tr>
<tr>
<td>MATH 141</td>
<td>Introduction to Statistics</td>
<td>M1 902</td>
</tr>
<tr>
<td>MATH 142</td>
<td>Business Statistics</td>
<td>M1 902</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus for Business &amp; Social Science</td>
<td>M1 900-B</td>
</tr>
<tr>
<td>MATH 161</td>
<td>Calculus I</td>
<td>M1 900-1</td>
</tr>
<tr>
<td>MATH 162</td>
<td>Calculus II</td>
<td>M1 900-2</td>
</tr>
<tr>
<td>MATH 163</td>
<td>Calculus III</td>
<td>M1 900-3</td>
</tr>
</tbody>
</table>
Electives

The following list includes HCC courses that will apply toward the Associate in Arts or Associate in Science degrees as emphasis/concentration/electives.

ACCT 200, 201
ACSM 101, 120
ART 100 or 140, 102 or 171, 103 or 271, 104, 105, 106, 145, 154, 180, 190, 204, 205, 206, 213, 214, 230, 231, 280, 290
BIOL 162, 182, 191, 297
BUSN 110, 115, 210
CHEM 162, 241, 242, 297
CHIN 101
CHLD 211, 212, 220, 221
COMM 109, 120, 125, 130, 132, 135, 160, 210, 296
CRJ 101, 200, 201, 202, 204, 206, 208, 215, 222, 224, 226
DSGN 110, 111
EASC 297
ECON 220
EDUC 101, 102, 105, 120, 220, 200, 208, 209, 210, 215, 296
ENGL 118, 206, 211, 296
FACS 201
FILM 216, 296
FREN 101, 102
GENS 100, 101, 102, 103, 104, 105
GEOG 120
GERM 101, 102
HEBR 101
HIST 107, 108, 209, 210, 240, 255, 259, 288
HLTH 111, 116, 118, 120, 125, 131, 201, 209, 296
HUMA 100, 221, 242, 276, 290
INDP 297
JAPN 101, 102, 201
LAT 101, 102
MATH 106, 109, 128, 135, 271, 272, 296, 297
MSC 101, 102, 111, 112
MUSI 104, 105, 106, 110, 111, 120, 145, 155, 160, 170, 171, 196, 197, 198, 199, 200, 201, 202, 203, 210, 211
PHIL 211, 296, 214
PHYS 162, 172, 173, 174, 297
PSY 203, 220, 223
RELI 220, 296
SCI 296
SOC 110, 220, 222, 225, 263, 296
SPAN 101, 102, 201
SSI 299
SWK 170
THEA 104, 108, 204
VOL 101, 299
WST 201
General Education and Student Learning Outcomes

Do students have the required skills to live and learn in contemporary society? Typically, the first two years of a four-year degree are devoted to the general education curriculum. At Heartland Community College the general education program is designed to ensure that students have experiences which help develop the abilities to communicate, problem solve, think critically and value the diversity which abounds in the world.

General education is the foundation of learning which enables students to further their education, advance in their careers and make decisions in life. In addition to mastering the content of college courses, students need to develop the ability to apply what they learn. The responsibility for living and making decisions requires thinking & evaluation skills, which the general education courses seek to develop in each student.

Learning Outcomes Statements
Heartland faculty have created 20 student learning outcome statements to help measure student learning in general education courses. These statements are embedded in all course syllabi for general education courses. For example, one outcome from the diversity and global awareness area encourages students to be “receptive to beliefs and values that differ from their own.” This statement is coded as DI1, and we know that it appears on numerous course syllabi at Heartland. Since academic disciplines vary, faculty members may rephrase the general statement to fit a specific course.

What does all this mean to Heartland students? The general education program is designed to help students make connections between academic courses & real life, between prior knowledge & new knowledge, and between prior experiences and different ways of knowing. To help students make these connections, Heartland faculty have designed the course-embedded learning outcomes. The current 20 general education outcomes statements are listed below. The HCC faculty strive to foster deeper and more connected learning that allows students to demonstrate their abilities in multiple ways and settings.

Students with questions about their learning are encouraged to ask instructors.

Communication Learning Outcomes

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO1</td>
<td>Students compose a message and provide ideas and information suitable to the topic, purpose and audience.</td>
</tr>
<tr>
<td>CO2</td>
<td>Students effectively deliver a message via various channels/modalities.</td>
</tr>
<tr>
<td>CO3</td>
<td>Students listen in order to comprehend information, critique and evaluate a message, show empathy for the feelings expressed by others and/or appreciate a performance.</td>
</tr>
<tr>
<td>CO4</td>
<td>Students are self-reflective of the communication process.</td>
</tr>
<tr>
<td>CO5</td>
<td>Students communicate ethically through monitoring their behavior and interactions with others.</td>
</tr>
<tr>
<td>CO6</td>
<td>Students can recognize and negotiate differences.</td>
</tr>
</tbody>
</table>

Note: The term “message” in each of the first three outcomes implies any form of communication - whether in written (essay, email, etc.), oral or non-verbal modes.

Diversity Learning Outcomes

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI1</td>
<td>Students are receptive to beliefs and values that differ from their own.</td>
</tr>
<tr>
<td>DI2</td>
<td>Students consider the views of others in light of those persons’ experiences and particular understandings.</td>
</tr>
<tr>
<td>DI3</td>
<td>Students reflect upon the formation of their own perspectives, beliefs, opinions, attitudes, ideals and values.</td>
</tr>
<tr>
<td>DI4</td>
<td>Students explain the contributions of diverse perspectives to the development of various fields of inquiry and to society as a whole and re-examine their own values and beliefs in light of the insights they have gained from their study of other cultures.</td>
</tr>
<tr>
<td>DI5</td>
<td>Students consistently and characteristically approach diversity issues in a manner that exemplifies respect for, and appreciation of, difference.</td>
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Problem-solving Learning Outcomes

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>PS1</td>
<td>Students solve problems based on examples and frameworks provided by instructor.</td>
</tr>
<tr>
<td>PS2</td>
<td>Students identify the type of problem and use a framework to solve the problem.</td>
</tr>
<tr>
<td>PS3</td>
<td>Students identify the type of problem and from multiple problem-solving methods, choose the best method and solve problem.</td>
</tr>
<tr>
<td>PS4</td>
<td>Students analyze the situation, explore different outcomes from multiple frameworks, apply the appropriate solution, analyze the results and refine the solution.</td>
</tr>
<tr>
<td>PS5</td>
<td>Students define, interpret and solve problems through collaboration with others.</td>
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Critical Thinking Learning Outcomes

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<tbody>
<tr>
<td>CT1</td>
<td>Students gather knowledge, apply it to a new situation and draw reasonable conclusions in ways that demonstrate comprehension.</td>
</tr>
<tr>
<td>CT2</td>
<td>Students determine the value of multiple sources or strategies and select those most appropriate in a given context.</td>
</tr>
<tr>
<td>CT3</td>
<td>Students generate an answer, approach or solution through an effective synthesis of diverse sources and arguments and provide a rationale.</td>
</tr>
<tr>
<td>CT4</td>
<td>Students actively reflect on an answer, approach or solution and act upon those reflections to improve the final result.</td>
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The learning outcome statements are arranged from lower- to higher-ordered skills. Thus, CT2 reflects a higher level of critical thinking than CT1.
Chargeback/Cooperative/"CAREER" Agreements

Students interested in pursuing a program at another Illinois Community College which is not offered at Heartland Community College may qualify for Chargeback/Cooperative Agreement benefits. A complete listing of individual cooperative agreements which Heartland has with other Illinois Community Colleges is available from Student Services. Heartland Community College also participates in the Comprehensive Agreement Regarding the Expansion of Education Resources (CAREER).

In addition to Heartland Community College, other colleges participating in the CAREER Agreement are Danville Area Community College, Illinois Valley Community College, Joliet Junior College, Kankakee Community College, Kishwaukee College, McHenry County College, Moraine Valley Community College, Morton College, Prairie State College, Richland Community College, South Suburban College and Waubonsee Community College.

Students wishing to take advantage of these cooperative agreements must complete a Chargeback/Cooperative Agreement Application at least 30 days prior to the start of the term they will begin their studies. Applications are available in the Student Services Center and at the Pontiac and Lincoln Centers.

ACADEMIC DIVISIONS

Academic Support:
Reading, General Studies

Health & Human Services:
Associate Degree Nursing, Criminal Justice, Early Childhood Care and Education, Emergency Medical Technology, Health, Nursing Assistant, Practical Nursing, Radiography

Humanities & Fine Arts:
Art, Communication, English, Film, Foreign Languages, Humanities, Music, Philosophy, Religion, Theatre, Women's Studies

Mathematics & Science:
Agriculture, Astronomy, Biology, Chemistry, Earth Science, Associate in Engineering Science, Mathematics, Military Science, Physical Science, Physics

Social & Business Sciences:

Technology:
Degree & Certificate Programs Offered at HCC

**Associate in Arts and Associate in Science Degrees**

The Associate in Arts (A.A.) and Associate in Science (A.S.) degrees represent the first two years of study for a bachelor’s degree. The A.A. represents the first two years of study for students who plan to pursue a bachelor’s degree in liberal arts. The A.S. program represents the first two years of study for students who plan to pursue a bachelor’s degree in science. The third and fourth years of study are completed at a four-year college or university to which the student transfers after completion of the A.A. or A.S. at HCC.

The first two years of most four-year programs can be completed at Heartland through appropriate course selection. Students wishing to take the first two years of a transfer program not specifically listed should consult with an Academic Advisor to plan a program that will meet individual student needs. Because four-year institutions vary in their requirements, A.A. and A.S. students are strongly encouraged to meet with an Academic Advisor as soon as possible after admission to Heartland to determine the sequence of courses which will most successfully transfer to the four-year institution of their choice.

**Associate of Arts in Teaching - Secondary Mathematics**

The Associate of Arts in Teaching (AAT) - Secondary Mathematics degree provides the necessary initial preparation for transfer at the junior level into a teacher education program at a number of four-year public universities in Illinois. The components of this degree include: 62 credit hours in general education, professional education and mathematics courses, a minimum of 15 classroom observation hours at the different P-12 levels of schools and a passing score on the Illinois Basic Skills Test. Students in this degree program will also create and maintain an electronic portfolio which will contain artifacts that demonstrate successful aptitude with the standards necessary for transfer into a teacher education program.

**Associate in Engineering Science**

The Associate in Engineering Science (A.E.S.) is a two-year program that prepares students for transfer into a baccalaureate engineering program. The A.E.S. program at Heartland Community College is composed of 62 credit hours and represents the first two years of a typical four-year program in engineering. During the two years of the A.E.S. program, students complete core courses in math, physics, chemistry and engineering mechanics that are required in most engineering curricula.

After a student completes the A.E.S. program, the student is prepared to fulfill the remaining requirements for a baccalaureate degree; these typically consist of electives specific to the selected engineering discipline.

Various transfer institutions may have different entrance requirements or may recommend slightly different course selections from those indicated in this catalog. Therefore, students should consult representatives of the college or university to which they intend to transfer before completing the A.E.S. program at HCC.

**Associate in Applied Science Degree**

Associate in Applied Science (A.A.S.) degrees are intended to prepare a student for immediate employment rather than for transfer. However, selected A.A.S. programs may be accepted for transfer by some universities. A.A.S. programs are offered in a broad range of career/technical fields. Courses within an A.A.S. degree are typically strongly sequential. Accordingly, students should work closely with an Academic Advisor in planning their studies.

**Career/Technical Certificates**

Certificates are typically composed of a series of technical courses and are issued upon completion of those courses.
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## Degree & Certificate Programs Offered at HCC

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<td>Small Business Management</td>
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<td>Web Application Developer</td>
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<td>Web Media Designer</td>
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<td>Welding Skills</td>
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<tr>
<td>Welding Technology</td>
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<td>X</td>
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<td>105</td>
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</tbody>
</table>

*HCC offers the first 2 years of most baccaluareate majors in addition to the ones listed here.*
Health & Human Services
Degree/Certificate Programs
Criminal Justice
Early Childhood Care & Education
Emergency Medical Services
Medical Transcription
Nursing
Radiologic Technology
Criminal Justice

Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Criminal Justice

This program is designed for students planning to complete the first two years of study leading to a baccalaureate degree and major in criminal justice at a four-year college or university in Illinois.

The following courses are recommended if you choose to begin your college career at one Illinois school and later transfer to another and you want to make sure that the courses you take will count towards a degree at the new school. Remember to consult with your Academic Advisor early and often in your academic career!

Criminal Justice Core Course
3 Semester Hours
CRJ 101 Introduction to Criminal Justice (CRJ 901)

Other Transferable Criminal Justice Courses
12 Semester Hours
CRJ 200 American Systems of Corrections (CRJ 911)
CRJ 201 Understanding Criminology (CRJ 912)
CRJ 204 Criminal Law (CRJ 913)
CRJ 215 The Juvenile Justice System (CRJ 914)

These courses will be accepted in transfer by baccalaureate schools, but they may or may not substitute for professional coursework required for the major. The courses will be accepted as general electives if not accepted as core or elective courses in the major.

General Education Core
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
Law Enforcement Officers
Private Security Officers
Investigators
Correctional Officers
Juvenile Detention Workers
Detectives
Sergeants
Lieutenants
Captains
Chiefs
Probation and Parole Officers
Associate in Applied Science Degree

Criminal Justice Studies
61-64 Semester Hours

The Associate in Applied Science Degree in Criminal Justice Studies is designed to prepare students for entry-level positions in law enforcement, probation or parole, correctional institution and private investigations. For those currently employed in the criminal justice field, the program affords the opportunity for professional growth and career advancement. The A.A.S. degree includes a significant portion of general education courses. The general education courses are Illinois Articulation Initiative (IAI) approved courses that transfer to participating four-year Illinois institutions.

General Education Requirements
ENGL 101 Composition I ..............................................................3
ENGL 102 Composition II .............................................................3
COMM 101 Introduction to Oral Communication...........................3
MATH 131 Exploration in Mathematics.........................................3
PSY 101 Introduction to Psychology..........................................3
SOC 101 Introduction to Sociology ............................................3
Humanities Elective ...............................................................................3
Science Elective w/Lab ......................................................................4-5
Total 25-26

Core Requirements
CRJ 101 Introduction to Criminal Justice ..................................3
CRJ 200 American System of Corrections.................................3
CRJ 201 Criminology.................................................................3
CRJ 202 Policing in America......................................................3
CRJ 204 Criminal Law .............................................................3
CRJ 206 Criminal Investigations .................................................3
CRJ 208 Administration of Justice.............................................3
CRJ 215 Juvenile Justice ...........................................................3
CRJ 222 Police Community Relations .......................................3
CRJ 224 Probation/Parole..........................................................3
CRJ 226 Criminal Justice Careers Seminar ................................2
Total 32

Elective Listing
ACSM 101 Introduction to Microcomputers ..................................3
General Elective ...........................................................................1-3
Total 4-6

Certificate

Criminal Justice: Corrections
21 Semester Hours

The Criminal Justice Certificate is a one-year program designed to prepare graduates for entry-level employment opportunities or for current field practitioners to enhance their knowledge and skills. Students choosing to continue their education after the Criminal Justice Certificate may continue into either the Applied Science Degree program or Transfer Preparation program for Criminal Justice Studies.

General Education Requirements
ENGL 101 Composition I ..............................................................3
PSY 101 Introduction to Psychology..........................................3

Criminal Justice Requirements
CRJ 101 Introduction to Criminal Justice ..................................3
CRJ 200 American System of Corrections.................................3
CRJ 208 Administration of Justice.............................................3
CRJ 215 Juvenile Justice ...........................................................3
CRJ 224 Probation/Parole..........................................................3
Total 21
Associate in Arts Degree or Associate in Science Degree

**Transfer Preparation for Early Childhood Education**

To teach young children (birth to age eight), teachers must be certified by the state of Illinois. To transfer to an approved baccalaureate program in Early Childhood Education as a junior, students must complete a minimum of 60 semester hours (up to a maximum of 64 semester hours). Since admission is competitive, completion of the recommended courses does not guarantee admission.

**Area of Concentration**

0-9 semester credits in one academic discipline at the sophomore level or above, selected in consultation with an Academic Advisor. Acceptable disciplines are mathematics; biology, chemistry or physics; economics, history, political science, psychology or sociology; or art, music, English, a single foreign language, philosophy or theatre.

**Professional Early Childhood Education Core Requirements**

0-9 Semester Credits

A grade of “C” or better is required in each of the following courses. It may be in the student’s best interest to repeat a course taken more than five years before transfer, since some schools may not accept these courses.

- CHLD 101 Introduction to Early Childhood Education (ECE 911)
- CHLD 102 Growth and Development of the Young Child (ECE 912)
- CHLD 201 Child Development Practicum I (ECE 914)
- CHLD 202 Health, Safety, & Nutrition for the Young Child (ECE 902)
- CHLD 207 Exceptional Child (ECE 913)
- CHLD 209 Child, Family, and Community (ECE 915)

While these credits will be accepted in transfer by baccalaureate schools, they may or may not substitute for upper-division professional coursework required for certification.

**General Education Core Courses**

37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.
HEALTH AND HUMAN SERVICES DEGREE/CERTIFICATE PROGRAMS

Associate in Applied Science Degree

Early Childhood Care and Education
63-65 Semester Hours

The Associate in Applied Science Degree in Early Childhood Care and Education provides individuals with skills to pursue careers as child care workers, preschool teachers, directors, family day care providers and family service workers. The curriculum is composed of courses recommended by the Illinois Department of Children and Family Services (DCFS) and the Illinois American Community College Early Childhood Educators.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Math Elective</td>
<td></td>
<td></td>
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<tr>
<td>Social Science Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Physical/Life Science Electives</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>24-25</td>
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</table>

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 102</td>
<td>Growth &amp; Development of the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 103</td>
<td>Environmental Design to Support Children’s Play</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 105</td>
<td>Curriculum for Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 108</td>
<td>Guidance of the Young Child</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 109</td>
<td>Observation and Assessment of the Young Child</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 201</td>
<td>Child Development Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety &amp; Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 206</td>
<td>Child Development Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 207</td>
<td>Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 209</td>
<td>Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

Elective Listing

(Select 3-4 courses for 8-9 hours total)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 106</td>
<td>Creative Activities*</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 107</td>
<td>Language Activities</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 203</td>
<td>Math &amp; Science Activities*</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 204</td>
<td>The First Three Years:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brain Development &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 205</td>
<td>Family Day Care Management*</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 208</td>
<td>Early Childhood Administration</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 210</td>
<td>School Age Programming*</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 215</td>
<td>Child Advocacy</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 220</td>
<td>Individual &amp; Family Development</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 221</td>
<td>Foundations of Inclusion</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 296</td>
<td>Special Topics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>8-9</td>
</tr>
</tbody>
</table>

All CHLD electives allow concurrent enrollment in READ 091.

*Allow concurrent enrollment in READ 091 and ENGL 095.

Career Potential:

Child Care Teachers
Child Care Assistant Teachers
Family Care Providers
Infant or Toddler Caregivers
In-Home Providers/Nannies
Early Childhood Special Needs/Educational Assistants
Directors/Administrators

With additional education and/or work experience, graduates may find employment as:
Elementary School Teacher
# EARLY CHILDHOOD CARE & EDUCATION

## Certificate

**Early Childhood Care & Education**  
**Early Childhood Basic**  
**9-10 Semester Hours**

This certificate is designed to meet DCFS basic requirements for teacher approval. Specifically, for teacher certification, DCFS requires two years of college or university credits with at least six hours of CHLD or one year of child development experience and one year of college or university credits with at least six semester hours in courses directly related to child development.

### Certificate Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 102</td>
<td>Growth and Development of the Young Child</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one or more of the following for 2-3 credits:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 103</td>
<td>Environmental Design to Support Children's Play</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 105</td>
<td>Curriculum for Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 108</td>
<td>Guidance in the Early Child Classroom</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 109</td>
<td>Observation &amp; Assessment of Young Children</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 205</td>
<td>Family Day Care Management</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 296</td>
<td>Special Topics in ECE</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total 9-10**

## Certificate

**Early Childhood Care & Education**  
**Early Childhood Advanced**  
**19 Semester Hours**

This certificate is designed to meet DCFS basic requirements to be director certified. Specifically, to be director qualified, DCFS requires two years of college or university credits with at least 18 hours in CHLD courses.

### Certificate Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 102</td>
<td>Growth and Development of the Young Child</td>
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<tr>
<td>CHLD 103</td>
<td>Environmental Design to Support Children's Play</td>
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</tr>
<tr>
<td>CHLD 105</td>
<td>Curriculum for Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 108</td>
<td>Guidance in the Early Child Classroom</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 109</td>
<td>Observation &amp; Assessment of Young Children</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 205</td>
<td>Family Day Care Management</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 296</td>
<td>Special Topics in ECE</td>
<td>1</td>
</tr>
<tr>
<td>CHLD 208</td>
<td>Early Childhood Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 19**
Certificate

**Early Childhood Care & Education**

**Family Child Care**

15 Semester Hours

Students who choose this certificate will gain specific knowledge and skills related to operating their own family childcare center.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 102</td>
<td>Growth and Development of the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 108</td>
<td>Guidance in Early Child Classroom</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 109</td>
<td>Observation and Assessment of Young Child</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 205</td>
<td>Family Day Care Management</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total 15**

Certificate

**Early Childhood Care & Education**

**School-Age**

15 Semester Hours

Students who choose this certificate will gain specific knowledge and skills related to working with the school-age population.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 102</td>
<td>Growth and Development of the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 108</td>
<td>Guidance in the Early Child Classroom</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 109</td>
<td>Observation &amp; Assessment of Young Children</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 210</td>
<td>School Age Programming</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total 15**

Certificate

**Early Childhood Care & Education**

**Infant, Toddler, and Two-Year Old**

16 Semester Hours

Students who choose this certificate will gain specific knowledge and skills related to working with infants and toddlers.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 102</td>
<td>Growth and Development of the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 108</td>
<td>Guidance in Early Child Classroom</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 109</td>
<td>Observation &amp; Assessment of Young Children</td>
<td>2</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 204</td>
<td>The First Three Years: Brain Development &amp; Implications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 16**
Emergency Medical Services

These certificate programs address current practices and concepts of pre-hospital emergency care. Emergency Medical Technicians (EMTs) provide treatment to patients for illness and injury in emergency situations. The Emergency Medical Technician certificate programs offer a comprehensive study of prehospital emergency care training.

Emergency Medical Technician - Basic

Certificate of Completion

EMT 101 EMT–Basic.................................................................8

Total 8

Emergency Medical Technician - Intermediate

Certificate of Completion

EMT 220 EMT–Intermediate I....................................................11
EMT 221 EMT–Intermediate II...................................................11

Total 22

Emergency Medical Technician - Paramedic

Certificate of Completion

EMT 230 EMT-Paramedic I .......................................................11
EMT 231 EMT-Paramedic II ......................................................11
EMT 232 EMT-Paramedic III .....................................................11

Total 33

Career Potential:

EMT-Basic
EMT-Intermediate
EMT-Paramedic

With additional education and/or work experience, graduates may find employment as:

EKG Technician
Firefighter
Medical Laboratory Technician
MEDICAL TRANSCRIPTION

Certificate – Pending Approval

Medical Transcription
34 Semester Hours

The Medical Transcription certificate prepares individuals to use transcribing machines to listen to taped and digitalized recordings of physicians and other health care providers to dictate a variety of medical reports including, but not limited to, patient assessments, diagnostic reports, therapeutic procedure reports, treatment and clinical notes, emergency department visits, operating room reports, chart reviews, history and physicals, discharge summaries and patient instructions.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 121</td>
<td>Essentials of Anatomy &amp; Physiology</td>
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</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
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<tr>
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</table>

Core Requirements

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HLTH 110</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 111</td>
<td>Diseases of the Human Body</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 135</td>
<td>Pharmacology for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 202</td>
<td>Professional Issues in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 209</td>
<td>Advanced Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 112</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 118</td>
<td>Machine Transcription &amp; Proofreading</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 120</td>
<td>Medical Transcription</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 293</td>
<td>Medical Transcription Practicum</td>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

Career Potential:

Medical Transcriptionist

- hospitals
- clinics
- physician’s offices
- long-term care centers
NURSING

Associate in Science Degree

Transfer Program to Mennonite College of Nursing at Illinois State University

Prior to entering Mennonite College of Nursing at ISU, students must complete all lower-division course work. These courses must be completed before entering the upper-division nursing major. A minimum of 59 semester hours and IAI certification needs to be completed.

Students should adhere to application deadlines at ISU. Students should request an official transcript be mailed directly to the admissions office at ISU. In making decisions, the college takes into consideration availability of space in upper-division courses and in clinical sites. Therefore, admission to the College of Nursing is competitive, and preference will be given to candidates considered to have the best qualifications. Students are encouraged to begin and complete the application process as early as possible.

Core Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>181 Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL</td>
<td>182 Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL</td>
<td>191 Introductory Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM</td>
<td>120 Fundamentals of Chemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>CHEM</td>
<td>161 General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>COMM</td>
<td>101 Introduction to Speech</td>
<td>3</td>
</tr>
<tr>
<td>ENGL</td>
<td>101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL</td>
<td>102 Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HLTH</td>
<td>120 Nutrition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>HLTH</td>
<td>125 Nutrition for Health Care</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>141 Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td>142 Business Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSY</td>
<td>101 Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY</td>
<td>209 Human Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

Total Credit Hours 60

*Taking nine hours credit in the humanities category and three hours credit in the social sciences category fulfills the elective requirement. The remainder 10 hours of credit is to meet the AA/AS Degree requirements.

Required courses plus electives should total a minimum of 60 semester hours to earn the associate’s degree.

Career Potential:

With additional education and/or work experience, graduates may find employment as:

Clinic Nurse (Ambulatory Care)
Critical Care Nurse
Emergency Room
Home Health Nurse
Hospital Staff Nurse
Industrial Nurse
Long Term Care Nurse
Office Nurse
Public Health Nurse
School Nurse
Administrator
Medical Researcher
Nurse Anesthetist
Nurse Practitioner
Nursing Educator
**HEALTH AND HUMAN SERVICES DEGREE/CERTIFICATE PROGRAMS**

**Associate in Applied Science Degree**

**Associate Degree in Nursing (ADN)**

68 Semester Hours

The Associate Degree Nursing Program prepares individuals to write the NCLEX-RN exam for licensure as a registered nurse (RN). Registered nurses provide care to people of all ages and in a variety of health care settings such as hospitals, long-term care facilities, physicians’ offices, home care agencies and community settings. The program is designed for individuals aspiring to a career in nursing, and for nursing assistants and LPNs seeking career advancement in nursing.

(See page 9 for accreditation information.)

The decision to allow an individual to take the NCLEX-RN for licensure or be granted a license after passing the examination rests with the Illinois Department of Professional Regulation Committee on Nursing. Please see the Nursing Admission Criteria & Procedures packet for further information about licensure.

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 112</td>
<td>Introduction to Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 113</td>
<td>Medication Principles for Nurses</td>
<td>1</td>
</tr>
<tr>
<td>NURS 114</td>
<td>Fundamentals of Nursing for CNAs</td>
<td>2</td>
</tr>
<tr>
<td>Or</td>
<td>NURS 115 Fundamentals of Nursing I</td>
<td>4</td>
</tr>
<tr>
<td>NURS 116</td>
<td>Fundamentals of Nursing II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 181</td>
<td>Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total 15-17</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 122</td>
<td>Community-Based Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 134</td>
<td>Nursing Individuals with Chronic Illness</td>
<td>5</td>
</tr>
<tr>
<td>NURS 135</td>
<td>Nursing Childbearing/Rearing Families</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 182</td>
<td>Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total 18</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 232</td>
<td>Leadership &amp; Mgmt in Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 240</td>
<td>Mental Health Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 241</td>
<td>Nursing Care of Individuals with Acute Health Problems</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 191</td>
<td>Introductory Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total 16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 242</td>
<td>Contemporary Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 245</td>
<td>Nursing Care of Individuals with Acute Health Problems II</td>
<td>5</td>
</tr>
<tr>
<td>NURS 246</td>
<td>Nursing Care of Individuals with Complex Health Problems</td>
<td>5</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total 17</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours 68**

**Admission Procedures**

The nursing program is a selective admissions program. Applications to the nursing program are processed during the specified application period. Please refer to the Nursing Program website, www.heartland.edu/divisions/he/nurs for specific information about the admission criteria or obtain nursing program admission information from the Student Services Center.

**Re-admission Procedures**

Any student wishing to re-enroll in the nursing program must follow the procedure outlined in the Nursing Handbook. The nursing faculty will consider each student’s application for re-admission and the decision to re-admit will be based on additional data, prior performance in the nursing program and space availability. Students may be re-admitted to the nursing program only once. All re-admissions are at the discretion of nursing faculty.

**Transfer of Nursing Credit**

Students seeking to transfer credit received from nursing courses at other institutions will be considered on an individual basis by the nursing faculty. The student may be asked to provide course descriptions, course syllabi, standardized achievement scores and selected data from the course instructor in order to determine placement in the nursing program, subject to availability of space. Since there frequently are differences among nursing programs, students wishing to transfer should be aware that there might be an interruption in program progression.

**Career Potential:**

- Clinic Nurse (Ambulatory Care)
- Critical Care Nurse
- Emergency Room Nurse
- Home Health Nurse
- Hospital Staff Nurse
- Industrial Nurse
- Long Term Care Nurse
- Office Nurse
- Public Health Nurse
- School Nurse

With additional education and/or work experience, graduates may find employment as:

- Administrator
- Medical Researcher
- Nurse Anesthetist
- Nurse Practitioner
- Nursing Educator
Certificate

**Practical Nursing**

*41 Semester Hours*

The Practical Nursing program is a one-year certificate program designed to prepare individuals to function under the direction of a registered nurse, licensed physician or licensed dentist or podiatrist. As members of the health team, practical nurses provide care to people of all ages and in a variety of health care settings, such as hospitals, long-term care facilities, physicians’ offices and home environments. The program is designed to provide a career ladder for qualified nursing assistants and for advancement to a professional nursing program. Individuals completing the practical nursing curriculum meet the educational requirements for writing the NCLEX-PN exam to become a licensed practical nurse (LPN).

The decision to allow an individual to take the NCLEX-PN for licensure or be granted a license after passing the examination rests with the Illinois Department of Professional Regulation Committee on Nursing. Please see the Nursing Admission Criteria & Procedures packet for further information about licensure.

### First Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 112</td>
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</tr>
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<td>NURS 114</td>
<td>Fundamentals of Nursing for CNAs</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 115</td>
<td>Fundamentals of Nursing I</td>
<td>4</td>
</tr>
<tr>
<td>NURS 116</td>
<td>Fundamentals of Nursing II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 181</td>
<td>Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>15-17</td>
</tr>
</tbody>
</table>

### Second Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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<td>Community-Based Nursing</td>
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<td>BIOL 182</td>
<td>Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
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<tr>
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</table>

### Summer Term

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 136</td>
<td>Practical Nursing</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Credit Hours 41**

### Admission Procedures

The nursing program is a selective admissions program. Applications to the nursing program are processed during the specified application period. Please refer to the Nursing Program website, [www.heartland.edu/divisions/hs/nurs](http://www.heartland.edu/divisions/hs/nurs) for specific information about the admission criteria or obtain nursing program admission information from the Student Services Center.

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### Transfer of Nursing Credit

Students seeking to transfer credit received from nursing courses at other institutions will be considered on an individual basis by the nursing faculty. The student may be asked to provide course descriptions, course syllabi, standardized achievement scores and selected data from the course instructor in order to determine placement in the nursing program, subject to availability of space. Since there frequently are differences among nursing programs, students wishing to transfer should be aware that there might be an interruption in program progression.
Certificate

**Nursing Assistant**

**8 Semester Hours**

This certificate prepares nursing assistants who provide basic care for patients in hospitals, long-term care centers and in-home health care. The certified nursing assistant is responsible for making basic observations about patients that may involve all body systems and the patient responses to treatment. Documentation and verbal reporting to the nurse are important aspects of the CNA's work. Thus, good communication skills are a vital part of the CNA course curriculum. The CNA works under the direction and supervision of the nurse, therefore they must be able to receive orders, accept suggestions and follow through with assignments. Compassion, honesty, caring and trustworthiness are all required to work in healthcare.

All students enrolling in NURS 110 must submit a criminal background check (CBC) in accordance with the Illinois Department of Public Health (IDPH) regulations. The CBC paperwork will be completed under the direction of the instructor. A positive CBC will prevent the student from participating in the clinical component of the course, unless an IDPH waiver has been granted.

**Requirement**

NURS 110 Nursing Assistant.........................................................8

**Total 8**

---

**Career Potential:**

Certified Nursing Assistant

With additional education and/or work experience, graduates may find employment as:
Registered Nurse
Licensed Practical Nurse
Heartland Community College offers an Associate in Applied Science Degree completion program to persons completing an approved radiologic technology program of study. A wide variety of opportunities exists for persons entering the medical imaging profession, including general and specialized medical imaging, management, education and sales. Enrollment in the Bloomington-Normal School of Radiography program is limited and specific requirements must be met. Contact the Bloomington-Normal School of Radiography early to facilitate planning.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 181</td>
<td>Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 182</td>
<td>Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>COMM 120</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 20**

**Technical Courses**

Radiography Courses .......................................................... 39

**Total 39**

**Elective Requirements**

<table>
<thead>
<tr>
<th>Type</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 6**

**Total Credit Hours 65**

---

**Career Potential:**

- Equipment Sales Representative
- Radiation Therapy Technologist

With additional education and/or work experience, graduates may find employment as:

- Bone Densitomtitist
- CT Technologist
- MRI Technologist
- Mammographer
- Special Procedures Technologist
- Nuclear Medicine Technologist
- Ultrasound (Sonographer)
- Radiographic Educator
Humanities & Fine Arts
Degree/Certificate Programs

Art
Art Education
English
Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Art

This program is designed for students planning to complete the first two years of study leading to a baccalaureate degree and major in Art. Illinois colleges and universities offer two different bachelor’s degrees in Art: the professional Bachelor of Fine Arts (B.F.A.) degree and the Bachelor of Arts (B.A.) degree with a major in Art. At some schools, a B.A. degree requires competency in a foreign language, while the B.F.A. degree does not.

Most four-year institutions require a portfolio review for admission to a Bachelor of Fine Arts program, for registration in a second studio course in a medium, and/or for scholarship consideration. The following courses should be selected in consultation with your Academic Advisor to ensure transferability to another Illinois school. Remember to consult with your Academic Advisor early and often in your academic career!

Art Core Courses
18 Semester Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 211</td>
<td>History of Art I (ART 901)</td>
<td></td>
</tr>
<tr>
<td>ART 212</td>
<td>History of Art II (ART 902)</td>
<td></td>
</tr>
<tr>
<td>ART 214</td>
<td>History of Modern Art (ART 903)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All art history should be completed at the same school.</td>
<td></td>
</tr>
<tr>
<td>ART 102</td>
<td>Two-Dimensional Design (ART 907)</td>
<td></td>
</tr>
<tr>
<td>ART 103</td>
<td>Three-Dimensional Design (ART 908)</td>
<td></td>
</tr>
<tr>
<td>ART 104</td>
<td>Basic Drawing (ART 904)</td>
<td></td>
</tr>
<tr>
<td>ART 154</td>
<td>Intermediate Drawing (ART 905)</td>
<td></td>
</tr>
</tbody>
</table>

Completion of the art core courses is recommended before enrolling in these media-specific studio courses. A portfolio review is usually required for transfer.

Media-specific Studio Art Courses
0-6 Semester Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 204</td>
<td>Life Drawing (ART 906)</td>
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</tr>
<tr>
<td>ART 180</td>
<td>Beginning Photography (ART 917)</td>
<td></td>
</tr>
<tr>
<td>ART 231</td>
<td>Graphic Design I (ART 918)</td>
<td></td>
</tr>
<tr>
<td>ART</td>
<td>Painting I (ART 911)</td>
<td></td>
</tr>
<tr>
<td>ART</td>
<td>Ceramics I (Art 912)</td>
<td></td>
</tr>
<tr>
<td>ART 145</td>
<td>Sculpture I (Art 913)</td>
<td></td>
</tr>
<tr>
<td>ART</td>
<td>Printmaking I (ART 914)</td>
<td></td>
</tr>
<tr>
<td>ART</td>
<td>Jewelry &amp; Metalworking I (ART 915)</td>
<td></td>
</tr>
<tr>
<td>ART</td>
<td>Fibers I (Art 916)</td>
<td></td>
</tr>
</tbody>
</table>

Select studio art courses in consultation with an Academic Advisor.

General Education Core
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
Advertising Manager
Architect
Art Therapist
Curator
Cartoonist
Designer - fashion, floral, graphic, interior
Teacher/Professor
Associate in Arts Degree or Associate in Science Degree

**Transfer Preparation for Art Education**

The following courses are recommended if you choose to begin your college career at one Illinois school and later transfer to another and you want to make sure that the courses you take will count towards a degree at the new school. Remember to consult with your Academic Advisor early and often in your academic career!

**Art Core Courses**
12 Semester Credits

- **ART** 102 Two Dimensional Design (ART 907)
- **ART** 103 Three Dimensional Design (ART 908)
- **ART** 104 Basic Drawing (ART 904)
- **ART** 154 Intermediate Drawing (ART 905)

Select at least one media-specific studio course from the following in consultation with an advisor. If more than one course is selected, they should be from different media.

**Media-specific Studio Courses**
3-9 Semester Credits

ART 204 Life Drawing (ART 906)
ART Painting I (ART 911)
ART Ceramics I (Art 912)
ART 145 Sculpture I (ART 913)
ART Printmaking I (ART 914)
ART Jewelry and Metalworking I (ART 915)
ART Fibers (Art916)
ART 180 Beginning Photography (ART 917)
ART 231 Graphic Design I (ART 918)
Optional
ART Art Education Observation (ART 921)

**General Education Core**
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit is required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

**Career Potential:**

With additional education and/or work experience, graduates may find employment as:
K-12 Art Teacher
Transfer Preparation for English

Bachelor’s degree programs in English generally emphasize the study of literature and literary criticism. Some universities also offer specialization in creative or technical writing and/or programs to prepare students for certification as a high school English teacher. Students should consult the current major requirements of the colleges or universities to which they plan to transfer. If a program does not offer a particular course from the list, or does not offer it at the lower-division level, the transfer student will receive credit towards graduation for the course, but may not receive major credit. Remember to consult your Academic Advisor early and often!

Competency in a Foreign Language
12-16 Semester Credits

Competency in a single foreign language through the third or fourth college semester is required.

English Major Courses
3-9 Semester Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 911</td>
<td>American Literature I</td>
</tr>
<tr>
<td>ENGL 912</td>
<td>American Literature II</td>
</tr>
<tr>
<td>ENGL 913</td>
<td>Survey of British Literature I</td>
</tr>
<tr>
<td>ENGL 914</td>
<td>Survey of British Literature II</td>
</tr>
</tbody>
</table>

In addition to the above courses, or in place of one of them, select one course from the following genre courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 915</td>
<td>Understanding Poetry</td>
</tr>
<tr>
<td>ENGL 916</td>
<td>Understanding Drama</td>
</tr>
<tr>
<td>ENGL 917</td>
<td>Understanding Fiction</td>
</tr>
</tbody>
</table>

A few universities require a multicultural or human diversity course within the English major. Consult with your Academic Advisor as to the transferability of the following course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 918</td>
<td>African-American Literature</td>
</tr>
</tbody>
</table>

A few universities offer a specialization in creative writing. Consult your Academic Advisor about this requirement.

General Education Core Courses
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor field of study.
Math & Science
Degree/Certificate Programs

Agriculture
Biology
Chemistry
Clinical Laboratory Science
Mathematics
Engineering
Transfer Preparation for Agriculture

This program is designed for students planning to complete the first two years of study leading to a baccalaureate degree and major in Agribusiness, Animal Sciences, Crop and Soil Science, Horticulture, Agricultural Mechanization or Agriculture Education at a four-year college or university. HCC has entered into a cooperative agreement with Illinois State University to provide AGRI instruction.

Students must see an Academic Advisor in the Student Services Center for admission, residency and registration in AGRI courses. Advisors can assist in selecting courses specific to the specialty within the major.

Suggested Agriculture Core Courses
12-16 Semester Hours
AGRI 110 Introductory Agricultural Economics (AG 901)
AGRI 120 Introductory Horticulture (AG 905)
AGRI 130 Introduction to Agricultural Engineering Technology (AG 906)
AGRI 150 Principles of Agronomy (AG 903)
AGRI 157 Soil Science (AG 904)
AGRI 170 Introduction to Animal Science (AG 902)

Other Agriculture Articulated Courses
AGRI 190 Introduction to Agricultural Education (AG 911)

These courses will be accepted in transfer by baccalaureate schools, but they may or may not substitute for professional coursework required for the major. The courses will be accepted as general electives if not accepted as core or elective courses in the major.

General Education Core
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.
Biology

Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Biological Sciences

Baccalaureate biological science programs are diverse. Some programs emphasize cell and molecular biology, whereas others emphasize organismal, ecological and evolutionary biology. Research universities offer specific programs of study, optional tracks or specializations within biology. Remember to consult your Academic Advisor early and often!

Biological Sciences Core Courses
8 Semester credits
BIOL 161 Principles of Biology I (BIOL 910)
and
BIOL 162 Principles of Biology II (BIOL 910)

These also fulfill the Illinois Transferable General Education core curriculum life sciences requirement. Biological sciences core courses may be taken in reverse order since some schools offer the cellular and molecular emphasis in the first biology course for the major and organismal biology in the second. To guarantee credit, students must complete the entire course sequence at the same school before transfer.

Supporting Science Courses
16 semester credits
CHEM 161 General Chemistry I (BIO 906)
CHEM 162 General Chemistry II (BIO 907)
PHYS 161 College Physics I (BIO 903)
PHYS 162 College Physics II (BIO 904)

Biological Sciences or Other Elective Courses
3-10 semester credits

Students selecting further coursework in biology should consult an advisor. Field courses in biology/botany and comparative vertebrate anatomy are biology electives that offer reasonable probability of transfer in the major, depending upon the student’s choice of biology specialization and the baccalaureate school. Courses such as microbiology and human anatomy and physiology sometimes will transfer for credit in allied health majors, but most often do not transfer as biology major credit.

General Education Core
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
- Aquatic Biologist
- Biologist
- Biotechnology Lab Technician
- Ecologist
- Environmental Engineer
- Forensic Pathologist
- Geneticist
- Hydrologist
- Microbiologist
- Nuclear Medical Technician
- Physical Therapist
- Sanitarian
- Teacher/Professor
CHEMISTRY

Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Chemistry

Bachelor’s degree programs in chemistry are built on an in-depth foundation of sequential coursework in science and math, while upper-division courses provide the preparation necessary for graduate studies and/or work in industry.

The following courses are recommended if you choose to begin your college career at one Illinois school and later transfer to another and you want to make sure that the courses you take will count towards a degree at the new school. Remember to consult with your Academic Advisor early and often in your academic career!

Supporting Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 162</td>
<td>Calculus II (MTH 902)</td>
</tr>
<tr>
<td>PHYS 162</td>
<td>College Physics II (BIO 904)</td>
</tr>
</tbody>
</table>

Chemistry Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 161</td>
<td>General Chemistry I (CHM 911)</td>
</tr>
<tr>
<td>CHEM 162</td>
<td>General Chemistry II (CHM 912)</td>
</tr>
<tr>
<td>CHEM 163</td>
<td>Organic Chemistry I (CHM 913)</td>
</tr>
<tr>
<td>CHEM 164</td>
<td>Organic Chemistry II (CHM 914)</td>
</tr>
</tbody>
</table>

Other Prerequisite Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 163</td>
<td>Calculus III (MTH 903)</td>
</tr>
</tbody>
</table>

Some schools require completion of Calculus III and Physics III before students can begin physical chemistry, a third-year course.

General Education Core Courses

37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
- Analytical Chemist
- Biochemist
- Biotechnologist
- Chemistry Teacher
- Dentist
- Environmental Technician
- Forensic Specialist
- Industrial Health Engineer
- Pharmacist
- Research Chemist
- Sanitarian
- Teacher/Professor
- Veterinarian
Associate in Arts Degree or Associate in Science Degree

**Transfer Preparation for Clinical Laboratory Science**

Clinical laboratory scientists play an important role in detection, diagnosis and treatment of many diseases. To be a certified clinical laboratory scientist, you need either a bachelor’s degree from an accredited clinical laboratory science program or a bachelor’s degree in biology or chemistry with extensive work experience. You must pass a nationally recognized certification examination in CLS. Baccalaureate programs in the field are called clinical laboratory science, medical laboratory science or medical technology and prepare students to perform complex analyses and manage the laboratory.

**Prerequisite Courses**

24 Semester Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 191</td>
<td>Introduction to Microbiology (CLS 905)</td>
<td></td>
</tr>
<tr>
<td>CHEM 162</td>
<td>General Chemistry II (CLS 907)</td>
<td></td>
</tr>
</tbody>
</table>

Select 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>Anatomy &amp; Physiology I (CLS 903)</td>
<td></td>
</tr>
<tr>
<td>BIOL</td>
<td>Anatomy &amp; Physiology II (CLS 904)</td>
<td></td>
</tr>
<tr>
<td>BIOL 161</td>
<td>Principles of Biology I (CLS 901)</td>
<td></td>
</tr>
<tr>
<td>BIOL 162</td>
<td>Principles of Biology II (CLS 902)</td>
<td></td>
</tr>
</tbody>
</table>

Select 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>Organic Chemistry I (CLS 908)</td>
<td></td>
</tr>
<tr>
<td>CHEM</td>
<td>Organic Chemistry II (CLS 909)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biochemistry (CLS 910)</td>
<td></td>
</tr>
</tbody>
</table>

**General Education Core Courses**

37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

**Career Potential:**

With additional education and/or work experience, graduates may find employment as:

- Medical Technologist
- Medical Microbiologist
- Laboratory Computer Sales or Training Specialist
- Laboratory Sales/Product Representative
- Instrument Service Technician
- Quality Control Officer
- Biomedical Instrument Specialist
- Clinical Research Associate
- Safety Officer
- Laboratory Science Instructor/Trainer
Transfer Preparation for Mathematics

Bachelor’s degree programs in mathematics prepare students with diverse career goals by developing rigorous, logical thinking; an appreciation and familiarity with complex structures and algorithms and the ability to learn technical material and abstract concepts.

The following courses are recommended if you choose to begin college at one Illinois school and later transfer to another, and if you want to make sure your courses count towards a degree at your new school. Remember to consult your Academic Advisor early and often!

Mathematics Major Core Courses
11-14 Semester Credits
MATH 161 Calculus I (MTH 901)
MATH 162 Calculus II (MTH 902)
MATH 163 Calculus III (MTH 903)

One additional mathematics course from below (with linear algebra preferred):
MATH 271 Linear Algebra (MTH 911)
MATH 272 Differentiated Equations (MTH 912)

Additional Recommended Courses
3-4 Semester Credits
CSCI 171 Computing for Engineering and Science (MTH 922)
PHYS 171 Mechanics (MTH 921)

These courses will transfer to bachelor’s degree granting colleges and universities, although students are advised to check with an advisor to determine whether it will transfer as coursework in the major or as general elective coursework.

General Education Core Courses
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
Accountant
Actuary
Computer Programmer
Computer Systems Analyst
Economist
Market Research Analyst
Mathematician
Project Manager
Risk Analyst
Sales/Marketing Representative
Statistician
Teacher/Professor
ENGINEERING

Associate in Engineering Science

Engineering Science (A.E.S.)
62 Semester Hours

The Associate in Engineering Science is a two-year program designed to prepare students to transfer as a junior in a baccalaureate-engineering program. The A.E.S. represents the first two years of a typical four-year program. During the two years of the A.E.S. program, students will complete the core courses for most engineering programs, including math, physics, chemistry and engineering mechanics. After completing the A.E.S. program, remaining requirements to earn a baccalaureate degree typically include program/department-specific electives.

Upon completion of this program, students will be able to transfer as a junior in a baccalaureate engineering program, having met core requirements common to most engineering programs.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
</tbody>
</table>

Social Science Electives .......................................................3

Humanities Electives .............................................................3

Total 12

Required Prerequisite Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 161</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CSCI 171</td>
<td>Computing for Engineering and Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 161</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 163</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 272</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 171</td>
<td>Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 172</td>
<td>Electricity &amp; Magnetism</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 32

Engineering Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 162</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 110</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 173</td>
<td>Fluids &amp; Thermal Physics</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 174</td>
<td>Quantum Physics</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 12

Specialty Course Requirements

(complete ONE set listed below)

*Set I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 241</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
</tbody>
</table>

*Set II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 271</td>
<td>Engineering Mechanics: Statics</td>
<td>3</td>
</tr>
</tbody>
</table>

*Set III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 272</td>
<td>Engineering Mechanics: Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 6 Min Needed

Minimum Total Credit Hours 62

*Specialty courses may be completed at the institution to which a student intends to transfer. (Credit must be transferred back to HCC to meet A.E.S. program requirements.)

Career Potential:

With additional education and/or work experience, graduates may find employment as:

- Aerospace Engineer
- Agricultural and Biological Engineer
- Bioengineer
- Biomolecular Engineer
- Chemical Engineer
- Civil Engineer
- Computer Engineer
- Computer Programmer
- Electrical Engineer
- Engineering Manager
- Environmental Engineer
- Industrial Engineer
- Materials Science Engineer
- Mechanical Engineer
- Nuclear Engineer
- Radiological Engineer
- Physicist
- Patent Attorney
- Technical Sales/Marketing Representative
Social & Business Sciences
Degree/Certificate Programs

Business
  Accounting
  Business Essentials
  Microcomputers
  Office Technology
  Sales
  Small Business Management

Education
  Paraprofessional Educator
  Secondary Mathematics

History
  Life & Health Insurance

Political Science

Psychology

Social Work

Sociology
Business programs include courses and majors in general business, accounting, finance, marketing and management.

The following courses are recommended if you choose to begin your college career at one Illinois school and later transfer to another and you want to make sure that the courses you take will count towards a degree at the new school. Remember to consult with your Academic Advisor early and often in your academic career!

**Suggested Business Core Courses**
12-16 Semester Hours
- ACCT 200 Financial Accounting (BUS 903)
- ACCT 201 Managerial Accounting (BUS 904)
- MATH 142 Business Statistics (BUS 901)
- BUSN 130 Computer Application & Business Systems Concepts (BUS 902)

**Other Transferable Business Courses**
3-11 Semester Hours
- BUSN 110 Introduction to Business (BUS 911)
- BUSN 210 Legal Environment of Business (BUS 913)

**General Education Core**
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Students planning on a major in Business need to complete ECON 101 and 102 as part of their social and behavioral science general education requirements and MATH 151 for the mathematics general education requirements. Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

**Career Potential:**

- Account Executive
- Accountant
- Advertising Manager
- Auditor
- Business Manager
- Customer Service Manager
- Financial Planner/Analyst
- Human Resource Manager
- Loan Officer
- Personnel Manager
- Personnel Recruiter
- Sales Manager
- Trust Officer
Certificate

**Accounting Essentials**

**15 Semester Hours**

Students completing this certificate will be prepared to meet the challenges of a growing technical area in many large companies. This certificate prepares the student for entry level positions in accounting, bookkeeping and auditing.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 200 Financial Accounting*</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 201 Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSN 130 Computer Applications &amp; Business Systems Concepts</td>
<td>3</td>
</tr>
<tr>
<td>Selected Electives**</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 15**

**Elective hours should be chosen from the following list:**

- BUSN 145 Workforce Preparation.................................1
- BUSN 150 Customer Relations .....................................1

and any Applied Computer Science (ACSM), Business (BUSN), or Office Technology (OTEC) course(s).

*This course has a MATH 106 or MATH 109 prerequisite.

---

**Career Potential:**

- Accounting Specialist
- Bookkeeper
- Payroll Assistant

With additional education and/or work experience, graduates may find employment as:

- Budget Analyst
- Cost Analyst
- Inventory Control Specialist
Certificate

**Business Essentials I**
**16 Semester Hours**

Students with this occupational certificate will be prepared to meet initial challenges of many available jobs. Leading to the Business Essentials II Certificate, the completer will be prepared to enter the workforce in office and other business environments.

**Certificate Requirements:**
- ACSM 101 Introduction to Microcomputers ..................................3
- BUSN 110 Introduction to Business..............................................3
- BUSN 115 Business Communications..........................................3
- BUSN 145 Workforce Preparation .................................................1
- BUSN 150 Customer Relations .....................................................1
- OTEC 103 Keyboarding and Document Formatting .....................2
- Selected Electives* .................................................................3

Total 16

*Elective hours should be chosen from the following list:
- ACSM 135 Spreadsheets - Microsoft Excel ..................................3
- ACSM 155 Word Processing - Microsoft Word .............................3

(Or select course(s) related to chosen work area)

Certificate

**Business Essentials II**
**28 Semester Hours**

This occupational certificate prepares students to meet ongoing challenges of many job openings. Building on the skills developed in the Business Essentials I Certificate, the completer will be more prepared to assume lead roles in office and other business environments.

**Certificate Requirements**
- Completion of Business Essentials I Certificate .................................16
- ACSM 120 Microcomputers in Office Management..........................3
- ACCT 120 Small Business Accounting .........................................3
- Selected Electives* .................................................................6

Total 28

*Elective hours should be chosen from the following list:
- ACCT 130 Computerized Accounting Applications .....................3
- ACSM 135 Spreadsheets - Microsoft Excel .................................3
- ACSM 155 Word Processing - Microsoft Word .............................3
- BUSN 170 Supervision .................................................................3
- OTEC 112 Records Management ................................................3
- OTEC 118 Machine Transcription and Proofreading .................3

(Or select course(s) related to intended work area)

Career Potential:
- General Office Clerk
- Auditing Clerk
- Financial Clerk
- Information and Records Clerk
- Administrative Assistant
- Data Entry and Information Clerk
- Processing Worker
- Bank Teller
- Receptionist
- Human Resource Assistant
## Microcomputer Applications

### 61-66 Semester Hours

This Associate in Applied Science Degree prepares students to specialize in microcomputers. The student receives extensive hands-on experience in application packages. Employment positions for graduates include receptionists, office clerks, office managers and administrative assistants.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Math Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Science Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 16**

### Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 120</td>
<td>Small Business Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 130</td>
<td>Computerized Accounting Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 101</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 120</td>
<td>Microcomputers in Office Management</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 125</td>
<td>Presentation Graphics - MS PowerPoint</td>
<td></td>
</tr>
<tr>
<td>ACSM 135</td>
<td>Spreadsheets - Excel for Windows</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 145</td>
<td>Database Applications - Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 155</td>
<td>Word Processing - MS Word</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 163</td>
<td>Desktop Publisher - PageMaker</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Desktop Publishing - QuarkXPress</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 110</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 145</td>
<td>Workforce Preparation</td>
<td>1</td>
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<tr>
<td>BUSN 150</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>OTEC 103</td>
<td>Keyboarding &amp; Document Formatting</td>
<td>2</td>
</tr>
<tr>
<td>OTEC 118</td>
<td>Machine Transcription and Proofreading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 38**

### Elective Specializations from Elective Listing

- Applied Computer Science
- Business Elective
- Computer & Information Science
- Health
- Office Technology

**Total 7-12**

**Total Credit Hours 61-66**

Choose from the following list of recommended electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSM 163</td>
<td>Desktop Publisher - PageMaker</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Desktop Publishing - QuarkXPress</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Basic Drawing</td>
<td></td>
</tr>
<tr>
<td>ART 231</td>
<td>Graphic Design I*</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 210</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 220</td>
<td>Principles of Management</td>
<td></td>
</tr>
<tr>
<td>BUSN 223</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 230</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 250</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 299</td>
<td>Internship in Business &amp; ACSM</td>
<td>1-6</td>
</tr>
<tr>
<td>COMM 130</td>
<td>News and Feature Writing*</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 110</td>
<td>Medical Terminology</td>
<td>2</td>
</tr>
<tr>
<td>DMED 101</td>
<td>Introduction to Digital Media*</td>
<td>3</td>
</tr>
<tr>
<td>DMED 110</td>
<td>Web Page Development</td>
<td>3</td>
</tr>
<tr>
<td>DMED 120</td>
<td>Computer Imaging and Design</td>
<td></td>
</tr>
<tr>
<td>NETW 151</td>
<td>PC Hardware Maintenance &amp; Repair*</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTEC 118</td>
<td>Machine Transcription and Proofreading*</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 140</td>
<td>Office Procedures*</td>
<td></td>
</tr>
</tbody>
</table>

Students wishing to specialize in Desktop Publishing must take the following courses as electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSM 163</td>
<td>Desktop Publisher - PageMaker</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Desktop Publishing - QuarkXPress</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Basic Drawing</td>
<td></td>
</tr>
<tr>
<td>ART 231</td>
<td>Graphic Design I*</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 110</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 145</td>
<td>Workforce Preparation</td>
<td>1</td>
</tr>
<tr>
<td>BUSN 150</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>OTEC 103</td>
<td>Keyboarding &amp; Document Formatting</td>
<td>2</td>
</tr>
<tr>
<td>OTEC 118</td>
<td>Machine Transcription and Proofreading*</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 140</td>
<td>Office Procedures*</td>
<td></td>
</tr>
</tbody>
</table>

**Additional electives may be available with departmental approval.**

---

**Career Potential:**

- Office Clerical Staff
- Administrative Assistant
- Executive Secretary
- Office Manager
Certificate

Microcomputer Applications
33-35 Semester Hours

The Certificate in Microcomputer Applications prepares students to specialize in jobs requiring the use of microcomputers including, but not limited to, the following: receptionist, office clerk, office manager and administrative assistant. The student receives extensive hands-on experience in application packages. The courses included in completion of the certificate are accepted toward the completion of the Associate in Applied Science Degree in Microcomputer Applications.

Core Requirements
ACCT 120 Small Business Accounting Applications ....................3
ACCT 130 Computerized Accounting Applications .....................3
ACSM 101 Introduction to Microcomputers .................................3
ACSM 120 Microcomputers in Office Management .......................3
ACSM 125 Presentation Graphics - MS PowerPoint .....................1
ACSM 135 Spreadsheets - Excel for Windows ............................3
ACSM 155 Word Processing - MS Word ...................................3
ACSM 163 Desktop Publisher - PageMaker ...............................3

or
ACSM 165 Desktop Publishing - QuarkXPress ............................3
BUSN 110 Introduction to Business ..........................................3
BUSN 115 Business Communications .......................................3
BUSN 145 Workforce Preparation ..............................................1
BUSN 150 Customer Relations ................................................1
OTEC 103 Keyboarding & Document Formatting ........................2

Total 32

Elective Specializations from Elective Listing
Applied Computer Science
Business Elective
Computer & Information Science
Health
Office Technology

Total 1-3

Total Credit Hours 33-35

Choose from the following list of recommended electives:
ACSM 145* Database Applications - Microsoft Access ..............3
ACSM 163 Desktop Publisher - PageMaker ................................3
ACSM 165* Desktop Publishing - QuarkXPress ......................3
BUSN 210 Legal Environment of Business .............................3
BUSN 220 Principles of Management ....................................3
BUSN 223 Human Resources Management .............................3
BUSN 230 Principles of Marketing .......................................3
BUSN 250 Small Business Management ................................3
BUSN 299* Internship in Business & ACSM ..........................1-6
HLTH 110 Medical Terminology .............................................2
DMED 101 Introduction to Digital Media ..............................3
DMED 110 Web Page Development .....................................3
DMED 120 Computer Imaging and Design .............................3
NETW 150* Workstation Operating Systems ...........................3
NETW 151* PC Hardware Maintenance & Repair ..................3
NETW 160* Introduction to Networking ................................3
OTEC 118* Machine Transcription and Proofreading ............3
OTEC 140* Office Procedures ...........................................3

Additional electives may be available with Departmental approval.
* Denotes electives that may have prerequisites.

Career Potential:
Administrative Assistant
Data Entry Information Clerk
Financial Clerk
Office Clerical Staff
Processing Worker
Receptionist
Secretary
Certificate

**Office Technology**

31 Semester Hours

This certificate is designed to provide a foundation in the application of principles in office technology. The certificate incorporates courses in office technology theory and courses that prepare the student to enter the work force. Upon completion, the student may seek entry-level business opportunities with his/her acquired skills.

**Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSM 101</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 120</td>
<td>Microcomputers in Office Management</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 135</td>
<td>Spreadsheets - Excel for Windows</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 155</td>
<td>Word Processing - MS Word</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 163</td>
<td>Desktop Publisher - PageMaker</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 145</td>
<td>Workforce Preparation</td>
<td>1</td>
</tr>
<tr>
<td>BUSN 150</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>OTEC 103</td>
<td>Keyboarding &amp; Document Formatting</td>
<td>2</td>
</tr>
<tr>
<td>OTEC 112</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 118</td>
<td>Machine Transcription and Proofreading</td>
<td>3</td>
</tr>
<tr>
<td>OTEC 140</td>
<td>Office Procedures*</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 31

Total Credit Hours 31

*Course must be completed at Heartland Community College.

Certificate

**Sales**

11 Semester Hours

This occupational certificate will prepare students to meet the challenges of many kinds of jobs currently in demand locally.

**Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 110</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 145</td>
<td>Workforce Preparation</td>
<td>1</td>
</tr>
<tr>
<td>BUSN 150</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>BUSN 180</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 11

Career Potential:

Transcriptionists
Word Processors
Office Clerical Staff

With additional education and/or work experience, graduates may find employment as:
Administrative Assistants
Secretaries
Certificate

Small Business Management
32 Semester Hours

The Certificate in Small Business Management is designed to improve and enhance the general business skills of small business managers and entrepreneurs. The curriculum includes classes in business communications, accounting, computer skills, taxes, customer relations, human resource management, marketing, financial planning and small business management. The program is designed to serve managers and small business owners in a variety of occupations such as residential contracting, restaurants and catering, real estate, personal service industries, retailing, automobile repair, landscaping and other occupations. This program is intended for individuals employed as managers or owners of small businesses who could benefit from additional education to enhance their business skills, for those interested in obtaining business skills prior to the opening of their own business, and for students interested in seeking office management positions within small businesses.

Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 120</td>
<td>Small Business Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 140</td>
<td>Small Business Taxes</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 110</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 220</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 230</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 240</td>
<td>Financial Planning and Budgeting</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 250</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>Selected Electives*</td>
<td></td>
<td>8</td>
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</tbody>
</table>

Total Credit Hours: 32

*Elective hours should be chosen from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 130</td>
<td>Computerized Accounting Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 120</td>
<td>Microcomputers in Office Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 130</td>
<td>Computer Apps &amp; Business Systems Concepts</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 145</td>
<td>Workforce Preparation</td>
<td>1</td>
</tr>
<tr>
<td>BUSN 150</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>BUSN 170</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 180</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 210</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 223</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 299</td>
<td>Internship in Business &amp; Applied Computer Science</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Career Potential:

Business Owner/Entrepreneur
Business Consultant
Department Manager
Manager of Small Business
Merchandising Manager
Personnel Manager
Sales Representative/Associate
**EDUCATION**

**Associate in Applied Science Degree**

**Paraprofessional Educator**

63 Semester Hours

The paraprofessional educator degree prepares students for positions as teacher assistants and teacher aides. The degree will help current as well as future paraprofessionals meet the No Child Left Behind requirements for success in working with children in Title I programs.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 114</td>
<td>Contemporary Biology</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>MATH 131 Explorations in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 135</td>
<td>U.S. History to 1865</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>HIST 136 History of the U.S. Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 203</td>
<td>Non-Western Humanities</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 21-22**

**Professional Education Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 105</td>
<td>Students with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>CHLD 207 Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 220</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>and/or</td>
<td>PSY 209 Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 208</td>
<td>Principles of Reading</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 209</td>
<td>Language Arts in Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 200</td>
<td>Using Technology in Education</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 118</td>
<td>Children’s Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 135</td>
<td>Mathematics for Elementary Teachers I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MATH 136 Mathematics for Elementary Teachers II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MATH 141 Introduction to Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 24-28**

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ART 211</td>
<td>History of Art I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 120</td>
<td>Fundamentals of Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHLD 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 202</td>
<td>Health, Safety, and Nutrition for the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CHLD 209</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>EASC 121</td>
<td>Introduction to Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 111</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 120</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 150</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Physics in Everyday Life</td>
<td>3</td>
</tr>
<tr>
<td>PSY 203</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 135</td>
<td>Sociology of Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 101</td>
<td>Spanish I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 18**

**Total Credit hours 63-68**

**Teacher Assistant**

With additional education and/or work experience, graduates may find employment as:

**P-12 Teacher**

---

**Career Potential:**

---
Associate of Arts in Teaching (AAT) Degree

**Secondary Mathematics**  
**62 Semester Hours**

The Associate of Arts in teaching - secondary mathematics degree provides the necessary initial preparation for transfer at the junior level into a teacher education program at a four-year college or university in Illinois. The components of this degree include: 62 credit hours in general education, professional education and mathematics courses, a minimum of 15 classroom observation hours at the different P-12 levels of schools and a passing score on the Illinois Basic Skills Test. Students in this degree program will also create and maintain an electronic portfolio that will contain artifacts that demonstrate completion of the standards at the level appropriate for transfer into a teacher education program.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 141</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 114</td>
<td>Contemporary Biology</td>
<td>4</td>
</tr>
<tr>
<td>EASC 121</td>
<td>Introduction to Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 101</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 150</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 150</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>POS 101</td>
<td>American Government and Politics</td>
<td>3</td>
</tr>
<tr>
<td>HIST 136</td>
<td>History of the U.S. Since 1865</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 41

**Professional Education Core Requirements**

**Required**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Recommended Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 200</td>
<td>Using Technology in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 105</td>
<td>Students with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 220</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 209</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 9

**Mathematics Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 161</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 162</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 163</td>
<td>Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

**Additional Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 271</td>
<td>Linear Algebra*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 272</td>
<td>Differential Equations*</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 12

*Students who initially place into Calculus II may take one of these courses.

**Career Potential:**

Teacher Assistant

With additional education and/or work experience, graduates may find employment as:

Secondary Mathematics Teacher
HISTORY

Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for History

Students wanting to major in history may have a choice of earning a B.A. or a B.S. degree, depending on the university they attend. A history major may also pursue a program leading to state certification as a high school (6-12) history teacher.

The courses below are recommended for students planning to transfer into a baccalaureate history program, including into a program leading to state certification as a high school history teacher. Since admission may be competitive, completing the recommended courses does not guarantee admission.

History Core Courses
12 Semester Hours
HIST 135 History of the US to 1865 (HST 911)
HIST 136 History of the US since 1865 (HST 912)
HIST 101 History of Western Civilization I (HST 913)
HIST 102 History of Western Civilization II (HST 914)

Since schools divide historical periods differently across courses, students should complete course sequences at the same school.

Other History Courses
Additional history courses (such as third-world or non-Western civilization) may transfer either for history major credit or as general education credit, depending on the school.

Related Courses
Students who have decided upon a minor field are encouraged to complete one or more courses in the minor. Students planning to seek high school (6-12) teacher certification are encouraged to complete one or more professional education courses.

A Single Foreign Language
Up to 12 Semester Hours
Competency through the second, third or fourth semester of a single foreign language is required for the B.A. degree in history in some schools and for all majors in the College of Arts and Sciences at other schools. Ask about the foreign language requirement of the schools you are considering and complete the required foreign language courses before transfer.

General Education Core
37-41 Semester Hours
General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent on an Academic Advisor to ensure completion of concentration and/or transferability towards the student's major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
Anthropologist
Archivist
Correspondent
Department Head, College Historian
Lawyer
Librarian
News Editor
Life and Health Insurance

61 Semester Hours

Life and health insurance courses are intended to provide individuals with the knowledge and skills necessary to succeed in the life and health insurance and financial services industries. These courses will serve persons seeking employment, individuals currently employed and professionals continuing their education to meet the requirements of state licensing or professional societies. Students in the program will develop a foundation of knowledge of life/health insurance principals. Courses in the latter part of the program will cover topics including insurance administration, information systems, economics and investment, accounting, finance and management. Specific knowledge about each of these topics will provide students with a detailed understanding of the life/health insurance industry. The A.A.S. degree includes a portion of general education courses. The general education courses are Illinois Articulation Initiative (IAI) approved courses that transfer to any participating four-year Illinois institution. The life and health insurance courses correspond to Life Office Management Association (LOMA) courses. The Associate in Applied Science prepares students for 10 LOMA examinations which, collectively, lead to the professional designation of Fellow, Life Management Institute (FLMI) granted by LOMA.

Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSR 115</td>
<td>Life and Health Insurance I</td>
<td>3</td>
</tr>
<tr>
<td>INSR 116</td>
<td>Life and Health Insurance II</td>
<td>3</td>
</tr>
<tr>
<td>INSR 140</td>
<td>Legal Aspects of Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 150</td>
<td>Marketing Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 160</td>
<td>Information Management in Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 170</td>
<td>Economics and Investments</td>
<td>3</td>
</tr>
<tr>
<td>INSR 180</td>
<td>Accounting for Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 190</td>
<td>Insurance Administration</td>
<td>3</td>
</tr>
<tr>
<td>INSR 200</td>
<td>Finance in Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 101</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>ACSM 120</td>
<td>Microcomputers in Office Management</td>
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</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 220</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education and Elective Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Elective</td>
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<tr>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>INSR or BUSN Elective</td>
<td>6-7</td>
</tr>
</tbody>
</table>

Total 61
Certificates

**Life and Health Insurance Basics**

**20 Semester Hours**

Life and health insurance courses are intended to provide individuals with the knowledge and skills necessary to succeed in the life and health insurance and financial services industries. These courses will serve persons seeking employment, individuals currently employed and professionals continuing their education to meet the requirements of state licensing or professional societies. Students in the program will learn about insurance principles and products, insurance company operations, legal aspects of life and health insurance, marketing life and health insurance and customer service concepts and strategies. The life and health insurance courses correspond to Life Office Management Association (LOMA) courses. The Basics certificate program prepares students for five LOMA examinations which, collectively, lead to the professional designation of Associate, Customer Service (ACS) granted by LOMA.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSR 115</td>
<td>Life and Health Insurance I</td>
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<tr>
<td>INSR 116</td>
<td>Life and Health Insurance II</td>
<td>3</td>
</tr>
<tr>
<td>INSR 130</td>
<td>Customer Relations In Insurance</td>
<td>2</td>
</tr>
<tr>
<td>INSR 140</td>
<td>Legal Aspects of Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 150</td>
<td>Marketing Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 20**

**Life and Health Insurance Expanded**

**36 Semester Hours**

Life and health insurance courses are intended to provide individuals with the knowledge and skills necessary to succeed in the life and health insurance and financial services industries. These courses will serve persons seeking employment, individuals currently employed and professionals continuing their education to meet the requirements of state licensing or professional societies. Students in the program will develop a foundation of knowledge of life/health insurance administration, information systems, economics and investment, accounting, finance and management. Specific knowledge about each of these topics will provide students with a detailed understanding of the life/health insurance industry. The life and health insurance courses correspond to Life Office Management Association (LOMA) courses. The expanded certificate program prepares students for 10 LOMA examinations which, collectively, lead to the professional designation of Fellow, Life Management Institute (FLMI) granted by LOMA.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSR 115</td>
<td>Life and Health Insurance I</td>
<td>3</td>
</tr>
<tr>
<td>INSR 116</td>
<td>Life and Health Insurance II</td>
<td>3</td>
</tr>
<tr>
<td>INSR 140</td>
<td>Legal Aspects of Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 150</td>
<td>Marketing Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 160</td>
<td>Information Management and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 170</td>
<td>Economics and Investments</td>
<td>3</td>
</tr>
<tr>
<td>INSR 180</td>
<td>Accounting for Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 190</td>
<td>Insurance Administration</td>
<td>3</td>
</tr>
<tr>
<td>INSR 200</td>
<td>Finance in Life and Health Insurance</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 115</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 220</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 36**
Political science is the study of the theory and practice of government and politics. Students of politics describe and analyze political systems and behavior. Baccalaureate programs offer courses in areas such as public administration, public law, international relations, comparative politics, political behavior, political philosophy and U.S. government.

**Required Political Science Prerequisite Courses**
3 Semester Hours

- POS 101 American Government and Politics (PLS 911)

**Other Political Science Courses**
up to 9 Semester Hours

- POS 151 Intro to International Relations (PLS 912)
- POS Intro to Political Philosophy (PLS 913)
- POS Comparative Government (PLS 914)
- POS 124 State and Local Government (PLS 915)

**General Education Core**
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Students pursuing a baccalaureate program in Elementary Education should work closely with their Academic Advisor to meet program admission requirements at the college or university to which they plan to transfer.

**Career Potential:**

With additional education and/or work experience, graduates may find employment as:
- Advertising Executive
- Attorney
- Campaign Manager
- City Manager
- Community Relations Director
- Consular Manager
- Development Associate
- Diplomatic Officer
- Director of Public Policy
- Executive Director, Non-Profit/NGO
- FBI/CIA Agent
- Fund Raising Director
- Government Intelligence Analyst
- Intelligence Specialist
- International Relations Manager
- Labor Relations Specialist
- Marketing Director
- Professor
- Sales Manager
- Special Interest Group Director
- Urban/Regional Planner
PSYCHOLOGY

Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Psychology

Psychology is the scientific study of human and animal behavior and the biological and mental processes that underlie behavior. This program is designed for students planning to complete the first two years of study leading to a baccalaureate degree and major in psychology at a four-year college or university in Illinois.

Required Psychology Prerequisite Courses
3 Semester Hours
PSY 101 Introduction to Psychology (S6 900)

Can also be used to fulfill the Illinois Transferable General Education core curriculum requirements in the social and behavioral sciences.

Other Psychology Courses
3-9 Semester Hours
One developmental psychology course selected from
PSY 207 Introduction to Child Psychology (PSY 901)
PSY 216 Adolescent Psychology (PSY 902)
PSY 203 Abnormal Psychology (PSY 905)
PSY 210 Social Psychology (PSY 908)
PSY 220 Personality Theory (PSY 907)

General Education Core
37-41 Semester Hours
General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
- Case Worker
- Child Psychologist
- Clergy
- Crisis Intervention Counselor
- Employee Assistance Director
- Hospice Coordinator
- Personnel Manager
- Psychiatrist
- Psychologist
- Physical Therapist
Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Social Work

The following courses are recommended if you choose to begin college at one Illinois school and later transfer to another, and if you want to make sure your courses count towards a degree at your new school. Remember to consult your Academic Advisor early and often!

Social Work Core Courses
Up to 21 Semester Hours

SWK Introduction to Social Work (SW 911)
PSY 223 Human Sexuality (SW 912)

You can also take courses from the following:
PSY 203 Abnormal Psychology (PSY 905)
PSY 209 Human Growth and Development (S6 902)
SOC 102 Social Problems (S7 901)
PSY 210 Social Psychology (S8 900)

General Education Core
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:
With additional education and/or work experience, graduates may find employment as:
Social Worker
Child Welfare Worker
SOCIAL & BUSINESS SCIENCES DEGREE/CERTIFICATE PROGRAMS

SOCIOLOGY

Associate in Arts Degree or Associate in Science Degree

Transfer Preparation for Sociology

The following courses are recommended if you choose to begin college at one Illinois school and later transfer to another, and if you want to make sure your courses count toward a degree at your new school. Remember to consult your Academic Advisor early and often!

Sociology Core Courses
Up to 12 Semester Hours

SOC  Sociology (S7 900)

You can take up to 9 semester hours from the following. A maximum of three courses beyond Sociology (S7 900) from the list below are for transfer credit under the following conditions: If the receiving school offers the course as a lower-division course, then a course-for-course transfer is possible; if the receiving school does not offer the course or does not offer it at the lower-division level, the student will receive elective lower-division sociology credit for the course.

SOC  Social Problems (SOC 911)
SOC  Marriage and Family (SOC 912)
SOC  Social Stratification (SOC 913)
SOC  Sociology of Gender (SOC 914)
SOC  Sociology of Deviant Behavior (SOC 915)

General Education Core
37-41 Semester Hours

General education core requirements can be found on page 22. The minimum number of 60 semester hours of credit are required to earn the A.A. or A.S. degree.

Courses are to be selected with the assistance and consent of an Academic Advisor to ensure completion of concentration and/or transferability towards the student’s major and minor fields of study.

Career Potential:

With additional education and/or work experience, graduates may find employment as:
Census Bureau Employee
Clergy
College Professor
Criminologist
FBI/CIA Agent
Gerontologist
Government Employee
High School Teacher
Researcher
Technology
Degree/Certificate Programs

Computer Aided Design (CAD)
Computer Networking
CISCO
Security
Windows
Linux
Digital Media Communication
Communication Graphics
Digital Media
Web Design
Web Developer

Drafting
Electrician Apprentice
Electronics
Electronic Systems Technology
Computer Maintenance
Information Technology

Laborer Apprentice
Maintenance Technology

Electrical
Facilities
Industrial
Mechanical

Manufacturing Technology
Logistics
Machines
Tooling
Planning & Quality

Welding
Associate in Applied Science Degree

Computer Aided Design (CAD) Technology
61-62 Semester Hours

The Computer Aided Design curriculum introduces students to a broad realm of technical and architectural modeling and imaging, visualization techniques, projection principles and concepts that typify engineering and architectural drawings. The program also develops the ability to use CAD systems to create drawings and models that reflect a thorough understanding of the standard practices used in the field. Students are guided through problem-solving activities and design projects that promote team effort and foster creativity. The program requires the student to select an area of specialty. Upon completion of the program, students will be able to seek entry-level employment as CAD technicians, CAD operators and engineering or architectural assistants.

General Education Requirements

COMM 101 Introduction to Oral Communication ..................3
ENGL 101 Composition I ....................................................3
MATH 109 College Algebra .................................................4

or

TMAT 103 Technical Mathematics I .........................................4
MATH 128 Trigonometry ....................................................3

or

TMAT 105 Technical Mathematics II ........................................4
Physical Science ............................................................4

Total 17-18

Technical Requirements

CSCI 101 Introduction to Computer & Information Science ....4
CAD 101 Introduction to AutoCAD ........................................3
MAIN 101 Industrial Electricity & Systems .............................3
TECH 114 Introduction to Technical Graphics .....................3
CAD 222 Advanced AutoCAD ............................................3

Total 16

Mechanical Drafting Option

CAD 203 Geometric Modeling ...........................................3
CAD 204 Product Design .................................................3
CAD 212 Technical Drawing .............................................3
CAD 214 Technical Drawing Applications ...........................3
CAD 224 Geometric Dimensioning & Tolerancing ...............3
CAD 254 Capstone Portfolio ............................................3
DME 120 Manufacturing Processes ...................................3

Total 27

Architectural Drafting Option

CAD 203 Geometric Modeling ...........................................3
CAD 212 Technical Drawing .............................................3
CAD 233 Residential Architecture ....................................4
CAD 234 Commercial Architecture ..................................3
CAD 244 Computer Applications in Architecture ................3
CAD 254 Capstone Portfolio ............................................3
CNST 101 Building Construction Basics ............................3
CNST 113 Construction Documents & Quantity Takeoff .......3
DME 120 Computer Imaging and Design ..........................3

Total 28

Building Construction Option

CAD 233 Residential Architecture ....................................4
CAD 234 Commercial Architecture ..................................3
CAD 244 Computer Applications in Architecture ................3
CNST 101 Building Construction Basics ............................3
CNST 103 Building Mechanics ..........................................3
CNST 113 Construction Documents and Quantity Takeoff ....3
CNST 224 Construction Estimating & Scheduling ...............3
MAIN 104 Air Conditioning & Refrigeration .......................3

Total 28

Total Hours 61-62

Notes: * Students who take TMAT 103 should also take TMAT 105 and TPHY 103.
Certificate

**Computer Aided Design (CAD)**

**33-35 Semester Hours**

The Computer Aided Design curriculum introduces students to a broad realm of technical and architectural modeling and imaging, visualization techniques and projection principles and concepts that typify engineering and architectural drawings. The program also develops the ability to use CAD systems to create drawings and models that reflect a thorough understanding of the standard practices used in the field. Students are guided through problem-solving activities and design projects that promote team effort and foster creativity. The certificate program requires the student to select an area of specialty. Upon completion of the program, students will be able to seek entry-level employment as CAD technicians, CAD operators and engineering or architectural assistants. All courses included in the CAD Technology Certificate are applicable to the Associate in Applied Science degree in CAD technology.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>College Level</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>TMAT 103 Technical Math I</td>
<td>4</td>
</tr>
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</table>

**Total 7**

**Technical Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 101</td>
<td>Introduction to AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>TECH 114</td>
<td>Introduction to Technical Graphics</td>
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**Total 10**

**Mechanical Drafting Option**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>CAD 204</td>
<td>Product Design</td>
<td>3</td>
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<tr>
<td>CAD 212</td>
<td>Technical Drawing</td>
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</tr>
<tr>
<td>CAD 222</td>
<td>Advanced AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 15**

**Architectural Drafting Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 212</td>
<td>Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CAD 222</td>
<td>Advanced AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>CNST 101</td>
<td>Building Construction Basics</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 16**

**Building Construction Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CAD 233</td>
<td>Residential Architecture</td>
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</tr>
<tr>
<td>CNST 101</td>
<td>Building Construction Basics</td>
<td>3</td>
</tr>
<tr>
<td>CNST 103</td>
<td>Building Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CNST 113</td>
<td>Construction Documents &amp; Quantity Takeoff</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 16**

**Total Hours 33-35**

**Career Potential:**

- CAD Technician
- Drafter
- Engineering Technician
- Assistant Engineer
- Tool Designer
- Building Estimator
- Construction Assistant Manager
- Designer
- Engineering Technologist
- CAD Systems Manager

With additional education and/or work experience, graduates may find employment as:
Certificate

Computer Network Cisco Academy
30 Semester Hours

This certificate prepares students for entry-level positions in the field of computer networking. Successful completion of this certificate results in a basic understanding of networking, routers, switches, as well as fundamental knowledge of Local and Wide Area LAN operation. The concepts covered in this certificate enable the student to develop experience in cabling, routing, IP addressing, routing protocols and network troubleshooting. Cisco Networking Academy courses NETW 121, NETW 122, NETW 123 and NETW 124 prepare students to take the Cisco Certified Network Associate exam. In addition to the CCNA certification exam objectives, this certificate covers topics to enhance your overall understanding of the networking industry. Hands-on experience is emphasized throughout the entire program.

General Education Requirements:
ENGL 101 Composition I ..............................................................3
Math Elective .....................................................................................4

Total 7

Core Requirements:
CSCI 101 Introduction to Computer Information Science...........4
NETW 150 Workstation Operating Systems.................................3
NETW 151 PC Hardware Maintenance & Repair...........................3
NETW 121 Cisco Network Academy I...........................................3
NETW 122 Cisco Network Academy II..........................................3
NETW 123 Cisco Network Academy III.........................................3
NETW 124 Cisco Network Academy IV.........................................3
TECH 299 Internship in Technology ..........................................1-4
or
NETW 172 Wireless Networking with Security .........................3

Total 23-27

Career Potential:
Network Control Operator
Network Support Technician
Network Technician
Network Specialist
Network Professional
Network Services
Assistant LAN Manager
Assistant LAN Administrator
Assistant Network Administrator

With additional education and/or work experience, graduates may find employment as:
LAN Manager
LAN Administrator
Network Support Services Manager
Network Engineer
Network Administrator
Web Designer
Networking Manager
Manager of Voice/Data Networks
Data Communications Analyst
Director of Networks
Advanced Certificate

Computer Network
Advanced Cisco Academy
12 Semester Hours

This certificate prepares students for advanced-level positions in the field of computer networking. Successful completion of this certificate results in an in-depth understanding of networking, routers, switches as well as knowledge of Local and Wide Area LAN operation. The concepts covered in this certificate enable the student to develop experience in remote access, advanced switching, routing, IP addressing, advanced routing protocols and network troubleshooting. Cisco Networking Academy courses NETW 221, NETW 222, NETW 223 and NETW 224 prepare students to take the Cisco Certified Networking Professional exam. In addition to the CCNP certification exam objectives, this certificate covers topics to enhance an overall understanding of the use of Virtual Private Networks.

Prerequisite for this certificate is a current CCNA certification or successful completion of NETW 124.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETW 221</td>
<td>Cisco Networking Academy V</td>
<td>3</td>
</tr>
<tr>
<td>NETW 222</td>
<td>Cisco Networking Academy VI</td>
<td>3</td>
</tr>
<tr>
<td>NETW 223</td>
<td>Cisco Networking Academy VII</td>
<td>3</td>
</tr>
<tr>
<td>NETW 224</td>
<td>Cisco Networking Academy VIII</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

Advanced Certificate

Computer Network Security Specialist
18 Semester Hours

This certificate prepares students for entry-level positions in the field of computer networking security. Successful completion of this certificate results in an in-depth understanding of networking, router and switch security, as well as knowledge of Local and Wide Area Networking operation and security. The concepts covered in this certificate enable the student to develop security experience in remote access, advanced switching, routing, IP addressing and network troubleshooting. Wireless and securing wireless networks will also be covered. Cisco Networking Academy courses NETW 170, NETW 171, NETW 271 and NETW 272 prepare students to take several Cisco Certified Networking exams as well as the CompTIA Security+ exam.

Prerequisite is the successful completion of the following three basic certificates: Computer Networking: Linux; Computer Networking: Windows; and Computer Network Cisco Academy.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETW 170</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NETW 172</td>
<td>Wireless Networking with Security</td>
<td>3</td>
</tr>
<tr>
<td>NETW 263</td>
<td>Windows Security</td>
<td>3</td>
</tr>
<tr>
<td>NETW 271</td>
<td>Cisco Router Security</td>
<td>3</td>
</tr>
<tr>
<td>NETW 272</td>
<td>Configuring Cisco PIX Boxes</td>
<td>3</td>
</tr>
<tr>
<td>NETW 296</td>
<td>Special Topics in Networking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>
Associate in Applied Science Degree

Computer Networking Technology
65 Semester Hours

The Associate in Applied Science Degree in computer networking technology prepares the student for a variety of entry-level positions. Examples include network administrator, PC/network technician, help desk technician and computer operator. Students receive hands-on PC and network experience in a variety of popular network components, including Linux and Microsoft Windows network operating systems, as well as network hardware installation and configuration, such as Cisco Networking equipment.

General Education Requirements
COMM 101 Introduction to Oral Communication ......................3
ENGL 101 Composition I ..........................................................3
MATH Elective ........................................................................4
Science Elective with Lab .......................................................4-5
Social Science or Humanities Elective.................................3
Total 17-18

NETW Core Requirements
CSCI 101 Intro to Computer & Information Science .................4
CSCI 130 Computer Science I ..................................................4
NETW 150 Workstation Operating Systems............................3
NETW 151 PC Hardware Maintenance & Repair.....................3
NETW 162 Networking Technologies ......................................4
Total 18

Technical Elective/Specialization
Elective Courses* .............................................................30 Hours
*Electives as approved by advisor/faculty

Electives as approved by advisor or Technology Division. Electives are recommended from the option or specialization area outlined on the next page and may include internship or special topics courses. Students who intend to transfer to a four-year school should contact an advisor or the department.

Career Potential:

Convergence Technician
LAN Manager
LAN Administrator
Networking Services
Network Professional
Network Specialist
Network Support Technician
Network Administrator
Network Technician
Network Analysis
Wireless Technician

With additional education and/or work experience, graduates may find employment as:
Network Administrator
Network Engineer
### Option/Emphasis Areas:

#### Networking Foundations Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETW 121</td>
<td>Cisco Network Academy I</td>
<td>3</td>
</tr>
<tr>
<td>NETW 122</td>
<td>Cisco Network Academy II</td>
<td>3</td>
</tr>
<tr>
<td>NETW 123</td>
<td>Cisco Network Academy III</td>
<td>3</td>
</tr>
<tr>
<td>NETW 124</td>
<td>Cisco Network Academy IV</td>
<td>3</td>
</tr>
<tr>
<td>NETW 166</td>
<td>Windows Workstation Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 172</td>
<td>Wireless Networking with Security</td>
<td>3</td>
</tr>
<tr>
<td>NETW 182</td>
<td>Linux Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 208</td>
<td>Data &amp; Cabling Systems</td>
<td>3</td>
</tr>
<tr>
<td>TECH 299</td>
<td>Internship in Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETW 167</td>
<td>Windows Server Administration</td>
<td>3</td>
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</tbody>
</table>

**Total 30**

#### Cisco Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETW 121</td>
<td>Cisco Network Academy I</td>
<td>3</td>
</tr>
<tr>
<td>NETW 122</td>
<td>Cisco Network Academy II</td>
<td>3</td>
</tr>
<tr>
<td>NETW 123</td>
<td>Cisco Network Academy III</td>
<td>3</td>
</tr>
<tr>
<td>NETW 124</td>
<td>Cisco Network Academy IV</td>
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<tr>
<td>NETW 172</td>
<td>Wireless Networking with Security</td>
<td>3</td>
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<tr>
<td>NETW 221</td>
<td>Cisco Network Academy V</td>
<td>3</td>
</tr>
<tr>
<td>NETW 222</td>
<td>Cisco Network Academy VI</td>
<td>3</td>
</tr>
<tr>
<td>NETW 223</td>
<td>Cisco Network Academy VII</td>
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</tr>
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<td>NETW 224</td>
<td>Cisco Network Academy VIII</td>
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<td>TECH 299</td>
<td>Internship in Technology</td>
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or

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<tbody>
<tr>
<td>NETW 271</td>
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**Total 30**

#### Linux/Windows Option

<table>
<thead>
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<th>Course Name</th>
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<tr>
<td>NETW 160</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>NETW 166</td>
<td>Windows Workstation Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 182</td>
<td>Linux Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 167</td>
<td>Windows Server Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 168</td>
<td>Managing a Windows Network</td>
<td>3</td>
</tr>
<tr>
<td>NETW 170</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NETW 182</td>
<td>Linux Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 183</td>
<td>Linux Security</td>
<td>3</td>
</tr>
<tr>
<td>NETW 208</td>
<td>Data &amp; Cabling Systems</td>
<td>3</td>
</tr>
<tr>
<td>NETW 261</td>
<td>Windows Network Infrastructure</td>
<td>3</td>
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<td>TECH 299</td>
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or

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NETW 263</td>
<td>Windows Security</td>
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**Total 30**

#### Security Basics Option

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<td>NETW 123</td>
<td>Cisco Network Academy III</td>
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<td>NETW 124</td>
<td>Cisco Network Academy IV</td>
<td>3</td>
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<td>NETW 170</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NETW 182</td>
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<td>NETW 183</td>
<td>Linux Security</td>
<td>3</td>
</tr>
<tr>
<td>NETW 271</td>
<td>Cisco Router Security</td>
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</tr>
<tr>
<td>NETW 272</td>
<td>Configuring Cisco PIX Boxes</td>
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<tr>
<td>TECH 299</td>
<td>Internship in Technology</td>
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or

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
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**Total 30**

#### Windows Option

<table>
<thead>
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<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NETW 160</td>
<td>Introduction to Networks</td>
<td>3</td>
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<tr>
<td>NETW 166</td>
<td>Windows Workstation Administration</td>
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<tr>
<td>NETW 167</td>
<td>Windows Server Administration</td>
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<td>NETW 168</td>
<td>Managing a Windows Network</td>
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</tr>
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<td>NETW 170</td>
<td>Network Security Fundamentals</td>
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</tr>
<tr>
<td>NETW 208</td>
<td>Data &amp; Cabling Systems</td>
<td>3</td>
</tr>
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<td>NETW 261</td>
<td>Windows Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>NETW 262</td>
<td>Windows Directory Services</td>
<td>3</td>
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<tr>
<td>NETW 263</td>
<td>Windows Security</td>
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<td>TECH 299</td>
<td>Internship in Technology</td>
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</tbody>
</table>

**Total 30**

**Total Hours 65**
Certificate

**Computer Networking: Windows**

30 Semester Hours

This certificate prepares students for an entry-level position as a network administrator using Windows. The first half of the program introduces students to basic computer concepts and networking. During the second half of the program, students intensively study Windows operating systems and utilities including network client/server capabilities. NETW 150 and NETW 151 courses in this program prepare students to take the A+ certification exams as computer technicians. NETW 160 prepares students to take the Network+ certification exam. NETW 166 and NETW 167 prepare students to take Microsoft Certified Professional exam. Hands-on experience is emphasized throughout the entire program.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Math Elective</td>
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**Total 7

**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computer Information Science</td>
<td>4</td>
</tr>
<tr>
<td>NETW 150</td>
<td>Workstation Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>NETW 151</td>
<td>PC Hardware Maintenance &amp; Repair</td>
<td>3</td>
</tr>
<tr>
<td>NETW 160</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>NETW 162</td>
<td>Networking Technologies</td>
<td>4</td>
</tr>
<tr>
<td>NETW 166</td>
<td>Windows Workstation Administration</td>
<td>3</td>
</tr>
<tr>
<td>NETW 167</td>
<td>Windows Server Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 23

**Total Hours 30
Advanced Certificate

**Computer Networking: Advanced Windows**

15 Semester Hours

Students intensively study the Windows platform and Microsoft Windows Server System software in this certificate program. Topics follow the objectives for Security+, Microsoft Certified Systems Administrator and Microsoft Certified Systems Engineer track exams. Hands-on experience is emphasized throughout the entire program. Prerequisite is successful completion of the Computer Networking Windows certificate.

- NETW 168 Managing a Windows Network ...................................3
- NETW 170 Network Security Fundamentals .................................3
- NETW 261 Windows Network Infrastructure.................................3
- NETW 262 Windows Directory Services........................................3
- NETW 263 Windows Security........................................................3

**Total 15**

Certificate

**Computer Networking: Linux**

30 Semester Hours

This certificate prepares students for an entry-level position as network administrator using Linux. The first half of the program introduces students to basic computer concepts and networking. During the second half of the program, students intensively study Linux operating system and its utilities including networking capabilities and security issues. NETW 150 and NETW 151 courses in this program prepare students to take the A+ certification exams as computer technicians. NETW 160 prepares students to take the Network+ certification exam. NETW 182 prepares students to take Linux+ certification exam. Hands-on experience is emphasized throughout the entire program.

**General Education Requirements**

- ENGL 101 Composition I ..............................................................3
- Math Elective ...........................................................................4

**Total 7**

**Core Requirements**

- CSCI 101 Introduction to Computer Information Science...........4
- NETW 150 Workstation Operating Systems...............................3
- NETW 151 PC Hardware Maintenance & Repair...........................3
- NETW 160 Introduction to Networks............................................3
- NETW 162 Networking Technologies ............................................4
- NETW 182 Linux Administration ....................................................3
- NETW 183 Linux Security ..............................................................3

**Total 23**

**Total Hours 30**
Certificate

**Communication Graphics**

33 Semester Hours

This certificate program is designed to prepare students for entry-level careers as commercial graphic designers. The comprehensive program provides students with skills in computer and art fundamentals, creating effective designs with an audience in mind, and troubleshooting technical problems. Students will be able to seek a variety of positions related to graphic design.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
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**Total 6**

**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>DMED 101</td>
<td>Introduction to Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DMED 120</td>
<td>Computer Imaging and Design</td>
<td>3</td>
</tr>
<tr>
<td>DMED 250</td>
<td>Preparing Print Publications</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Basic Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 180</td>
<td>Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 231</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 230</td>
<td>Principles of Marketing</td>
<td>3</td>
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</table>

**Total 21**

**Electives**

6 Hours

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any DMED, ART or COMM course</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 6**

**Total Hours 33**

---

**Career Potential:**

- Computer Animation
- Computer Graphics
- Graphic Design and Layout
- Illustrator
- Package Designer
- Promotion Assistant
- Publication Designer
- Production Print

With additional education and/or work experience, graduates may find employment as:
- Art Direction/Editing
- Graphic Designer
Associate in Applied Science Degree

**Digital Media Communication (DMED)**

*60 Semester Hours*

Students completing the Digital Media Communications degree in Applied Science program will have a number of opportunities in various fields. Currently, companies are expanding their Web presence, and graduates of this program will be well prepared to help in that effort. The skills and concepts covered in this program are valued by any business with a Web presence as well as the traditional creators and broadcasters of media.

The target population for this program will be students who are interested in a career writing, producing, and distributing digital content across a computer network. Students who want to create print materials (such as brochures, magazines or newspapers), video programs, Web sites or Web applications will find a home in this program.

This program will offer opportunities that are not covered by other programs at Heartland Community College. Students will learn not only the concepts of effective media communication, but they will have access to the tools to create all forms of digital media: Web sites, video programs, electronic print materials and Web-based applications.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101 Introduction to Oral Communication</td>
<td>3</td>
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<td>Science Elective</td>
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<td>Social Science/Humanities Elective</td>
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**Total 15-16**

### Core Requirements

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<tr>
<td>DMED 101 Introduction to Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DMED 110 Web Page Development I</td>
<td>3</td>
</tr>
<tr>
<td>DMED 120 Computer Imaging and Design</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 101 Introduction to Computer Information Science</td>
<td>4</td>
</tr>
<tr>
<td>BUSN 230 Principles of Marketing</td>
<td>3</td>
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<tr>
<td>ART 104 Basic Drawing</td>
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**Total 19**

### Web Media Designer Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DMED 145 Video Production</td>
<td>3</td>
</tr>
<tr>
<td>DMED 150 Interactive Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DMED 160 Web Server Administration</td>
<td>3</td>
</tr>
<tr>
<td>DMED 170 Dynamic Web Technologies</td>
<td>3</td>
</tr>
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<td>DMED 210 Advanced Web Page Design</td>
<td>3</td>
</tr>
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<td>DMED 260 Computer Animation</td>
<td>3</td>
</tr>
<tr>
<td>DMED 290 Advanced Media Production</td>
<td>3</td>
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<td>Technical Electives*</td>
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</table>

**Total 25-26**

### Web Application Developer Option

<table>
<thead>
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<th>Course</th>
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<tbody>
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<td>DMED 150 Interactive Digital Media</td>
<td>3</td>
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<td>DMED 160 Web Server Administration</td>
<td>3</td>
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<td>DMED 170 Dynamic Web Technologies</td>
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<tr>
<td>DMED 210 Advanced Web Page Design</td>
<td>3</td>
</tr>
<tr>
<td>DMED 270 JavaScript</td>
<td>3</td>
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**Total 25-26**

### Communication Graphics Option

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<tbody>
<tr>
<td>COMM 160 Mass Communication</td>
<td>3</td>
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<tr>
<td>ART 180 Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 231 Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>DMED 145 Video Production</td>
<td>3</td>
</tr>
<tr>
<td>DMED 150 Interactive Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DMED 210 Advanced Web Page Design</td>
<td>3</td>
</tr>
<tr>
<td>DMED 250 Preparing Print Publications</td>
<td>3</td>
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<tr>
<td>Technical Electives*</td>
<td>4-5</td>
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**Total 25-26**

### Total Hours 60

* Technical Electives

Any DMED, CSCI, NETW, or ART courses. Or any of the following:

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<tr>
<td>FILM 211 History of Film</td>
<td>3</td>
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<tr>
<td>COMM 109 Visual Communication</td>
<td>3</td>
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<tr>
<td>COMM 130 News and Feature Writing</td>
<td>3</td>
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<tr>
<td>COMM 135 Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td>COMM 160 Mass Communications</td>
<td>3</td>
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</tbody>
</table>

Career Potential:

- Web Designer
- Web Application Developer
- Web Programmer
- Graphic Designer

With additional education and/or work experience, graduates may find employment as:

- Web Master
- Web Analyst
- Web Server Technician
Certificate

Web Application Developer
35 Semester Hours

Completion of CSCI 101 or equivalency exam is required for admission to this certificate. This certificate program is designed to prepare students for entry-level careers as World Wide Web application developers. The comprehensive program provides students with skills in computer and Internet fundamentals, designing effective interfaces, coding HTML, providing application through a Web interface, and troubleshooting technical problems. Students will be able to seek a variety of positions related to Web application development.

General Education Requirements
ENGL 101 Composition I ..............................................................3
MATH 109 College Algebra ...........................................................4
Total 7

Core Requirements
CSCI 130 Computer Science I.....................................................4
DMED 101 Introduction to Digital Media .......................................3
DMED 110 Web Page Development I ............................................3
DMED 120 Computer Imaging and Design ...................................3
DMED 160 Web Server Administration ........................................3
DMED 170 Dynamic Web Technologies ......................................3
DMED 270 JavaScript ....................................................................3
Technical Electives* ...............................................................................3
Total 25

Technical Electives*
Any DMED Course
COMM 101 Introduction to Oral Communication .........................3
BUSN 230 Principles of Marketing ..............................................3
Total 3

Total Hours 35

Career Potential:
Web Programmer
Web Publisher
Web Research Specialist
Web Coordinator
Certificate

**Web Media Designer**

**33 Semester Hours**

This certificate program is designed to prepare students for entry-level careers as World Wide Web site designers. The comprehensive program provides students with skills in computer and Internet fundamentals, designing effective interfaces, coding HTML, creating graphics, and troubleshooting technical problems. Students will be able to seek a variety of positions related to Web site design.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
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**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DMED 101</td>
<td>Introduction to Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DMED 110</td>
<td>Web Page Development</td>
<td>3</td>
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<td>DMED 120</td>
<td>Computer Imaging and Design</td>
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<td>Video Production</td>
<td>3</td>
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<td>DMED 150</td>
<td>Interactive Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DMED 210</td>
<td>Advanced Web Design</td>
<td>3</td>
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<td>DMED 260</td>
<td>Computer Animation</td>
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**Elective Listing**

<table>
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<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Any DMED, ART or COMM course</td>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

**Total Hours 33**

**Career Potential:**

Webpage Designer  
Web Illustrator  
Computer Animator  
Computer Graphic Designer  
Web Project Management  
Interactive Design
Certificate

**Drafting Skills**

**17 Semester Hours**

The Drafting Skills Certificate of completion prepares individuals for entry-level positions as drafters, CAD technicians, detailers and related occupations. This certificate may be applied towards further study in CAD or manufacturing technology.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI</td>
<td>101 Intro to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>CAD</td>
<td>101 Introduction to AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>CAD</td>
<td>212 Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>TECH</td>
<td>114 Introduction to Technical Graphics</td>
<td>3</td>
</tr>
<tr>
<td>TMAT</td>
<td>103 Technical Mathematics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 17**

---

**Career Potential:**

- Draper
- CAD Technician

With additional education and/or work experience, graduates may find employment as:
- CAD Technician
- Designer
ELECTRICIAN APPRENTICE PROGRAM

Associate in Applied Science Degree

Electrician Apprentice Program

66 Semester Hours

This degree program is available only to students who have been admitted to the Bloomington-Normal Joint Apprenticeship Training Committee Program. For additional information concerning the Electrician Apprenticeship program, students should contact the IBEW JATC office at (309) 829-9819.

The Electrician Associate in Applied Science Degree program was established for the purpose of providing increased educational opportunities for electrician apprentices working towards their journeyman certification. The Associate of Applied Science Degree program will add additional coursework in general education to help expand his/her journeyperson education and training and the education component of the degree. He or she will also earn the Associate of Applied Science Degree from Heartland Community College.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101 - Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 - Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH or TMAT Elective</td>
<td>4</td>
</tr>
<tr>
<td>Social Science Elective</td>
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<tr>
<td>Humanities Elective</td>
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<tr>
<td><strong>Total 16</strong></td>
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</tbody>
</table>

Residential Electrician Apprenticeship Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ELAP 111 - Electrician Apprentice I</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 112 - Electrician Apprentice II</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 127 - Electrician Apprentice-Residential III</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 128 - Electrician Apprentice-Residential IV</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 137 - Electrician Apprentice-Residential V</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 138 - Electrician Apprentice-Residential VI</td>
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<tr>
<td>ELAP 211 - Electrician Internship-Semester 1</td>
<td>1</td>
</tr>
<tr>
<td>ELAP 212 - Electrician Internship-Semester 2</td>
<td>1</td>
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<tr>
<td>ELAP 221 - Electrician Internship-Semester 3</td>
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<tr>
<td>ELAP 222 - Electrician Internship-Semester 4</td>
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</tr>
<tr>
<td>ELAP 231 - Electrician Internship-Semester 5</td>
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<tr>
<td>ELAP 232 - Electrician Internship-Semester 6</td>
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<tr>
<td>Electives*</td>
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<td><strong>Total 50</strong></td>
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</table>

Commercial Electrician Apprenticeship Option

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>ELAP 111 - Electrician Apprentice I</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 112 - Electrician Apprentice II</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 121 - Electrician Apprentice III</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 122 - Electrician Apprentice IV</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 131 - Electrician Apprentice V</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 132 - Electrician Apprentice VI</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 141 - Electrician Apprentice VII</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 142 - Electrician Apprentice VIII</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 151 - Electrician Apprentice IX</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 152 - Electrician Apprentice X</td>
<td>4</td>
</tr>
<tr>
<td>ELAP 211 - Electrician Internship-Semester 1</td>
<td>1</td>
</tr>
<tr>
<td>ELAP 212 - Electrician Internship-Semester 2</td>
<td>1</td>
</tr>
<tr>
<td>ELAP 221 - Electrician Internship-Semester 3</td>
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<tr>
<td>ELAP 222 - Electrician Internship-Semester 4</td>
<td>1</td>
</tr>
<tr>
<td>ELAP 231 - Electrician Internship-Semester 5</td>
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<tr>
<td>ELAP 232 - Electrician Internship-Semester 6</td>
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<tr>
<td>ELAP 241 - Electrician Internship-Semester 7</td>
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<td>ELAP 242 - Electrician Internship-Semester 8</td>
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<td>ELAP 251 - Electrician Internship-Semester 9</td>
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<td>ELAP 252 - Electrician Internship-Semester 10</td>
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</tr>
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<td><strong>Total 50</strong></td>
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</tr>
<tr>
<td><strong>Total Hours 66</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Electives as approved by advisor or Technology Division

Career Potential:

**Electrician**

With additional education and/or work experience, graduates may find employment as:

Journeyman Electrician
Associate in Applied Science Degree

Electronic Systems Technology
66 Semester Hours

Electronic systems technology is a growing field with employment opportunities expected to continue their rapid increase. The curriculum is designed to prepare technicians with a solid core of knowledge and skills that can be transferred to positions in industry, business, health care, communications, utilities, government and other sectors.

General Education Requirements
COMM 101 Introduction to Oral Communication...........................3
ENGL 101 Composition I ..............................................................3
MATH 109 College Algebra ...........................................................4

or
TMAT 103 Technical Mathematics I* .............................................4

or

MATH 128 Trigonometry................................................................3

or
TMAT 105 Technical Mathematics II*............................................4

Physical Science* ........................................................4
Social Science/Humanities Elective ........................................3

Total 20

Technical Core Requirements:
CSCI 101 Introduction to Computer & Information Science .......4
TECH 114 Introduction to Technical Graphics..............................3
CAD 101 Introduction to AutoCAD ...........................................3
MAIN 101 Industrial Electricity & Systems ...................................3
MFTG 110 Manufacturing Processes............................................3

Total 16

Electronics Core Requirements:
ELTC 102 DC Electronics.............................................................3
ELTC 103 AC Electronics .............................................................3
ELTC 206 Digital Electronics .......................................................3
ELTC 207 Solid State Electronics ................................................3
ELTC 220 Data Communications.................................................3

Total 15

Automation and Controls Option:
ELTC 212 Automation and Control Electronics.........................3
MAIN 202 Hydraulic & Pneumatic Maintenance ......................3
MAIN 222 Industrial Controllers ..............................................3
NETW 208 Data and Cabling Systems ......................................3

Elective** .....................................................................................3

Total 15

Computer Electronics Option:
NETW 150 Workstation Operating Systems.............................3
NETW 151 PC Hardware Maintenance & Repair ......................3
NETW 160 Introduction to Networking ....................................3

NETW 208 Data and Cabling Systems ....................................3

Elective** .....................................................................................3

Total 15

Total Hours 66

*Students who take TMAT 103/105 should also take TPHY 103.
**Electives as approved by advisor or department

Career Potential:

Computer Technician
Network Technician
Electronics Development Technician
Electronics Maintenance Technician
Electronics Technician
Field Service Technician
Automation Technician
Communication Systems Technician
Wireless Technician

With additional education and/or work experience, graduates may find employment as:
Computer Field Service Supervisor
Production Supervisor
Electronics Maintenance Supervisor
Field Engineer
Sales Engineer
Certificate

Electronic Skills
16 Semester Hours

The Electronics Certificate of completion prepares individuals with basic skills in electronics, troubleshooting and circuit construction. This certificate may be applied for further study in the PC maintenance or electronic systems technology programs.

Certificate Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTC 102</td>
<td>DC Electronics</td>
<td>3</td>
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<tr>
<td>ELTC 103</td>
<td>AC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 206</td>
<td>Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 207</td>
<td>Solid State Electronics</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Certificate

Computer Maintenance Technician
35 Semester Hours

The Computer Maintenance Technician Certificate is designed to prepare students for entry-level careers as computer technicians. The comprehensive program provides students with skills in electronic fundamentals, instrument usage, troubleshooting, basic computer skills and PC maintenance and repair skills. Students will be able to seek a variety of positions related to computer installation, maintenance, repair and servicing. Students will be prepared with a body of knowledge sufficient to take the A+ certification exam. Upon completion of the program the students may continue their study in the A.A.S. Degree in electronic systems technology.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or Technical Mathematics I</td>
<td>4</td>
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Core Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CSCI 101</td>
<td>Intro to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>ELTC 102</td>
<td>DC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 103</td>
<td>AC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 206</td>
<td>Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 207</td>
<td>Solid State Electronics</td>
<td>3</td>
</tr>
<tr>
<td>NETW 150</td>
<td>Workstation Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>NETW 151</td>
<td>PC Hardware Maintenance and Repair</td>
<td>3</td>
</tr>
<tr>
<td>NETW 160</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
<tr>
<td>NETW 208</td>
<td>Data and Cabling Systems</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

**Total Hours 35**

Career Potential:

Electronics Technician

With additional education and/or work experience, graduates may find employment as:

Electrical Maintenance Technician
Journeyman Industrial Electrician

Career Potential:

Computer Technician
Network Technician
Información Tecnológica

Asociado en Ciencias Aplicadas

Información Tecnológica

61-62 Horas de Semestre

El Asociado en Ciencias Aplicadas en Información Tecnológica prepara al estudiante para una variedad de posiciones de nivel de entrada. Ejemplos incluyen programador de aplicaciones, programador de negocios, técnico de soporte de usuario/centro de ayuda y operador de computadora. Los estudiantes reciben dos semestres de experiencia de programación en vivo en un lenguaje de programación de alta nivel, como Java, y tienen la opción de seleccionar un segundo lenguaje de la rama de lenguajes de programación electiva.

Requerimientos Generales

<table>
<thead>
<tr>
<th>Curso</th>
<th>Créditos</th>
</tr>
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<tbody>
<tr>
<td>COMM 101 Introducción a la Comunicación Oral</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 Composición I</td>
<td>3</td>
</tr>
<tr>
<td>MATH Electivo (MATH 109 y 4 horas o superior)</td>
<td>4</td>
</tr>
<tr>
<td>Ciencia Electivo</td>
<td></td>
</tr>
<tr>
<td>Humanidades Electivo</td>
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<tr>
<td>Ciencia Electiva</td>
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Requerimientos Nucleares

<table>
<thead>
<tr>
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<th>Créditos</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 101 Introducción a la Ciencia &amp; Tecnología Informática</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 130 Ciencia Informática I</td>
<td>4</td>
</tr>
<tr>
<td>NETW 150 Sistemas de Trabajo de Escritorio</td>
<td>3</td>
</tr>
<tr>
<td>NETW 160 Introducción a la Red</td>
<td>3</td>
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<tr>
<td>Total 14</td>
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</tbody>
</table>

Electivos/Opciones/Especializaciones*

Electivos aprobados por el consejero o la División de Tecnología. Electivos se recomiendan de la opción o área de especialización y pueden incluir una Internado o Cursos Especiales. Los estudiantes que planean transferirse a una escuela de cuatro años deberían consultar a un consejero o el departamento.

**Opciones/Emphasis Areas:**

**Opción de Ciencia de Computadoras**

<table>
<thead>
<tr>
<th>Curso</th>
<th>Créditos</th>
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<tbody>
<tr>
<td>CSCI 115 Matemáticas Discretas</td>
<td>4</td>
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<tr>
<td>MATH 142 Estadística (o MATH 141)</td>
<td>4</td>
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<tr>
<td>MATH 161 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 110 Aplicaciones de la Ciencia de la Computadora</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 131 Ciencia de la Computadora II</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 200 Electivo (4 créditos)</td>
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<tr>
<td>Electivos** (Contacte al consejero)</td>
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<td>Total 28</td>
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</tbody>
</table>

**Opción de Sistemas de Información de Gestión Empresarial**

<table>
<thead>
<tr>
<th>Curso</th>
<th>Créditos</th>
</tr>
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<tbody>
<tr>
<td>CSCI 110 Aplicaciones de la Ciencia de la Computadora</td>
<td>3</td>
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<tr>
<td>CSCI 135 Programación en COBOL</td>
<td>3</td>
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<tr>
<td>CSCI 136 Programación en Visual Basic</td>
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<tr>
<td>CSCI 138 Programación en COBOL II</td>
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<tr>
<td>CSCI 260 Sistemas de Gestión de la Computadora</td>
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<td>MATH 142 Estadística (o MATH 141)</td>
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<td>ACCT 200 Contabilidad Financiera</td>
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<td>BUSN Electivo (selección de BUSN)</td>
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<tr>
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**Opción de Desarrollador de Aplicaciones Web**

<table>
<thead>
<tr>
<th>Curso</th>
<th>Créditos</th>
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</thead>
<tbody>
<tr>
<td>CSCI 110 Aplicaciones de la Ciencia de la Computadora</td>
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<tr>
<td>DMED 101 Desarrollo Digital de Datos</td>
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</tr>
<tr>
<td>DMED 110 Desarrollo Web de Desarrollo</td>
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<tr>
<td>DMED 120 Programación en Imagen &amp; Diseño</td>
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<tr>
<td>DMED 160 Administración de Servidor de Web</td>
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</tr>
<tr>
<td>DMED 170 Tecnologías Dinámicas Web</td>
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</tr>
<tr>
<td>DMED 270 JavaScript</td>
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</tbody>
</table>

**Otros Electivos:**

Otros cursos como MATH, NETW, DMED, TECH, ELTC & BUSN pueden ser tomados como electivos. Consulte un consejero para obtener más información.

Posibles carreras:

Desarrollador de Aplicaciones Web

Con educación adicional y/o experiencia laboral, los estudiantes pueden encontrar empleo como:

Administrador de Base de Datos
Gerente de Proyecto
Programador Senior
Analista de Sistemas
Certificate

**Computer Technology: Programming**

**31 Semester Hours**

This certificate prepares students for entry-level positions such as applications programmer, business programmer, user support/help desk and computer operator. Students receive two semesters of hands-on programming experience in a high-level programming language, such as C, and have the choice of selecting a second high-level language from the programming electives group. The courses included in the certificate are accepted toward the completion of the Associate in Applied Science degree in computer technology.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
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<td>CSCI 115</td>
<td>Discrete Math</td>
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**Core Requirements**

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<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 130</td>
<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 131</td>
<td>Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>NETW 150</td>
<td>Workstation Operating Systems</td>
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<td>NETW 160</td>
<td>Introduction to Networking</td>
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**Technical Elective/Specialization**

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<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tr>
<td></td>
<td>Programming Language Elective*</td>
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</tr>
<tr>
<td></td>
<td>CSCI Elective Courses*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total 6</strong></td>
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</tr>
</tbody>
</table>

*Electives as approved by advisor/faculty.

**Electives Listing**

**Programming Language Electives**

(Students are required to take at least one 200-level programming language course.)

**CSCI Elective Courses**

See degree.

Certificate

**PC Support Skills**

**10 Semester Hours**

The PC Support Certificate of completion prepares individuals with basic skills required to install, maintain and support PCs in the workplace. This certificate may be applied toward further study in electronics, networking or computer technology.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 101</td>
<td>Intro to Computer &amp; Info Science</td>
<td>4</td>
</tr>
<tr>
<td>NETW 150</td>
<td>Workstation Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>NETW 151</td>
<td>PC Hardware Maintenance &amp; Repair</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total 10</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Career Potential:**

Application Programmer

With additional education and/or work experience, graduates may find employment as:
- Database Administrator
- Information Systems Department Manager
- System Analyst
- System Programmer
- Database Assistant
- Project Manager

Customer Call Center Specialist

End User Support Specialist

Help Desk Professional

Microcomputer Application Specialist

PC Support Technician

Technical Help Desk Support
# Maintenance Technology

**Associate in Applied Science Degree**

**Maintenance Technology**  
**61-63 Semester Hours**

The maintenance technology Associate in Applied Science degree is a two-year program designed to prepare graduates for a position in industrial and facility maintenance or management. This program includes introductions to industrial electricity and wiring, mechanical applications, welding, hydraulic and pneumatic equipment and heating and air conditioning systems.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
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</tr>
<tr>
<td>MATH 109</td>
<td>College Algebra</td>
<td>4</td>
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<tr>
<td>or</td>
<td>TMAT 103 Technical Mathematics I*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 128</td>
<td>Trigonometry</td>
<td>3</td>
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<tr>
<td>or</td>
<td>TMAT 105 Technical Mathematics II*</td>
<td>4</td>
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<tr>
<td>Physical Science*</td>
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<td>4</td>
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<tr>
<td>Social Science/Humanities Elective</td>
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**Total 20-21**

### Technical Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>TECH 114</td>
<td>Introduction to Technical Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Introduction to AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity and Systems</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 16**

### Technical Electives

Specialty Electives** (see option areas) ........................................... 26-27

### Industrial Maintenance Option:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN 102</td>
<td>Industrial Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 202</td>
<td>Hydraulic and Pneumatic Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 220</td>
<td>Machine Installation and Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 222</td>
<td>Industrial Controllers</td>
<td>3</td>
</tr>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>4</td>
</tr>
<tr>
<td>MTT 201</td>
<td>Machine Tool II</td>
<td>3</td>
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<tr>
<td>WELD 110</td>
<td>Maintenance Welding</td>
<td>3</td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 25**

### Electrical Maintenance Option:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTC 102</td>
<td>DC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 103</td>
<td>AC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 206</td>
<td>Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 207</td>
<td>Solid State Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 212</td>
<td>Automation &amp; Control Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 220</td>
<td>Data Communication</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 201</td>
<td>Electrical Wiring &amp; Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 222</td>
<td>Programmable Controllers</td>
<td>3</td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 27**

### Facilities Maintenance Option:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 101</td>
<td>Building Construction Basics</td>
<td>3</td>
</tr>
<tr>
<td>CNST 103</td>
<td>Building Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CNST 113</td>
<td>Construction Documents &amp; Quantity Takeoff</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 104</td>
<td>Air Conditioning &amp; Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 221</td>
<td>Heating Systems</td>
<td>3</td>
</tr>
<tr>
<td>Electives**</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

**Total 27**

**Total Hours 62-63**

*Students who take TMAT 103/105 should also take TPHY 103.

**Students are encouraged to pursue a certificate program in conjunction with the A.A.S. degree. Other electives may be taken as approved by advisor or the department.

---

**Career Potential:**

- Maintenance Technician
- Facilities Technician
- Mechanical Maintenance Specialist
- Electronic Maintenance Technician
- Automation Technician

With additional education and/or work experience, graduates may find employment as:

- Journeyman Maintenance
- Maintenance Supervisor
- Senior Maintenance Technician
- Production Engineer
- Automation Specialist
- Sales Engineer
Certificate

**Electrical Maintenance Technology**

**31 Semester Hours**

The Electrical Maintenance Technology Certificate is a one-year program designed to prepare graduates for employment or advancement in electrical-related maintenance areas within industry. This program includes introductions to electricity, electronics, digital electronics and solid state electronics, and allows students to select elective courses. Students choosing to continue their education after the Electrical Maintenance Technology Certificate may easily continue into the electronic systems technology or maintenance technology Associate in Applied Science degree programs.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or TMAT 103</td>
<td>Technical Mathematics I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 7**

**Electrical Maintenance Core Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTC 102</td>
<td>DC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 103</td>
<td>AC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 206</td>
<td>Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELTC 207</td>
<td>Solid State Electronics</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 201</td>
<td>Electrical Wiring &amp; Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>or NETW 208</td>
<td>Data and Cabling Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 18**

**Technical Electives/Specialization**

* Elective as approved by advisor or department.

**Total Hours 31**

Certificate

**Electrical Maintenance Skills**

**10 Semester Hours**

The Electrical Maintenance Certificate of completion prepares individuals with basic skills in electrical fundamentals, circuits, wiring, industrial applications and the National Electrical Code. This certificate may be applied for further study in electronics or electrical maintenance.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 201</td>
<td>Electrical Wiring and Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 10**

**Career Potential:**

- Electrical Maintenance Technician
- Automation Technician
- Electrical Apprentice

With additional education and/or work experience, graduates may find employment as:

- Journeyman Industrial Electrician
- Maintenance Supervisor
- Lead Technician
MAINTENANCE TECHNOLOGY

Certificate

Facilities Maintenance Technology
31 Semester Hours

The purpose of the Facilities Maintenance Certificate is to prepare individuals who are involved with or plan to pursue a career related to the facilities maintenance area. This certificate will prepare an individual with a broad array of skills including electro-mechanical, basic construction, air conditioning and heating systems.

General Education Requirements
COMM 101 Introduction to Oral Communication..................3
MATH 109 College Algebra ..........................................................4
or
TMAT 103 Technical Mathematics I ..............................................4

Total 7

Industrial Maintenance Core Requirements:
CNST 101 Building Construction Basics ......................................3
CNST 103 Building Mechanics .....................................................3
CNST 113 Construction Documents & Quantity Takeoff ..............3
MAIN 101 Industrial Electricity and Systems ...............................3
MAIN 104 Air Conditioning & Refrigeration ..................................3
MAIN 221 Heating Systems .........................................................3

Total 18

Technical Electives/Specialization
Elective* .....................................................................................6

Total 6

Total Hours 31

* Elective as approved by advisor or department.

Career Potential:
Facilities Technician
HVAC Technician

With additional education and/or work experience, graduates may find employment as:
Maintenance Supervisor
Estimator
Inspector
Project Manager

Certificate

Facilities Maintenance Skills
16 Semester Hours

The Facilities Maintenance Certificate of completion prepares individuals with fundamental skills used in the support and maintenance of physical facilities. Skills learned include basic wiring, simple construction methods, air conditioning and heating systems, pumps and plumbing. This certificate may be applied in further study towards the maintenance technology program.

Certificate Requirements
CNST 103 Building Mechanics ..................................................3
MAIN 101 Industrial Electricity & Systems .................................3
MAIN 104 Air Conditioning & Refrigeration ...............................3
MAIN 221 Heating Systems .........................................................3
TMAT 103 Technical Mathematics ..............................................4

Total 16
Certificate

**Industrial Maintenance Technology**

**33 Semester Hours**

The Industrial Maintenance Technology Certificate is a one-year program designed to prepare graduates for a position in industrial and facility maintenance. This program includes introductions to industrial electricity and wiring, mechanical applications and welding, and allows students to select elective courses.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>TMAT 103</td>
<td>Technical Mathematics I</td>
</tr>
</tbody>
</table>

**Total 7**

**Industrial Maintenance Core Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 102</td>
<td>Industrial Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 202</td>
<td>Hydraulic and Pneumatic Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 220</td>
<td>Machine Installation &amp; Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>4</td>
</tr>
<tr>
<td>MTT 201</td>
<td>Machine Tool II</td>
<td>4</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Maintenance Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 23**

**Technical Electives/Specialization**

Elective* .....................................................................................3

**Total 3**

**Total Hours 33**

* Elective as approved by advisor or department.

Certificate

**Mechanical Maintenance Skills**

**13 Semester Hours**

The Mechanical Maintenance Certificate of completion prepares individuals with basic skills needed for industrial maintenance and related occupations. This certificate may be applied for further study in maintenance, or manufacturing technology.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN 102</td>
<td>Industrial Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 202</td>
<td>Hydraulic &amp; Pneumatic Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Maintenance Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 13**

**Career Potential:**

Production Maintenance Technician
Production Mechanic

With additional education and/or work experience, graduates may find employment as:

Maintenance Manager
Production Supervisor

Certificate

**Career Potential:**

Maintenance Mechanic
Industrial Mechanic

With additional education and/or work experience, graduates may find employment as:

Lead Mechanic
Journey-level Mechanic
Laborer Apprentice Program
60 Semester Hours

This degree program is available only to students who have been admitted to the Illinois Laborers & Contractors program. For additional information concerning the Laborer Apprenticeship program, students should contact the Illinois Laborers & Contractors Joint Apprenticeship and Training Program at 217-773-2741.

The Laborer Apprentice Associate in Applied Science degree program was established for the purpose of providing increased educational opportunities for laborer apprentices working towards their journeyman certification. The Associate of Applied Science degree program will add additional coursework in general education to help expand his or her Journeyperson education and training and the education component of the degree. He or she will also earn the Associate of Applied Science degree from Heartland Community College.

General Education Requirements
COMM 101 Introduction to Oral Communication.......................3
ENGL 101 Composition I .........................................................3
MATH or TMAT Elective.........................................................4
Social Science OR Humanities Elective.......................................3
Physical Science Elective (Earth Science recommended)...............4
Total 17

Construction Craft laborer Apprenticeship Option
ILAP 111 Craft Orientation & Safety Training.........................3
ILAP 112 Mason Tending ..........................................................3
ILAP 113 Concrete Practices & Procedures...............................3
ILAP 114 Asphalt Technology & Construction..........................3
ILAP 121 Asbestos Abatement ..................................................3
ILAP 122 Principles of Pipelaying ..........................................3
ILAP 123 Introduction to Blueprint Reading .............................3
ILAP 131 Basic Surveying.........................................................3
ILAP 132 Bridge Construction ..................................................3
ILAP 133 AGC Hazardous Waste Worker .................................4
ILAP 211 Laborer Internship I ..................................................3
ILAP 221 Laborer Internship II ..................................................3
ILAP 231 Laborer Internship III ..................................................3
Technical Electives* ................................................................3
Total 43

Total Hours 60

* Technical electives as approved by advisor or Technology Division.
Certificate

**Laborer Apprentice Program**

**44 Semester Hours**

This certificate program is available only to students who have been admitted to the Illinois Laborers & Contractors program. For additional information concerning the Laborer Apprenticeship program, students should contact the Illinois Laborers & Contractors Joint Apprenticeship and Training Program at 217-773-2741.

The Laborer Apprentice Program Certificate was established for the purpose of providing increased educational opportunities for laborer apprentices working towards their journeyman certification.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH or TMAT Elective</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Physical Science Elective (Earth Science recommended)</td>
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</tr>
</tbody>
</table>

**Total 4**

**Construction Craft Laborer Apprenticeship Option**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ILAP 111</td>
<td>Craft Orientation &amp; Safety Training</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 112</td>
<td>Mason Tending</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 113</td>
<td>Concrete Practices &amp; Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 114</td>
<td>Asphalt Technology &amp; Construction</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 121</td>
<td>Asbestos Abatement</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 122</td>
<td>Principles of Pipelaying</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 123</td>
<td>Introduction to Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 131</td>
<td>Basic Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 132</td>
<td>Bridge Construction</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 133</td>
<td>AGC Hazardous Waste Worker</td>
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<tr>
<td>ILAP 211</td>
<td>Laborer Internship I</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 221</td>
<td>Laborer Internship II</td>
<td>3</td>
</tr>
<tr>
<td>ILAP 231</td>
<td>Laborer Internship III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 40**

**Total Hours 44**
MANUFACTURING TECHNOLOGY

Certificate

Machine Operations Skills
17 Semester Hours

The Machine Operation Skills Certificate will prepare individuals for occupations in machining and related positions such as CNC operator, machine operator and apprentice. Students may apply this certificate for further study in manufacturing, CAD or maintenance technology.

Certificate Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>3</td>
</tr>
<tr>
<td>MTT 201</td>
<td>Machine Tool II</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 120</td>
<td>CNC Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>TECH 114</td>
<td>Introduction to Technical Graphics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Certificate

Machine Tool Technology
36 Semester Hours

The Machine Tool Technology Certificate is a one-year program designed to prepare graduates for employment or advancement in the machine tool trade areas. This program includes introductions to blueprint reading, microcad, machine tool, CNC manufacturing, tool-making, ferrous metallurgy, welding, technical writing and basic computer skills. Students choosing to continue their education after the Machine Tool Technology Certificate may easily continue into the Manufacturing Technology Associate in Applied Science Degree.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 107</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics</td>
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<tr>
<td>GEN 103</td>
<td>Information Technology Skills</td>
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<td></td>
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Machine Tool Technology Core Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 101</td>
<td>Introduction to AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 120</td>
<td>CNC Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>4</td>
</tr>
<tr>
<td>MTT 150</td>
<td>Ferrous Metallurgy</td>
<td>3</td>
</tr>
<tr>
<td>MTT 110</td>
<td>Toolmaking I</td>
<td>3</td>
</tr>
<tr>
<td>MTT 201</td>
<td>Machine Tool II</td>
<td>3</td>
</tr>
<tr>
<td>MTT 210</td>
<td>Toolmaking II</td>
<td>3</td>
</tr>
<tr>
<td>TECH 111</td>
<td>Blueprint Reading for Industry</td>
<td>2</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Maintenance Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

Total Hours 36

Career Potential:

Machine Operator
CNC Operator

With additional education and/or work experience, graduates may find employment as:
CNC Technician
CAD/CAM Technician
Machinist

Tool and Die Apprentice
Mold Making Apprentice
Millwright Apprentice
Precision Machinist
CNC Machinist
CNC Programmer
Machine Repair Specialist

With additional education and/or work experience, graduates may find employment as:
Journey-level Tool and Die Maker
Journey-level Mold Maker
Journey-level Millwright
Journey-level Machinist
Shop Owner/Manager
Process Planner
Manufacturing Engineer
Industrial Sales Engineer
Die and/or Mold Designer

HEARTLAND COMMUNITY COLLEGE
TECHNOLOGY DEGREE/CERTIFICATE PROGRAMS

Associate in Applied Science Degree

**Manufacturing Technology**

60-62 Semester Hours

Manufacturing technology is a comprehensive program designed to prepare graduates for employment or advancement in industrial/organizations as technicians, engineering aid or first-line supervisors. Students will learn the processes involved in mass production, planning, quality control, material selection, tools and equipment, and how to inspect and handle parts, equipment and the finished product.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics I*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 128</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>TMAT 105</td>
<td>Technical Mathematics II*</td>
<td>4</td>
</tr>
<tr>
<td>Physical Science Elective*</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Social Science/Humanities Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total 20-21**

**Technical Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>TECH 114</td>
<td>Introduction to Technical Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Introduction to AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>MAIN 101</td>
<td>Industrial Electricity &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 16**

**Manufacturing Requirements:**

**Planning & Quality Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFTG 101</td>
<td>Principles of Dimensional Metrology</td>
<td>2</td>
</tr>
<tr>
<td>MFTG 215</td>
<td>Statistics and Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 216</td>
<td>Statistical Process Control</td>
<td>2</td>
</tr>
<tr>
<td>MTRL 101</td>
<td>Basics of Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>MTRL 210</td>
<td>Master Planning of Resources</td>
<td>3</td>
</tr>
<tr>
<td>MTRL 220</td>
<td>Detailed Scheduling and Planning</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 170</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 220</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 25**

**Tool Design Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFTG 101</td>
<td>Principles of Dimensional Metrology</td>
<td>2</td>
</tr>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>3</td>
</tr>
<tr>
<td>MTT 110</td>
<td>Tool Making I</td>
<td>4</td>
</tr>
<tr>
<td>MTT 150</td>
<td>Ferrous Metallurgy</td>
<td>3</td>
</tr>
<tr>
<td>CAD 203</td>
<td>Geometric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CAD 204</td>
<td>Product Design</td>
<td>3</td>
</tr>
<tr>
<td>CAD 212</td>
<td>Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CAD 214</td>
<td>Technical Drawing Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 24**

**Machining Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFTG 101</td>
<td>Principles of Dimensional Metrology</td>
<td>2</td>
</tr>
<tr>
<td>MFTG 120</td>
<td>Computer Numerical Controlled Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>MFTG 215</td>
<td>Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>4</td>
</tr>
<tr>
<td>MTT 110</td>
<td>Toolmaking I</td>
<td>3</td>
</tr>
<tr>
<td>MTT 150</td>
<td>Ferrous Metallurgy</td>
<td>3</td>
</tr>
<tr>
<td>MTT 201</td>
<td>Machine Tool II</td>
<td>3</td>
</tr>
<tr>
<td>MTT 210</td>
<td>Toolmaking II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 25**

**Total Hours 60-62**

**Career Potential:**

- Manufacturing Technician
- Manufacturing Technologist
- Production Planner
- Quality Technician
- Machinist
- Machine Operator
- CNC Operator

With additional education and/or work experience, graduates may find employment as:

- Manufacturing Engineer
- Quality Engineer
- Quality Manager
- Lead Operator
- CAD/CAM Engineer
MANUFACTURING TECHNOLOGY

Certificate

Manufacturing Skills
15 Semester Hours

The Manufacturing Skills Certificate of completion provides individuals with basic skills required in most manufacturing-related occupations. It also provides a foundation for further study in manufacturing, CAD, quality or maintenance technology.

Certificate Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFTG 101</td>
<td>Principles of Dimensional Metrology</td>
<td>2</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>MTT 101</td>
<td>Machine Tool I</td>
<td>3</td>
</tr>
<tr>
<td>TECH 114</td>
<td>Introduction to Technical Graphics</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

HEARTLAND COMMUNITY COLLEGE 102
Materials and Logistics Management

32 Semester Hours

Materials and Logistics Management is a one-year certificate program designed to provide individuals with the concepts, principles and skills needed for successful careers in materials management, manufacturing management, inventory control, production control, purchasing and material control. The program is intended for those individuals wanting to gain the necessary credentials for entry into the field and for current employees looking to enhance their knowledge and skills. The program also prepares students for professional certification by the American Production and Inventory Control Society (APICS). This certificate may also be incorporated wholly or in part into an associate’s degree program in manufacturing technology or business.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>Math Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTRL 101</td>
<td>Basics of Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>MTRL 210</td>
<td>Master Planning of Resources</td>
<td>3</td>
</tr>
<tr>
<td>MTRL 220</td>
<td>Detailed Scheduling &amp; Planning</td>
<td>3</td>
</tr>
<tr>
<td>MTRL 230</td>
<td>Execution &amp; Control of Operations</td>
<td>3</td>
</tr>
<tr>
<td>MTRL 240</td>
<td>Strategic Management of Resources</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Technical Electives/Specialization

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical/Business Electives*</td>
<td>10</td>
</tr>
</tbody>
</table>

|          | **Total**                                 | **10** |

|          | **Total Hours**                           | **32** |

*Students interested in an emphasis in PRODUCTION should take the following electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 215</td>
<td>Statistics and Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 225</td>
<td>Production and Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students interested in an emphasis in BUSINESS should take the following electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 200</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACSM 101</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 130</td>
<td>Computer Applications in Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSN 150</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>MFTG 225</td>
<td>Productions and Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

*Other technical or business elective courses may be selected as electives as approved by the advisor/department.

Career Potential:

Production Planner
Logistics Planner
Expeditor

With additional education and/or work experience, graduates may find employment as:
Logistics Manager
Planning Supervisor
Certificate

**Quality Technology**

**30 Semester Hours**

The Quality Technology Certificate is a one-year program designed to prepare graduates for employment or advancement in industrial and manufacturing organizations in areas dealing with process and product quality. This program includes introductions to computers, blueprint reading, metrology, manufacturing processes, statistics and quality control, statistical process control, materials science and production and operations management, and allows students to select an elective course. Students choosing to continue their education after the Quality Technology Certificate may easily continue into the Manufacturing Technology Associate in Applied Science Degree.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>Math Elective*</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

**Quality Technology Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 101</td>
<td>Intro to Computer &amp; Information Science</td>
<td>4</td>
</tr>
<tr>
<td>TECH 111</td>
<td>Blueprint Reading for Industry</td>
<td>2</td>
</tr>
<tr>
<td>MFTG 101</td>
<td>Principles of Dimensional Metrology</td>
<td>2</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 120</td>
<td>Computer Numerically Controlled Mfg.</td>
<td>4</td>
</tr>
<tr>
<td>MFTG 215</td>
<td>Statistics and Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 216</td>
<td>Statistical Process Control</td>
<td>2</td>
</tr>
<tr>
<td>MTRL 101</td>
<td>Basics of Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

**Total Hours 30**

*Math Elective to be chosen from the following:

MATH 109, MATH 141, TMAT 103.

**Career Potential:**

- Quality Technician
- Supervisor
- Leader Worker
- Team Leader
- Team Facilitator
- Inspector
WELDING

Certificate

Welding Skills
6 Semester Hours

The Welding Certificate of completion prepares individuals with basic skills in welding and related processes. This certificate may be used as a path to further study in welding, maintenance or manufacturing technology.

Certificate Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 110</td>
<td>Maintenance Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 116</td>
<td>Shielded Metal Arc Welding I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 6

Certificate

Welding Technology
31 Semester Hours

Welding technology is a comprehensive program leading to a certificate. The program is designed to prepare graduates for employment or advancement as technicians or operators in industrial manufacturing organizations that utilize welding procedures. Students will learn the processes and techniques in industrial welding. Appropriate materials, tools equipment, weld design, code application and weld inspection are discussed.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Introduction to Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>TMAT 103</td>
<td>Technical Mathematics I</td>
<td>4</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total 10

Welding Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 114</td>
<td>Introduction to Technical Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MFTG 110</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Maintenance Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 116</td>
<td>Shielded Metal Arc Welding (SMAW) I</td>
<td>3</td>
</tr>
<tr>
<td>WELD 217</td>
<td>Shielded Metal Arc Welding (SMAW) II</td>
<td>3</td>
</tr>
<tr>
<td>WELD 218</td>
<td>Gas Metal Arc Welding (GMAW)</td>
<td>3</td>
</tr>
<tr>
<td>WELD 219</td>
<td>Gas Tungsten Arc Welding (GTAW)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 21

Total Hours 31

Career Potential:

Maintenance Welder
Structural Welder
Welder/Fabricator

With additional education and/or work experience, graduates may find employment as:
Welding Apprentice
Welding Foreman
Welding Inspector
Welding Supervisor
The courses offered by Heartland Community College are listed on the following pages. Descriptions are in alphabetical order by abbreviated code, not by subject field.

Courses numbered below 100 are developmental education courses and credit earned from these courses does not apply toward degrees or certificates. These courses prepare students for additional course work with Heartland Community College.

Prerequisites

Stated prerequisites: Students enrolling in courses with stated prerequisites must provide documentation of their fulfillment of those prerequisites at the time of their enrollment in the course.

Absence of stated prerequisites: The absence of a stated prerequisite in the course description indicates that college-level reading and writing proficiency is required. All credit-bearing courses require demonstrated college-level reading and writing skills unless the course description is accompanied by the triangle-shaped icon described below.

Icons

Illinois Articulation Initiative icons are located next to courses approved to meet the General Education Core Requirements. Read more about IAI on pages 23, 24 and 25 of this catalog or log onto the IAI Web page: www.ITransfer.org.

Course descriptions accompanied by the triangle-shaped icon refer to courses included on the Course Selection Guides for Students Enrolled in Developmental Courses on this page. Students enrolled in developmental English and reading courses may enroll only in the credit-bearing courses specified by these guides. However, it should be noted that enrollment in the credit-bearing courses listed by the guides is not limited solely to students in developmental reading and writing courses.

Courses above the dotted line in each cell apply to the Associate in Arts or the Associate in Science degree. Those below the dotted line in each cell (and in italicized print) apply only to Associate in Applied Science or certificates. Courses numbered below 100 (bold print and preceded with a "*") are developmental education courses; credit earned from these courses does not apply toward degrees or certificates.

Students must maintain enrollment in the appropriate developmental reading and/or writing course to remain enrolled in the credit-bearing courses identified by this guide.

In addition to the courses listed for their reading and/or writing placement, students may also enroll in the credit-bearing courses listed for the developmental reading and writing courses that are lower than their course (i.e., in the cells above and to the left), also.

<table>
<thead>
<tr>
<th>ENGL 094</th>
<th>ENGL 095</th>
<th>ENGL 101 (College-Level Writing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 070</td>
<td>MUSI 104, MUSI 105, MUSI 106, MUSI 120, MUSI 145, MUSI 199, MUSI 200, HLTH 101, HLTH 103, HLTH 104</td>
<td></td>
</tr>
<tr>
<td>READ 090</td>
<td>CSCI 100, THEA 104, THEA 108, NURS 110</td>
<td></td>
</tr>
<tr>
<td>READ 091</td>
<td>ACSM 101, CSCI 101, ACCT 120, CAD 101, CAD 132, CAD 142, CAD 212, CAD 222, CAD 233, CRJ 114, MAIN 101, MAIN 102, MAIN 104, MAIN 221, MFTG 101, MFTG 110, MFTG 120, MFTG 215, MFTG 216, MTT 101, MTT 110, MTT 150, MTT 201, MTT 210, OTEC 103, TECH 110, TECH 111, TECH 114, TMAT 103, TMAT 105, TPHY 103, WELD 110, WELD 115, WELD 116, WELD 217, WELD 218, WELD 219</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ART 103, ART 104, ART 105, ART 106, ART 140, ART 145, ART 154, ART 204, ART 205, ART 206, EDUC 101, GENS 100, GENS 101, GENS 102, GENS 103, GENS 104, GENS 105, HUMA 100, THEA 101, BUSN 145, CHLD 106, CHLD 203, CHLD 205, CHLD 210, ELTC 102, ELTC 103, EMT 101, EMT 220, EMT 221, EMT 230, EMT 231, EMT 232</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHLD 296, COMM 101, COMM 230, CHLD 107, CHLD 208, CHLD 215, DMED 101, DMED 120</td>
<td></td>
</tr>
<tr>
<td>College-Level Reading</td>
<td>ACSM 120, ACSM 135, ACSM 145, ACSM 155, ACSM 163</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 114, BIOL 116, BIOL 117, BIOL 121, ECON 101, ECON 102, ECON 220, ENGL 118, ENGL 206, MUSI 110, MUSI 111, RELI 230, SOC 101, SOC 102, SOC 135, ACCT 130, ACCT 140, MTRL 101, MTRL 210, MTRL 220, MTRL 230, MTRL 240</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*BIOL 099, *POS 090</td>
<td></td>
</tr>
</tbody>
</table>
Mathematics Courses Sequence
Current Heartland Mathematics Curriculum

Math 070
Fundamentals of Math
3 credits

Math 087
Beginning Algebra
3 credits

Math 099*
Intermediate Algebra for Math & Science
5 credits

Math 096
Intermediate Algebra for Business & Social Science
3 credits

Math 131*
Explorations in Mathematics
3 credits

Math 106*
College Algebra for Business & Social Science
4 credits

Math 141*
Introduction to Statistics
4 credits

Math 128
Trigonometry
3 credits

Math 109
College Algebra for Math & Science
4 credits

Math 142
Business Statistics
4 credits

Math 111
Finite Math for Business
4 credits

Math 151
Calculus for Business & Social Science
4 credits

Math 161
Calculus I
4 credits

Math 162
Calculus II
4 credits

Math 163
Calculus III
4 credits

Math 271
Linear Algebra
4 credits

Math 272
Differential Equations
4 credits

Math 098
Geometry
3 credits

Math 135**
Mathematics for Elementary Teachers I
3 credits

Math 136
Mathematics for Elementary Teachers II
3 credits

* Math 098 (or high school geometry or equivalent) with a grade of "C" or higher is a prerequisite for this course and all subsequent courses.

**The prerequisite for Math 135 is Math 098 and Math 096 or Math 099.
ACCOUNTING

ACCT 120
Small Business Accounting 3 HRS
General accounting principles and their application to small businesses. Topics will include the accounting cycle, special journals and ledgers, cash and receivables, inventory, depreciation, product costing, cost analysis and financial statement preparation. Practical applications will be emphasized throughout the course. (FA, SP)

ACCT 130
Computerized Accounting Applications 3 HRS
Prerequisite: ACCT 120 or ACCT 200 or permission of instructor. Introduction to software used for accounting information systems. Use of general ledger accounting software on the microcomputer, development of a computerized accounting information system and development of supporting software applications. (FA, SP, SU)

ACCT 140
Small Business Taxes 3 HRS
General tax principles and their application to small businesses. This course will introduce the basics of the federal state tax structure, payroll taxes, sales tax reports and basic tax preparation, and reporting requirements for small business. (FA)

ACCT 200
Financial Accounting 4 HRS
Prerequisite: MATH 106 or MATH 109. Sophomore standing recommended. This course offers students a full semester of financial accounting. It presents accounting as an information system that produces summary financial statements, primarily for users external to a business or other enterprise. The emphasis of the course is on understanding & applying basic accounting principles and other concepts that guide the reporting of the effects of common business transactions. How to analyze and interpret historical financial statements as well as the limitations of using these in making business decisions is included. The primary content emphasis will be accounting for operating activities, current assets & liabilities, long-term assets & liabilities, corporations, cash flow statements and financial statement analysis. (IAI Major Code BUS 903) (FA, SP, SU)

ACCT 201
Managerial Accounting 4 HRS
Prerequisite: ACCT 200 or equivalent. This course offers students a full semester of managerial accounting. It presents accounting as a system of producing information for use in internally managing a business. The course emphasizes the identification, accumulation & interpretation of information for planning, controlling and evaluating the performance of the separate components of a business. Included is the identification and measurement of the cost of producing goods or services and how to analyze and control these costs. (IAI Major Code BUS 904) (FA, SP, SU)

APPLIED COMPUTER SCIENCE

ACSM 101
Introduction to Microcomputers 3 HRS
Discovering computers will introduce students from any major to the major components of computer hardware and software. Students will have the opportunity to work with the graphical user interface created for personal computers in addition to the Internet/World Wide Web, computer languages and integrated software packages used in business and industry. Keyboarding ability is recommended. (FA, SP, SU)

ACSM 120
Microcomputers in Office Management 3 HRS
Prerequisite: ACSM 101 or ACSM 110 or satisfactory score on the ACSM 101 proficiency exam. This course is an introduction to a popular integrated software applications package. Students will be introduced to introductory concepts and develop skills in word processing, spreadsheet creation, database development and presentation graphics. In addition, the student will learn to combine and link their word processing text, spreadsheets and databases into a single integrated document. The skills acquired and techniques developed will be applicable to problems that are typical in an office environment. (FA, SP, SU)

ACSM 125
Presentation Graphics-MS PowerPoint 1 HR
Prerequisite: ACSM 120 or satisfactory score on placement exam. This course is a comprehensive exploration of designing and creating presentations. Students will be introduced to the concepts and techniques fundamental to the application of Microsoft PowerPoint. The course material integrates Internet resources with current business, education and individual student objectives. Keyboarding skills recommended. (FA, SP, SU)
ACSM 135
**Spreadsheets - Excel for Windows** 3 HRS
Prerequisite: ACSM 120 or satisfactory score on placement exam. Students of this course will develop a working knowledge of the basic and advanced capabilities of the Windows-based spreadsheet software program Microsoft Excel. The course is taught in an exercise-oriented approach, which will prepare students to develop spreadsheet solutions for accounting, financial analysis and many other business planning situations. Topics explored in this course include: spreadsheet design, creation of graphs, templates, linking of files, database management and macros. (FA, SP, SU)

ACSM 145
**Database Applications - Access** 3 HRS
Prerequisite: ACSM 120, or satisfactory score on placement exam. This course will introduce students from any discipline to the major components of database management systems with a thorough coverage of database use and applications. Students will use the database to create files and business reports, including file design and maintenance, report generation and advanced concepts. (FA, SP, SU)

ACSM 155
**Word Processing - MS Word** 3 HRS
Prerequisite: ACSM 120 or satisfactory score on placement exam. This course will develop a working knowledge of the basic and advanced capabilities of the Windows-based word processing program Microsoft Word. The course is taught in an exercise-oriented approach, which will prepare students to produce a variety of documents, from one-page letters to multiple page newsletters and brochures. Word processing features including formatting, printing, merging, desktop publishing and use of templates will be explored during the semester. (FA, SP, SU)

ACSM 163
**Desktop Publisher - Pagemaker** 3 HRS
Prerequisite: ACSM 120 or permission of instructor. A hands-on introduction to desktop publishing procedures that mix text and graphics to produce office documents. Advanced topics include the production of pamphlets, brochures and newsletters. (FA, SP)

ACSM 165
**Desktop Publishing - QuarkXPress** 3 HRS
Prerequisite: ACSM 155 or permission of instructor. A hands-on introduction to desktop publishing procedures that mix text and graphics to produce office documents. Advanced topics include the production of pamphlets, brochures and newsletters. (FA)

ACSM 296
**Topics in Microcomputer Applications** 1-6 HRS
This course will offer students an opportunity to study a special topic or current issue which is unique and infrequently offered as part of their program. The course is intended to familiarize students with some of the latest microcomputer applications. The topic will be announced in the schedule book. Because topics studied will change each semester, ACSM 296 may be repeated up to a total of 6 credit hours.

**AGRICULTURE**

AGRI 110
**Introductory Agricultural Economics** 3 HRS
Fundamental principles of economics applied to agriculture, agriculture finance, prices, taxation, marketing and land use. (IAI Major Code AG 901)

AGRI 120
**Introductory Horticulture** 3 HRS
Introduction to principles and practices in development, production and use of horticultural crops (fruits, vegetables, greenhouse, floral, turf, nursery and landscape).

AGRI 130
**Introduction to Agricultural Engineering Technology** 3 HRS
An exploration into efficiently and economically confronting the challenges found in the mechanical systems of a Midwest agricultural business. Emphasis will be placed on the use of energy in agricultural enterprises, resource conservation, the use of agricultural machinery, welding & metallurgy and agricultural structures. (IAI Major Code AG 906)

AGRI 150
**Principles of Agronomy** 4 HRS
Fundamentals of plant science; importance, classification, distribution and production practices of the major crops of the world. (IAI Major Code AG 903)

AGRI 157
**Soil Science** 4 HRS
Prerequisite: Completion of a fundamentals chemistry course. Origin and formation, physical and chemical properties, moisture relationships, liming & fertilizing soils will be covered. Chemical & physical tests of soils will also be done. (IAI Major Code AG 904)

AGRI 170
**Introduction to Animal Science** 4 HRS
Breeding, selection, genetics, nutrition, physiology and production of farm animals. Fundamentals of animal science. (IAI Major Code AG 902)

AGRI 171
**Introduction to Animal Nutrition** 4 HRS
Prerequisite: AGRI 170. Study of nutrients, their metabolism and utilization; digestive physiology in ruminants and non-ruminants, diet formulation and ration balancing.

AGRI 190
**Introduction to Agricultural Education** 2 HRS
Introduction to the agricultural teaching profession, overview of the total agricultural program, philosophical base of education process and teaching special-need students. (IAI Major Code AG 911)
Course Descriptions

ANTHROPOLOGY

ANTH 101
Introduction to Cultural Anthropology 3 HRS
The study of human beings, from their common origins as hominids to their vast capacity for cultural diversity, stressing the culturally conditioned behaviors that are unique to their adaptive mechanisms. The comparative method will be used to reveal deep underlying cultural universals, while observing the many diverse ways of implementing these universals in different societies, both ancient and modern. (GECC S1 901N) (FA, SP)

ART

ART 102
Two-Dimensional Design 3 HRS
Prerequisite: concurrent enrollment in ART 104 is recommended. A studio course exploring the fundamentals of the formal systems and basic elements of visual organization through two-dimensional design principles and theories. A variety of media will be utilized, including pencil, pen, acrylic paint and computer imaging. This course meets 6 hours for 3 hours credit. (FA, SP)

ART 103
Three-Dimensional Design 3 HRS
An exploration of the general considerations in design, especially the relationship of art forms to our three-dimensional world and the principles that unify design. Emphasis will be placed on the application of various media and techniques to 3-D image making. This course meets 6 hours for 3 hours credit. (IAI Major Code ART 908) (FA, SP)

ART 104
Basic Drawing 3 HRS
An introduction to drawing principles and techniques. Covers the fundamental concepts of drawing, including a study of line, form, space, value and composition, utilizing a variety of media, such as pencil, pen, conte, chalk and other tools. This course meets 6 hours for 3 hours credit. (IAI Major Code ART 904) (FA, SP, SU)

ART 105
Ceramics I 3 HRS
An exploratory course designed to introduce students to the basic sculptural techniques of three-dimensional clay design and clay glazing. This course meets 6 hours for 3 hours credit. (FA, SP, SU)

ART 106
Painting I 3 HRS
Prerequisite: ART 104 recommended. An introduction to basic painting techniques and color principles applied to the exploration of oil and/or acrylic painting media. This course meets 6 hours for 3 hours credit. (FA, SP, SU)

ART 140
Introduction to Water Color and Pastel 3 HRS
An exploratory course using transparent water color and pastel, which introduces color theory and practice, formal compositional principles & painting/drawing techniques appropriate to these media. Subject matter will include still life, landscape, portraiture and figure study. This course meets 6 hours for 3 hours credit. (FA)

ART 145
Sculpture I 3 HRS
Prerequisite: ART 103, Three-Dimensional Design or equivalent. Sculpture I is a studio course introducing basic sculptural processes, materials and tools, including additive, subtractive and substitution methods. Shop safety and aesthetic issues, both modern and historical, will be emphasized. This course meets 6 hours for 3 hours credit. (IAI Major Code ART 913) (SP)

ART 150
Art Appreciation 3 HRS
An understanding of the role of art in our culture and in contemporary life. This course is non-historical in approach, utilizing works from all cultures and periods to establish basic principles of aesthetic organization and to illustrate common techniques in the visual arts. Not intended for art majors. (GECC F2 900) (FA, SP, SU)

ART 154
Intermediate Drawing 3 HRS
Prerequisite: ART 104 or equivalent. Intermediate drawing is a studio course designed to further the visual explorations begun in basic drawing. In this course, students will continue to explore new media and to develop their perceptual skills. In addition, they will examine the process of drawing in conjunction with and independent of subject matter. Half of the semester will be devoted to exploring the human figure: its proportions, its construction and its potential as an expressive image. This course meets 6 hours for 3 hours credit. (IAI Major Code ART 905) (FA)

ART 180
Beginning Photography 3 HRS
Fundamentals of black and white still photography. Historical development of the medium. The role of photography in contemporary visual expression, including contributions from diverse cultures. The course emphasizes photographic seeing, camera operation, use of aperture and shutter settings for aesthetic and sensitometric control, film processing, printing, use of natural light for personal expression and communication and appropriate instruction in the health and safety issues relative to the methods of the course and the materials being used. Students will need to provide their own 35mm camera equipped with manual capabilities to change lens opening and shutter speeds. This course meets 6 hours for 3 hours credit. (IAI Major Code ART 917) (FA, SP, SU)

ART 190
Digital Photography and Imaging I 3 HRS
Prerequisite: Completion of ART 180 with a “C” or better. Introduction to digital photography and digital imaging processes. Acquire tools for expressive communication, using Adobe Photoshop for scanning, manipulating, printing and web publishing. Develop skills in a variety of outputs for both fine art and commercial applications. Explore the “digital darkroom,” using both traditional photographic materials and digital input. Survey photography’s role in society and culture, including the evolution of various
photographic genres and the contributions to the development of digital photography by people of diverse ethnic and cultural backgrounds. Students need to provide their own 35mm camera, digital or film, equipped with manual capabilities to change the lens opening and shutter speeds. This course meets 6 hours for 3 hours credit.

ART 195
**History of Photography**  3 HRS
The history of still photography from the earliest investigations of the camera obscura to 21st century electronic imaging. Emphasis on the role of photographs as a social and cultural force and on our artistic heritage of camera work. (GECC F2 901)

ART 204
**Life Drawing**  3 HRS
Prerequisite: ART 104 or permission of instructor. A continuation of ART 104 and ART 154, with emphasis on drawing the figure to develop a sense of proportion, structure, gesture, movement and composition in the various media. This course will introduce a visual vocabulary and provide group experiences, as well as foundations both technical and aesthetic. This course meets 6 hours for 3 hours credit. (IAI Major Code ART 906)(SP)

ART 205
**Ceramics II**  3 HRS
Prerequisite: ART 105. Development of technical ceramic skills, including wheel work, sculpture, clay body and clay glazing. Exploration of past and present ceramic forms. This course meets 6 hours for 3 hours credit. (SP, SU)

ART 206
**Painting II**  3 HRS
Prerequisite: ART 106. A continuation of ART 106, with an increased emphasis on painting the human figure, portraiture, landscape painting, general composition and the continued exploration of the formal & technical elements of painting in various opaque mediums. This course meets 6 hours for 3 hours credit. (FA, SP, SU)

ART 211
**History of Art I**  3 HRS
A study of the principal achievements in painting, sculpture, architecture and minor arts from prehistoric times to the late Gothic period, including the art of Mesopotamia, Egypt, Greece and Rome, the Byzantine world, the Islamic world and Europe during the Early Christian, Medieval, Romanesque and Gothic periods. (GECC F2 901, IAI Major Code ART 901) (FA)

ART 212
**History of Art II**  3 HRS
A study of the principal achievements in painting, sculpture, architecture and minor arts from the Renaissance to the twentieth century, including art of the proto-Renaissance, the High Renaissance, Mannerism, the Baroque and Rococo periods, Neo-Classicism, Romanticism, Impressionism, Post-Impressionism, Cubism and related movements, Dadaism, Surrealism, Abstract Expressionism and the diverse movements from 1945 to the present. (GECC F2 902, IAI Major Code ART 902) (SP)

ART 213
**Survey of Art History**  3 HRS
A study of the principal achievements in painting, sculpture, architecture and minor arts from prehistoric times to the present. Focus will be on the interaction between the fine arts, architecture and industrial design. For study abroad program only.

ART 214
**History of Modern Art**  3 HRS
Prerequisite: ART 212 strongly recommended. A history of modernism in art from the French Revolution to the present with emphasis on contemporary issues. (IAI Major Code ART 903) (SP)

ART 230
**Computer Art I**  3 HRS
Prerequisite: ART 102 Two-Dimensional Design and ART 104 Drawing, or consent of the instructor. A studio course exploring computer applications in the visual arts. An introduction to computer software-based approaches to visual image manipulation and original generation, including the integration of computer hardware, software and peripheral devices as tools to create and combine traditional and contemporary visual ideas as applied to art and design. This course meets 6 hours for 3 hours credit. (SP)

ART 231
**Graphic Design I**  3 HRS
Prerequisite: ART 104 or permission of the department. Suggested prerequisite: DMED 120. An introduction to the theoretical and practical aspects of graphic design, including techniques, processes, terminology and basic compositional and conceptual skills. This course provides a study of the principles and methods of combining several elements to design images that communicate information effectively. Emphasis on projects which use design elements, typography, illustrations and technology to create effective messages. An emphasis is placed on computerized design. This course meets 6 hours for 3 hours credit (IAI Major Code ART 918) (FA)

ART 280
**Photography II**  3 HRS
Prerequisite: Completion of ART 180 with a “C” or better. Further technical development in black and white photography. This course emphasizes the control of available light through use of tripods and push-processing, attributes of various films and appropriate chemistry for each, graded fiber papers, introduction to sensitometry, specialized developing and printing techniques, enhancing personal photographic expression, digital manipulation of the photographic image, and instruction in the health and safety issues relative to the methods of the course and the materials being used. Students will need to provide their own 35mm camera equipped with manual capabilities to change lens opening and shutter speeds. This course meets 6 hours for 3 hours credit. (FA, SP, SU)
ART 283
**Non-Silver Processes in Photography** 3 HRS
*Prerequisite: Completion of ART 180 with a "C" or better or consent of instructor.* This course will introduce the student to alternative methods to the ubiquitous silver print in photography today. Areas explored will include, but will not be limited to, Platinum/Palladium, Cyanotypes, Van Dyke Brown and Salted Paper Prints. This course meets 6 hours for 3 hours credit.

ART 290
**Photography III** 2 HRS
*Prerequisite: ART 180 & 280.* This course is designed to further technical and aesthetic development in black & white photography beyond the Photo I and II course work. Emphasis will be placed on the development of a personal body of photographic work while demonstrating refined technical virtuosity. Students will need to provide their own 35mm camera equipped with a manual override option. This course meets 4 hours for 2 hours credit. (FA, SP)

ART 291
**Digital Photography and Imaging II** 3 HRS
*Prerequisite: Completion of ART 190 with a "C" or better.* This course is a further exploration of digital photography and digital imaging processes, involving a deeper understanding of the technical and aesthetic issues of digitally created images. The emphasis of this course is personal creative expression in relation to artistic practice. In addition, we will study photography’s role in society and culture, including the evolution of various photographic genres and the contributions to the development of digital photography by people of diverse ethnic and cultural backgrounds. Evaluation includes formal group critique of images in addition to individual critiques. Students need to provide their own 35mm camera, digital or film, equipped with manual capabilities to change the lens opening and shutter speeds. This course meets 6 hours for 3 hours credit.

ART 296
**Special Topics in Art** 1-3 HRS
*Prerequisite: Will be set by faculty.* This is an advanced course in art, with variable content that is focused on research, theory, (classroom) and/or creation of work (studio) in a particular area of art. Readings will center on current developments in the study of art and may have an interdisciplinary, social, environmental and/or critical perspective. Because topics and research studied will change each semester, ART 296 may be repeated for a total of six credits toward graduation.

ASTRONOMY

ASTR 121
**Introduction to Astronomy** 4 HRS
An introductory course in astronomy. Topics include: the earth as a planet, the sun & the solar system, stellar systems, stellar evolution, galaxies & cosmology. Laboratory activities supplement the lecture material and may include evening astronomical observation. (GECC P1 906L) (FA)

BIOLOGY

BIOL 099
**Biology for Health Careers** 2 HRS
*Prerequisite: MATH 087 with a "C" or higher or assessment.* Topics reviewed in this course will include an introduction to scientific methods and terminology, fundamentals of chemistry and biochemistry, cell biology and genetics. This course is intended for pre-nursing and allied health students who need a review of biology prior to entering more advanced life science courses in their programs. This course may be used as a prerequisite to BIOL 181 and BIOL 191. It may not be used to fulfill any part of HCC’s general education science requirement for graduation. Students who have completed BIOL 161 or who plan to major in biology should not enroll in this course. (FA, SP, SU)

BIOL 114
**Contemporary Biology** 4 HRS
*Prerequisite: MATH 087 with a “C” or higher or assessment.* An introduction to biological principles including organization, function, heredity, evolution and ecology, with emphasis on the importance of biology to the individual and society. The laboratory component will emphasize scientific inquiry and use of knowledge in problem solving. This course is not intended for students planning a science major, nor will it fulfill the prerequisite for BIOL 181 or BIOL 191. Students will not receive science credit toward their graduation requirements for both BIOL 114 and BIOL 161. (GECC L1 900L) (FA, SP, SU)

BIOL 116
**Genes: Foundation of Life** 3 HRS
*Prerequisite: MATH 096 or 099 with a “C” or higher or assessment.* Introduction to genetics. Scientific principles, applications and ethical implications of DNA fingerprinting, genetic engineering and the human genome project are emphasized. Life science lab credit can be obtained by concurrent or subsequent enrollment in BIOL 114 and BIOL 161. (GECC L1 906) (FA, SP)

BIOL 117
**Genes: The Foundations of Life Lab** 2 HRS
*Prerequisite: Credit or concurrent enrollment in BIOL 116.* A laboratory course designed to enhance the student’s understanding of concepts covered in BIOL 116. (GECC L1 906L) (FA, SP, SU)

BIOL 121
**Essentials of Anatomy & Physiology** 4 HRS
*Prerequisite: MATH 087 with a “C” or higher or assessment.* Basic structure and function of the human body on the cellular, tissue and organ system levels. The relationships between genetics and lifestyle choices and their contribution to health and diseases will also be explored. Lab exercises include animal dissection. (This course cannot be used for credit in programs requiring BIOL 181 and BIOL 182.) (GECC L1 904L) (FA, SP)
BIOL 161
Principles of Biology I 4 HRS
Prerequisite: MATH 096 or MATH 099 with a grade of “C” or higher or assessment. A first course in biology for those students who are concentrating in the sciences. General principles of biology with emphasis on molecular biology, cell biology, genetics, biodiversity & evolution. The laboratory component will emphasize scientific inquiry and use of knowledge in problem solving. Students will not receive science credit toward their graduation requirements for both BIOL 114 & BIOL 161. (GECC L1 900L, IAI Majors Codes BIO 910, CLS 902) (FA, SP, SU)

BIOL 162
Principles of Biology II 4 HRS
Prerequisite: BIOL 161 with a grade of “C” or higher, MATH 096 or MATH 099 with a grade of “C” or higher or assessment. Principles of animal biology and behavior, plant biology and ecology. Intended for science or health profession majors. Lab exercises include animal dissection. (IAI Major Codes BIOL 910, CLS 901) (SP)

BIOL 181
Anatomy & Physiology I 4 HRS
Prerequisite: One year of high school biology within the last 3 years, BIOL 099 with a grade of “C” or higher, MATH 096 or MATH 099 with a grade of “C” or higher or assessment. Structure and function of the human body, starting at the biochemical, cellular & tissue levels of organization & continuing with the integumentary, skeletal, muscular, nervous and endocrine systems. Lab exercises include animal dissection. (Anatomy and Physiology II completes the sequence.) (GECC L1 904L) (FA, SP, SU)

BIOL 182
Anatomy & Physiology II 4 HRS
Prerequisite: BIOL 181 with a grade of “C” or better, MATH 096 or MATH 099 with a grade of “C” or higher or assessment. Structures and function of the cardiovascular, lymphatic, immune and respiratory systems. Topics also covered include: excretion and fluid balance, reproduction and development, digestion, metabolism and nutrition. Three hours of lecture and two hours of lab per week. Lab exercises include animal dissection. Completes the sequence started in BIOL 181. (FA, SP, SU)

BIOL 191
Introductory Microbiology 4 HRS
Prerequisite: MATH 096 or MATH 099 with a grade of “C” or higher or assessment. Biological concepts of structure, function, organization, genetics, ecology and evolution are emphasized through the study of microorganisms. The diversity of microbes and their roles in the environment and human affairs are discussed. Topics include microorganisms in food and industry, biotechnology, health and disease. Weekly laboratory sessions emphasize scientific inquiry. (IAI Majors Codes CLS 905, NUR 905) (FA, SP, SU)

BIOL 297
Independent Study
In Biology 1-2 HRS
Prerequisite: ENGL 101, a college level biology course, and permission of the instructor. Intensive work in an area of the life sciences of special interest to the student. Each individual project is to culminate in a comprehensive written report.

BUSINESS/SMALL BUSINESS MANAGEMENT

BUSN 110
Introduction to Business 3 HRS
An introduction to the influence of economic, social and political pressures on business systems & operating procedures, including markets, production, organization, management and government regulation of business. (IAI Major Code BUS 911) (FA, SP, SU)

BUSN 115
Business Communications 3 HRS
This course is designed to enable students to communicate appropriately and effectively in a business setting. Topics will include critical analysis and application of communication processes, business presentations, persuasive speaking, interviews and business report writing. (FA, SP)

BUSN 120
Principles of Bank Operations 3 HRS
A study of the American Banking System. Topics include the economic importance of banks, processing of cash items, paying teller operations, collection services, legal relationships with depositors, creation of money through the loan function, savings and time deposit functions, internal controls and other bank services.

BUSN 130
Computer Apps & Bus Systems Concepts 3 HRS
Keyboarding ability recommended. An introduction to management information systems and application software. Students will increase their understanding of how information and technology are utilized by business managers to support decision making. In addition, the student will learn the fundamentals of accessing the Internet and using word processing, spreadsheet, database management and presentation application software. (FA, SP, SU)

BUSN 145
Workforce Preparation 1 HR
Securing an employment position and keeping it. Topics include the job search process, effective resume writing, interviewing skills, appropriate business attire, economical wardrobe building, office demeanor and developing a positive work ethic. (FA, SP)

BUSN 150
Customer Relations 1 HR
The values and attitudes necessary for successful interaction with co-workers and clientele/customers served. Presented in a workshop/seminar mode with simulation exercises, the course will focus on verbal and non-verbal communication including effective listening and telephone skills; the attitudes, values and practices of different cultures, races and ethnic groups; and interpersonal relationships, including tolerances of others; team processes; and dealing with difficult people. (FA, SP)
Course Descriptions

BUSBN 170
Supervision 3 HRS
This course is designed to explore the leadership tools and human relation skills needed to function effectively as a supervisor. Topics covered in this course will include leadership qualities, communication skills, human relation skills, organizational dynamics, motivation and other work group issues and concerns such as diversity in the workforce, quality principles and processes and conflict resolution. (FA)

BUSBN 180
Principles of Selling 3 HRS
Focuses on the principal factors for successful selling of goods, ideas, or services. Topics covered in this course will include the nature of selling, developing sales strategies, identifying sales prospects, sales presentations and demonstrations, negotiating buyer resistance, closing and confirming the sale and post-sale customer relations. In addition, the course will explore the skills necessary for the sales professional to develop and manage their personal careers such as the nature of selling as a career, creating a professional image, time management and legal and ethical issues in selling.

BUSBN 210
Legal Environment of Business 3 HRS
Prerequisite: BUSN 110. BUSN 210 is a study of the legal and social environment of business with emphases on business ethics and corporate social responsibilities. The impact of the legal system and ethical standards on business decisions as they effect key stakeholders will be examined. Areas of law to be studied include, but are not limited to, government regulation of business practices and competition, contract law, consumer protection law, employment law, labor law and securities law. (IAI Major Code BUS 913) (FA)

BUSBN 220
Principles of Management 3 HRS
This management course is designed to introduce students to the role of various levels of management in public and private sector organizations. Emphasis is placed on the management functions of planning, organizing, leading and controlling in a dynamic global environment. (FA, SP)

BUSBN 223
Human Resources Management 3 HRS
This course presents principles and procedures relating to human resources management, including staffing, appraisal, training, compensation, employment law & programs for hiring & managing employees.

BUSBN 230
Principles of Marketing 3 HRS
Overview of principles of markets, market structure, marketing cost and efficiency, public and private regulation and development of marketing programs, including decisions involving products, price, promotion and physical distribution. (FA, SP)

BUSBN 240
Financial Planning and Budgeting 3 HRS
Principles and problems of planning and managing the assets of a business. Topics covered will include cash management, source and application of funds, types and sources of long-term capital, capital budgeting, cost of capital and financial structure. (FA, SP)

BUSBN 250
Small Business Management 3 HRS
Introduction to the concepts and tools necessary to start and operate a small business. Students will develop a complete business plan which integrates assessment of business opportunities and the development of operating plans. (SP)

BUSBN 296
Topics in Business 1-6 HRS
This course will offer students an opportunity to study a special topic or current issue of special interest in business and industry. The topic will be announced in the schedule book. Because topics studied will change each semester, BUSN 296 may be repeated up to a total of 6 credit hours.

BUSBN 299
Internship in Business and Applied Computer Science 1-6 HRS
Prerequisite: Completion of semester hours equivalent to 75% of the certificate/degree requirements with a minimum of 12 hours in business, office technology and/or applied computer science; cumulative GPA of 3.0 or higher at the time of application for the internship and at placement; demonstrated commitment to business field; or permission of instructor. This course provides supervised field experiences in a variety of settings that are related to business and applied computer science. Such settings include educational institutions, governmental organizations, businesses and health care agencies. Students work at least five hours a week (a total of 75 hours a semester equals one internship credit hour), gaining practical skills and experience in a setting which will utilize business theories and/or applied computer science skills.

COMPUTER AIDED DESIGN

CAD 101
Introduction to AutoCAD 3 HRS
Prerequisite: TECH 114 (or TECH 112), or concurrent enrollment. An introduction to the use of AutoCAD software. The course will cover mechanical and architectural applications using basic AutoCAD commands and techniques. (FA, SP, SU)

CAD 132
Introduction to IntelliCAD 2 HRS
Prerequisite: CAD 101. An introduction to the use of IntelliCAD software. The course will cover mechanical and architectural applications using basic IntelliCAD commands and techniques.

CAD 142
Introduction to MicroStation 2 HRS
Prerequisite: CAD 101. An introduction to the use of MicroStation software. The course will cover mechanical and architectural applications using basic MicroStation commands and techniques.
CAD 203
Geometric Modeling 3 HRS
Prerequisite: CAD 112 or CAD 212. A course that encompasses the 3D CAD techniques necessary for the creation and analysis of 3D geometric models. Topics will include 3D surface and solid modeling techniques.

CAD 204
Product Design 3 HRS
Prerequisite: CAD 212 or CAD 213. A study of the design process in a technological environment. Students will develop a presentation based on a product design or revision. This project will be presented to an industry representative panel.

CAD 212
Technical Drawing 3 HRS
Prerequisite: CAD 101. A study of the graphic language of industry and ANSI standard practices used in creating technical and engineering drawings. The course topics include creating auxiliary views, descriptive geometry, introduction to geometric dimensioning and tolerancing, drawings of threads & fasteners, assembly & detail drawings, bend allowances & drawings of springs, welding drawings & drawings of springs, cams and gears.

CAD 214
Technical Drawing Applications 3 HRS
Prerequisite: CAD 203. This course includes study of cams, gears, shafts, bearings, welding drawings, piping drawings, kinematic analysis of simple mechanisms and advanced dimensioning techniques.

CAD 222
Advanced AutoCAD 3 HRS
Prerequisites: CAD 212 or concurrent enrollment, and CSCI 101. This course encompasses the basics of computer configuration and AutoCAD software customization. Topics include setting up a CAD station, paper space, menu customization, interaction with the Internet, blocks and attributes, creating linetypes and hatch patterns, accessing external databases, exchanging data and embedding objects.

CAD 224
Geometric Dimensioning & Tolerancing 3 HRS
Prerequisite: CAD 203. This course focuses on applying geometric dimensioning and tolerancing principles in product design. Topics covered include the standard definitions, print designation, datum reference frame & tolerances of location, form, profile, orientation and runout. Advanced concepts include a study of bonus tolerances, virtual conditions and datum references. (IAI Major Code MTM 932)

CAD 233
Residential Architecture 4 HRS
Prerequisite: CAD 112 or CAD 212. An introductory course in practices used in the field of architecture when creating working drawings for the residential construction industry. The course incorporates sketching and computer aided drafting software to create floor plan layouts, various house sections, elevations and other details of a typical residence.

CAD 234
Commercial Architecture 3 HRS
Prerequisite: CAD 233. An advanced course in the practices used in the field of architecture when creating working drawings for the small commercial building and construction industry. Topics include a basic study of steel detailing, concrete structures, heating & air-conditioning representation and typical construction methods. The course incorporates sketching and computer-aided drafting software to create the plans for a small commercial building.

CAD 244
Computer Applications Architecture 3 HRS
Prerequisite: CAD 233. This is a course in advanced architectural software use. Topics include architectural software and add-on packages, walk-thrus, architectural design, materials estimations and 3D models of architectural structures.

CAD 254
Capstone Portfolio 3 HRS
Prerequisite: CAD 203 or concurrent enrollment. This course will provide students an opportunity to prepare for employment by compiling an electronic and paper portfolio, posting a Web-based portfolio and participating in a mock interview. (IAI Major Code MTM 931)

CHEMISTRY

CHEM 120
Fundamentals of Chemistry 4 HRS
Prerequisite: MATH 087 or assessment, or equivalent. This is a one-semester survey of general, organic and biological chemistry for students who plan to pursue a health-related profession or who have an interest in chemistry. An emphasis is placed on the relationship between chemistry and life through issues and examples from the health, medical and environmental fields. A two-hour laboratory exercise each week is used to reinforce the lecture material. Credit will not be given for both CHEM 120 and CHEM 161 (or equivalent). (GECC P1 902L) (FA, SP, SU)

CHEM 161
General Chemistry I 5 HRS
Prerequisite: MATH 106 or MATH 109 or assessment. An introduction to the basics of chemistry for those students who are concentrating their studies in the sciences. Those fundamental concepts of chemistry included are chemical formulas, chemical reactions, stoichiometry, structure of molecules, chemical bonding and the behavior of gases, liquids and solids. A three-hour laboratory exercise each week will reinforce the lecture material. (GECC P1 902L, IAI Majors Codes BIO 906, CHM 911, EGR 961) (FA, SP, SU)

CHEM 162
General Chemistry II 5 HRS
Prerequisite: CHEM 161 or equivalent. A continuation of CHEM 161, including a study of kinetics, equilibrium, acids & bases, thermodynamics, electrochemistry, nuclear chemistry and transition metals. A three-hour laboratory exercise each week will reinforce the lecture material. (IAI Majors Codes BIO 907, CHM 912, CLS 907, EGR 962, NUR 907) (FA, SP)
Course Descriptions

CHEM 241
Organic Chemistry I  5 HRS
Prerequisite: CHEM 162 or equivalent. An introduction to the basic concepts of organic chemistry. Those fundamental concepts of organic chemistry included are the structure and bonding of, the acid-base principles of, and the standard (IUPAC) nomenclature of the various classes of hydrocarbons. Also, types of isomerism, substitution and elimination reactions, reaction mechanisms and an introduction to various spectroscopic techniques are included. A three-hour lab each week will stress the synthesis, identification and separation of organic compounds.

CHEM 242
Organic Chemistry II  5 HRS
Prerequisite: CHEM 241 or equivalent. A continuation of Organic Chemistry I. This course will focus on the synthesis, reactivity and mechanisms of various organic reactions. Topics will include the study of aldehydes, ketones, carboxylic acids, esters, amines, amides, aromatic derivatives and biologically important molecules. Two three-hour labs each week will emphasize the synthesis, characterization and identification of organic compounds that feature different functional groups.

CHEM 297
Independent Study in Chemistry  1-3 HRS
Prerequisite: ENGL 101 or permission of the instructor. Intensive work in a chemistry subject of special interest to the student. Each individual project is to culminate in a comprehensive written report.

CHIN 102
Chinese II  4 HRS
Prerequisite: CHIN 101 with a “C” or better, or consent of the instructor. This course is the second course at the beginning level in Chinese, focusing on further development of basic communicative skills in listening, speaking, reading and writing. The dialect taught is Mandarin and the course is designed for students who have had CHIN 101 Beginning Chinese I or equivalent. The course includes basic vocabulary, essentials of Chinese grammar and syntax and the use of speech patterns.

EARLY CHILDHOOD CARE AND EDUCATION

CHLD 101
Intro to Early Childhood  3 HRS
The course provides an overview of the history and philosophy of early childhood education and examines a variety of past and present programs in terms of basic values, structure, organization and programming. The role of early childhood professionals in assessing and planning developmentally appropriate actions and programs to serve young children is studied. Field experiences provide students with opportunities to develop observation & guidance skills. (IAI Major Code ECE 911) (FA, SP)

CHLD 102
Growth and Development of the Young Child  3 HRS
This course provides a foundation in theory and principles of development for young children. Although the course covers prenatal through adolescent development, the focus of the course is on children ages birth through eight. Theories and principles of the physical, intellectual, emotional and social development of children are studied, including the theories of Piaget, Vygotsky, Erikson, Skinner and others. Cultural, familial & individual influences are stressed. The implications for professional practice within the field of early childhood are stressed. (IAI Major Code ECE 912) (FA, SP)

CHEM 103
Environmental Design to Support Children’s Play  3 HRS
Prerequisite: Completion of, or concurrent enrollment in, CHLD 102. The types and functions of play are studied, along with an exploration of play techniques that allow children to exercise their physical abilities, learn about their world and cope with their conflicts and emotions. The role of the teacher in facilitating play and choosing appropriate equipment is emphasized. (FA)

CHLD 105
Curriculum for Early Childhood Programs  3 HRS
Prerequisite: Completion of, or concurrent enrollment in CHLD 102. The principles of planning, implementing and evaluating developmentally appropriate curricula are studied. The course focuses on lesson plans, emerging curricula, scheduling, room arrangement, materials and equipment, individual, small and large group activities, goals and the teacher’s role in developing curricula & promoting cultural diversity. (SP)

CHLD 106
Creative Activities for the Young Child  2 HRS
Experiences and methods for developing self-expression and creativity in the young child are studied. Art, music, rhythm and movement are emphasized. (SP)

CHLD 107
Language Development and Activities for the Young Child  3 HRS
Language development, its importance and the adult’s role are examined. Students are introduced to a variety of language and literature activities and are assisted in preparing, presenting and evaluating language activities. (SP)
CHLD 108
Guidance in the Early Childhood Classroom 2 HRS
Prerequisite: Completion of, or concurrent enrollment in, CHLD 102. The theories of behavior analysis and guidance are introduced and the relationship between careful observation, communication and effective interaction with children is examined. Techniques and skills will be presented that promote appropriate behavior management. (SP)

CHLD 109
Observation & Assessment of Young Children 2 HRS
Prerequisite: Completion of, or concurrent enrollment in, CHLD 102. The study of appropriate assessment and observational strategies for children ages birth through eight. Includes field experience in observation. (SP)

CHLD 201
Child Development Practicum I 3 HRS
Prerequisite: CHLD 102, 108 and 109. This course deals with the practical application of early childhood education principles and theories. Students work with young children in a child care setting under the supervision of a site supervisor and a college course work supervisor. (IAI Major Code ECE 914) (FA, SP)

CHLD 202
Health, Safety & Nutrition for the Young Child 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, CHLD 102. Ways to ensure the child's physical well-being are studied. Basic and changing health, safety and nutritional needs are examined, as are methods to meet such needs in group care settings. First aid for children is included. (IAI Major Code ECE 902) (FA)

CHLD 203
Math and Science for the Young Child 2 HRS
This course introduces theoretical and practical concepts related to math and science for the young child. It emphasizes planning and evaluating developmentally appropriate activities and materials. (FA)

CHLD 204
The First Three Years: Brain Development & Its Implications 3 HRS
Patterns of growth and development of children from birth to age three are studied. Students examine the needs of infants and toddlers in various child care settings and learn to manage a safe environment and plan stimulating, appropriate activities. (FA)

CHLD 205
Family Day Care Management 2 HRS
This course considers issues and responsibilities in providing home day care for infants and young children. (FA)

CHLD 206
Child Development Practicum II 3 HRS
Prerequisite: CHLD 103, 105 and 201. This course builds on skills and knowledge acquired in CHLD 201 (Child Development Practicum I). The supervised practicum experience in early childhood settings emphasizes practical application of early childhood education principles and theories. (FA, SP)

CHLD 207
Exceptional Child 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, CHLD 102. Overview of children with exceptional cognitive, social, physical and emotional needs. Course explores current issues, including educational implications for children with special needs, their families and the community. Identification, intervention strategies, methods and programs to meet their needs are all discussed. Study of applicable federal and state laws and requirements: Individuals with Disabilities Education Act, Individualized Family Service Plan, Individualized Education Plan and inclusive programs. Fulfills requirements of School Code, Article 21, 2a. (IAI Major Code ECE 913) (SP)

CHLD 208
Child Care Center/Early Childhood Administration 3 HRS
This course examines a variety of management processes, as well as components needed for an effective center, including staffing, budgeting, development of policies, purchasing, monitoring of program quality, evaluation, parent involvement, computers and administrative software, licensing and accreditation. Accessing community resources and professional organizations as a means to improving program quality will be addressed. (SP)

CHLD 209
Child, Family and Community 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, CHLD 102. This course focuses on the child within the context of family and community, drawing heavily on the work of Bronfenbrenner and ecology theory. Methods of supporting child, family and community will be stressed, emphasizing the relationship among the three. Contextual factors such as communication, social policy, community resources, parent-child and professional-family relationships will be emphasized. Legal consideration and associated responsibilities, criteria and methods for effective parent-teacher communication and an in-depth study of community resources will be addressed. (IAI Major Code ECE 915) (SP)

CHLD 210
School Age Programming 2 HRS
This course examines knowledge and skills needed to work effectively with the school-age child. Focus is on planning, organizing and implementing developmentally appropriate activities. (SP)

CHLD 211
Intro to Family Services I 3 HRS
Introduction to and analysis of child and family problems in poverty, health, criminal behavior, education, employment, family life and welfare and the early intervention organizations and agencies designed to alleviate such problems. Focus on the interrelationships between children, families, community and society.
Course Descriptions

CHLD 212
Intro to Family Services II 3 HRS
Analysis of family services theory, early intervention agencies and early intervention programs. Includes construction and analysis of early intervention programs designed to alleviate child and family problems in poverty, health, criminal behavior, education, employment & welfare.

CHLD 215
Child Advocacy 2 HRS
This course will prepare early childhood educators to serve as advocates for the early childhood profession and the children and families who are served by the profession. Topics covered will include: 1) becoming an advocate; 2) developing a grass-roots movement and 3) learning to motivate and influence others through advocacy.

CHLD 220
Individual and Family Development 3 HRS
Overview of the development of the individual throughout the lifespan within the context of the developing family & society. A theoretical emphasis will be placed on the interdependence between the individual and the context they exist within. (FA)

CHLD 221
Foundations of Inclusion 3 HRS
Foundations of Inclusion focuses on the practical knowledge and skills necessary for childcare providers and other early childhood professionals to successfully practice inclusion. Topics covered include individual learning plans, accessibility, partnering with parents, arranging the environment and selecting & adapting toys and materials. Also addresses guidance, positioning and communication. (SP)

CHLD 296
Special Topics 1-4 HRS
Prerequisite: Faculty approval. Course will offer students an opportunity to study a topic which is (1) unique and infrequently offered as a part of their program curriculum or (2) of special interest to the field of early childhood.

CHLD 299
Internship in Family Services 3 HRS
Supervised work experience in approved training station. This supervised practicum experience in family service settings emphasizes practical application of early childhood & social services principles and theories. Students will attend 14 laboratory hours and one lecture hour per week.

CONSTRUCTION

CNST 101
Building Construction Basics 3 HRS
Introduction to the principles, methods and materials used in the building construction industry. (SP)

CNST 103
Building Mechanics 3 HRS
This course presents general principles of building mechanics, including pumps and valves, piping and construction; and how these principles apply to residential and commercial facilities. The student will participate in lab activities and tour various facilities. (SP)

CNST 113
Construction Documents & Quantity Takeoff 3 HRS
The course is an introductory course in the basics of construction blueprint reading and quantity takeoff. All persons involved in the planning, supplying and/or building of structures should be able to read construction blueprints and provide a list of materials. Topics include types of drawings, nomenclature, applications of technical drawings and material usage. While no formal prerequisite is required for this course, it is suggested that students have a familiarity with basic mathematical concepts of fractions & linear measurement before enrolling in this course. (FA)

CNST 224
Construction Estimating & Scheduling 3 HRS
Prerequisite: CNST 113. An introduction to construction estimating and the tools used to determine the costs of any building project. Reinforcing the concepts of blueprint reading and visualization skills required to help understand how to accurately estimate a construction project. Emphasizing the importance of determining project costs and schedule prior to the start of construction. (SP)

COMMUNICATION

COMM 101
Introduction to Oral Communication 3 HRS
An introductory course in public speaking, which has the dual goals of helping students understand basic communication principles while also improving their oral communication skills. In this course emphasis is placed upon preparing, selecting, organizing and delivering oral messages, as well as analyzing and evaluating the speaking/listening process. (GECC C2 900) (FA, SP, SU)

COMM 109
Visual Communication 3 HRS
Prerequisite: ENGL 101. An introduction to visual literacy by examining images presented in many media including print, photography, fine art, animation & cartoons, film, television, video & multimedia. Covers image processing, theories of visual communication, ethical and cultural issues. Projects will include essays, research and small group & hands-on activities.

COMM 120
Interpersonal Communication 3 HRS
A study of communication theory and its application to interpersonal relations, including analysis of self-concepts and perceptions, verbal and nonverbal codes and cultural expectations. (FA, SP, SU)

COMM 121
Introduction to Intercultural Communication 3 HRS
This is an introductory communication course, emphasizing a variety of communication practices with cultural origins, including nonverbal and verbal practices. The course focuses on both intercultural communication theory and practical approaches to communicating between cultures and subcultures. The course is recommended for any student majoring in communication. (IAI Major Code SPC 916)
COMM 125  
**Small Group Communication**  
3 HRS  
An introduction to information-providing, problem-solving and decision-making techniques for communication groups, both formal and informal of different types and sizes. Covers such topics as the role of small groups in society and the variables that influence small group communication, such as participation roles and types of leadership. (FA, SP)

COMM 130  
**News & Feature Writing**  
3 HRS  
Prerequisite: ENGL 101 or consent of the department. An introduction to the basic techniques of news gathering and reporting, including newspaper style, information sources, interviewing, editing and rewriting procedures and general principles of page make-up for news and feature articles. (FA, SP)

COMM 132  
**Introduction to Photojournalism**  
3 HRS  
Prerequisite: Art 180 with at least a grade of “C” or consent of the instructor. Completion of or concurrent enrollment in COMM 130 is highly recommended. This class assumes an intermediate knowledge of photography. This course is an introduction to the principles and techniques of photojournalism for use in print, broadcast and other journalistic mass media. This course will advance students’ skills in camera use and introduce them to digital technology. Ethical, legal, technical and aesthetic issues will be explored as well as the history of photojournalism. Students will need to provide their own SLR camera (equipped with manual override), lenses of varying focal lengths and a flash with adjustable output.

COMM 135  
**Writing for the Media**  
3 HRS  
Prerequisite: ENGL 101 or consent of the department. An introduction to the basic techniques of news gathering and reporting including researching, interviewing, editing and rewriting procedures. Emphasis on learning news writing style. Introduction to writing in various formats including newspapers and magazines, public relations and broadcast. (FA, SP)

COMM 160  
**Mass Communication**  
3 HRS  
A study of the history and development, functions, responsibilities and economic, social and cultural impact of mass media of communication including newspapers, books, magazines, film, music, radio, television and their allied fields of public relations and advertising.  
(IAI Major Code MC 911) (FA, SP)

COMM 210  
**Intro to Communication Theory**  
3 HRS  
This course provides students with a general overview of communication theory and a concrete understanding of specific communication theories. Emphasis is placed on evaluation of communication theories & their application to everyday life.

COMM 230  
**Multimedia Presentations**  
3 HRS  
Prerequisite: COMM 101 and DMED 110 or permission of department. Using multimedia and communication skills, students will learn how to design, produce and present projects with digital media. Students will gain skills in effective organization, presentation styles, media aesthetics and program development.

COMM 296  
**Special Topics in Communication**  
1-3 HRS  
Prerequisite: ENGL 101. This is an advanced course in communication studies, with variable content that is focused on research, theory and application in a particular topic of communication studies (such as organizational communication, sexual communication, media, etc.) Readings will center on current developments in the study of communication and may have an interdisciplinary, social scientific, ethnographic and/or critical perspective. Because topics and research studied will change each semester, COMM 296 may be repeated for a total of six credits.

COMM 299  
**Internship in Communication**  
1-6 HRS  
Prerequisite: ENGL 101. Completion of 15 semester credit hours, successful completion of COMM 101 (grade of “C” or better) and successful completion of COMM 130, COMM 135 or COMM 160. Supervised field experience in a variety of settings related to communication, including businesses, publications, advertising and public relations agencies, non-profit organizations, educational institutions and governmental agencies. Students will receive on-the-job experience, in a volunteer or paid capacity, for at least five hours a week (a total of 75 hours a semester equals one internship credit hour) to gain practical skills and experience. Credit is available only for work experience which has been approved in advance by the internship coordinator.

**CRIMINAL JUSTICE**

CRJ 101  
**Introduction to Criminal Justice**  
3 HRS  
Introduction to Criminal Justice Sciences is an examination of the criminal justice system from historical, developmental and philosophical perspective. This course includes the independent relationships which exist between the police, the courts and the correctional components of the criminal justice system and its impact on society. (IAI Major Code CRJ 901) (FA, SP)

CRJ 114  
**Introduction to Private Security**  
3 HRS  
This course provides an overview of the basic foundations and knowledge of security methods and application of laws. A review of theory and practice involved in the protection of personnel, facilities and other assets will be explored. The records, reports and laws that pertain to these security issues are reviewed.
Course Descriptions

CRJ 200
American System of Corrections 3 HRS
This course familiarizes the student with various correctional alternatives, including institutional, as well as community sanctions. Controversies & emerging trends in corrections will also serve as a focus of the course. (IAI Major Code CRJ 911) (SP)

CRJ 201
Understanding Criminology 3 HRS
The theoretical and conceptual explanations of the psychological causes of criminal behavior. The study of the causes of crime, participants, victims, community organizations and society’s reaction to the crime and criminals are examined. (IAI Major Code CRJ 912) (SP)

CRJ 202
Policing in America 3 HRS
A survey of the history of law enforcement, the development of police practices & the role of police in a democratic society. (FA)

CRJ 204
Criminal Law 3 HRS
Prerequisite: CRJ 101 or consent of instructor. An analysis of the criminal investigation process, including recording, collection and preservation of physical evidence. Scientific aids, modus operandi, sources of information and follow-up techniques will be covered. (FA)

CRJ 206
Criminal Investigations 3 HRS
Prerequisite: CRJ 101 or consent of instructor. An analysis of the criminal investigation process, including recording, collection and preservation of physical evidence. Scientific aids, modus operandi, sources of information and follow-up techniques will be covered. (FA)

CRJ 208
Administration of Justice 3 HRS
An overview of the criminal court system in operation. The judicial process involving court personnel, defendants, victims and advocacy groups will be explored. The role of the public defender system will also be examined. Emphasis will be placed on rules controlling pre- and post-trial proceedings, including motions, appeals, habeas corpus, courtroom procedures and protocol. (FA)

CRJ 215
Juvenile Justice System 3 HRS
Prerequisite: CRJ 101 or consent of instructor. A course that encompasses the juvenile justice system and the organization, functions and jurisdiction of juvenile agencies. The processing and disposition of the youthful offender is examined. The current methods of treatments and alternatives in dealing with youthful offenders in our society are explored. (IAI Major Code CRJ 914) (SP)

CRJ 222
Police/Community Relations 3 HRS
An examination of the relationship between police bureaus and the communities they serve. The role of law enforcement in implementing programs to address social problems, cultural issues and promoting community relations is reviewed. (SP)

CRJ 224
Probation and Parole 3 HRS
Prerequisite: CRJ 101 or consent of instructor. A course that encompasses the history, nature and practice of the probation and parole process. The role, responsibilities and duties of the probation and parole officer will be discussed. Topics will include: specific terms and conditions, legal liability & presentencing investigations. (FA)

CRJ 226
Criminal Justice Careers Seminar 2 HRS
Prerequisite: Sophomore standing, successful completion, with a grade of “C” or higher, of 15 credit hours of criminal justice courses, including CRJ 101, or consent of instructor. This course provides a supervised field experience for the student to observe the practices of an approved criminal justice agency. Students will gain practical knowledge of the various operations of that agency and its related employment criteria. Classroom discussion will include topics such as resume writing, interviewing, Bona Fide Occupational Qualifications and locating criminal justice resources on the Internet. (SP)

CRJ 296
Special Topics in Criminal Justice 1-6 HRS
Prerequisite: Successful completion of CRJ 101, with a grade of “C” or higher, cumulative grade point average of 2.0 or higher or consent of instructor. The purpose of this course is to offer students an opportunity to study a topic, which will (1) develop a greater knowledge of the criminal justice field or (2) study or examine a contemporary issue of concern within the criminal justice system. Course may be repeated up to 3 times with a different topic, for 6 hours of credit. Refer to the schedule book for specific topics offered. Specific topic title will be stated on the student’s transcript.

CRJ 299
Internship in Criminal Justice 1-6 HRS
Prerequisite: Sophomore standing, successful completion, with a grade of “C” or higher in CRJ 101 and 12 credit hours of criminal justice courses, and ENGL 101 and COMM 101 or consent of instructor. Supervised field experience in a variety of settings related to the criminal justice field including: law enforcement, court services, correctional institutions, advocacy groups or private security. Students will receive on-the-job experience, as an aide or in a volunteer capacity for at least five hours per week (a total of 75 hours per semester equals one internship credit hour) to gain practical skills and experience. Students may be required to submit to a criminal history background check, as well as a driver’s license check prior to beginning an on-site experience.
COMPUTER SCIENCE

CSCI 100
Basic Computer Literacy  1 HR
This computer literacy course assumes no prior knowledge on the part of the student and covers all aspects of basic computer use from selecting a computer to setup and successful use. Specifically, students will learn how to select a computer package that meets their needs, how to assemble the components (i.e. as traditionally received from a store), how to run the operating system, basic file system operation and maintenance, software installation, Internet use and basic computer security. Hands-on experiences will be provided for every topic. (FA, SP, SU)

CSCI 101
Introduction to Computer Information Science  4 HRS
Prerequisite: Concurrent enrollment in MATH 109 is suggested. This course presents concepts of computer-based systems; computer hardware, software and organization environments; system categories and delivery modes; systems development methods; career opportunities and responsibilities. This is a lecture course with hands-on experience with microcomputers. (IAI Major Code CS 910) (FA, SP, SU)

CSCI 110
Microcomputer Database Applications  3 HRS
Prerequisite: CSCI 101 or satisfactory score on the CSCI 101 placement exam. Introduction to the design and use of commercial microcomputer database software. Students use the microcomputer database package to create files and business reports, including file design and maintenance, information retrieval, report generation and advanced concepts. (FA)

CSCI 115
Discrete Mathematics  4 HRS
Prerequisite: MATH 109, with a grade of “C” or higher, or equivalent, or assessment. Introduction to analysis of finite collections and mathematical foundations of sequential machines, computer system design, data structures and algorithms. Topics include number systems, set theory (including counting techniques), symbolic logic (including Boolean algebra), trees, matrix theory (including arrays and subscripting), graph theory, relations and functions, recursion, nets and automata. This course is not intended for a mathematics major or minor. (GECC M1 905, IAI Major Code CS 915) (FA, SP, SU)

CSCI 130
Computer Science I  4 HRS
Prerequisite: CSCI 101 with a grade of “C” or better; MATH 109 with a grade of “C” or better or placement. Concurrent enrollment in MATH 115 is suggested. The first in a sequence of courses for majors in computer science. Introduces a disciplined approach to problem-solving and algorithm development, in addition to an introduction to object-oriented programming and data abstraction. Covers: selection, repetition and sequence control structures; program design, testing and good programming style; high-level programming languages, arrays and sorting, files and I/O. (IAI Major Code CS 911) (FA, SP)

CSCI 131
Computer Science II  4 HRS
Prerequisite: CSCI 130 with a grade of “C” or better; MATH 115 with a grade of “C” or better or placement. The second in a sequence of courses for majors in computer science. Covers: design and implementation of large-scale problems, abstract data types, inheritance and polymorphism data structures, dynamic concepts, input and output, and documentation standards. (IAI Major Code CS 912) (FA, SP)

CSCI 135
Cobol Programming I  3 HRS
Prerequisite: CSCI 130 with a grade of “C” or better, or equivalent. This course provides an introduction to the COBOL programming language to solve simple business application problems. Lectures and programming lab projects emphasize program structure, language syntax, sequential file processing, table handling, sorting procedures and report logic with control breaks. Structured design, programming and documentation techniques will be emphasized. Advanced features such as sub-programs and copy libraries will also be discussed. (IAI Major Code CS 913) (FA)

CSCI 136
Programming in Visual Basic  3 HRS
Prerequisite: CSCI 130 with a grade of “C” or better, or equivalent. This course provides an introduction to the Visual Basic programming tool to solve simple business application and Windows problems. Lectures and programming lab projects emphasize program structure, language syntax, sequential file processing, table handling, sorting procedures and arrays. Structured design, programming and documentation techniques will be emphasized. (FA, SP, SU)

CSCI 137
RPG/400 Programming  3 HRS
Prerequisite: CSCI 135. This course will teach mid-range system programming techniques using the RPG/400 programming language. The basics of this language will be taught, as well as the advanced techniques such as file update procedures and various access methods used with disk files. An online editing facility enables students to enter and syntactically check their programs.

CSCI 138
Cobol Programming II  3 HRS
Prerequisite: Completion of CSCI 135 with a grade of “C” or better, or equivalent. This course is the second in a two-semester sequence. Students will complete more advanced COBOL programming projects utilizing programming tools learned in the first semester course. Additional key topics in this course include multi-level control breaks, multi-level tables, sorting procedures, file access and embedded SQL. Students will also complete a program in a team development environment. (IAI Major Code CS 912) (SP)
Course Descriptions

CSCI 171
Computing for Engineering and Science 3 HRS
Prerequisite: MATH 161. This course covers the fundamental principles, methods and concepts of computing with an emphasis on applications in the physical sciences and engineering. Basic problem solving and computing techniques will be taught using structured programming techniques. Fundamental algorithms, data structures and ANSI C standard mathematical functions will be covered using engineering and scientific problems. Note: This course does not count for credit in a computer science program. (AI Majors Codes EGR 922, MTH 922) (SP)

CSCI 220
C Programming 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. This course provides a detailed study of the C Programming language. It includes program planning, design methods, C-language procedures, efficient C-programs and reliable data structures. (FA, SP)

CSCI 221
C++ Programming 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. Fundamental object-oriented programming concepts, develop problem-solving skills using a structured approach, development of structured programs, the basics of C++ programming language, C++ extension to C programming language, object-oriented programming, including classes & objects, inheritance and derived classes & reusable code. Programming to provide practical experience with C++ concepts. (FA, SP)

CSCI 222
Programming in Pascal 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. An introduction to the Pascal programming language to solve simple problems using microcomputers. It includes procedures and functions, branching and loops, arrays and records. Students are also introduced to program error checking, flowcharting, coding and program maintenance techniques.

CSCI 223
Smalltalk Programming 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. Fundamental object-oriented programming concepts; development of problem-solving skills using a structured approach; development of structured programs; the basics of the Smalltalk programming language; using a visual editor to build interfaces; object-oriented programming, including classes and objects, inheritance and derived classes and reusable code. Programming to provide practical experience with the Smalltalk concepts. (FA, SP)

CSCI 224
Programming in Java 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. Students who have completed CSCI 130 AND CSCI 131 will not be given credit for CSCI 224 toward their program of study. This course is intended to be both an introduction to Java and the first course in a series designed to teach the fundamentals of Java and prepare students for Java Programmer Certification & Java Developer Certification. The course covers fundamental object-oriented programming concepts and helps develop problem-solving skills using an object-oriented/event-driven approach. It also covers development of programs using the techniques of object-oriented programming and design and the basics of the Java programming language. The course will give students experience with classes & objects, inheritance & derived classes and reusable code. Programming assignments will provide practical experience with JAVA concepts. (FA, SP)

CSCI 230
Network Programming in Java 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or CSCI 224 with a grade of “C” or better, or equivalent. The course covers fundamental networking programming concepts and helps develop problem-solving skills using an object-oriented approach. Basic networking terminology and implementation of standard networking protocols will be covered along with security and distributed programming issues. In addition, the course will cover database connectivity through JDBC and ODBC. Programming assignments will provide practical experience with Java concepts. (FA)

CSCI 231
Graphical Programming in Java 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better or CSCI 224 with a grade of “C” or better or equivalent. The course covers fundamental and advanced graphical programming concepts and helps develop problem-solving skills using an object-oriented approach. Basic and advanced graphical techniques, event handling, security and distributed programming issues will be covered. Programming assignments will provide practical experience with Java concepts. (SP)

CSCI 232
Enterprise Application Programming in Java 3 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or CSCI 224 with a grade of “C” or better, or equivalent. This course is intended to be both an introduction to the world of Enterprise Programming and to teach the Java 2 Enterprise Edition Platform (J2EE). The course covers advanced server-side programming concepts and helps develop problem-solving skills using an object-oriented/event-driven approach. Basic and advanced Web techniques, event handling, security, server programming and distributed programming issues will be covered. Programming assignments will provide practical experience with Enterprise Application concepts. (FA, SP)
CSCI 240
Data Structures 4 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. Algorithmic paradigms (divide and conquer, greedy, dynamic, back-tracking); recurrence relations; complexity analysis (big oh, big omega, big theta, little oh); algorithms (graphs, sorting, searching, string processing); advanced ADTs (sets, graphs, heaps, hash tables); random number generation and related algorithms. (IAI Major Code CS 921) (FA, SP)

CSCI 250
Object-Oriented Analysis & Design 4 HRS
Prerequisite: CSCI 131 with a grade of “C” or better, or equivalent. Algorithmic paradigms (divide and conquer, greedy, dynamic, back-tracking); recurrence relations; complexity analysis (big oh, big omega, big theta, little oh); algorithms (graphs, sorting, searching, string processing); advanced ADTs (sets, graphs, heaps, hash tables); random number generation and related algorithms.

CSCI 260
Database Management Systems 3 HRS
Prerequisite: CSCI 110 and NETW 160. This course provides a detailed study of relational database administration with advanced concepts. It includes planning for database implementation, installing, configuring, tuning, server administration and data management with the use of structured query language. (SP)

CSCI 296
Special Topics in Computer Technology 2-4 HRS
Prerequisite: As set by faculty. Course will offer students an opportunity to study a topic which is (1) unique and infrequently offered as a part of their program curriculum or (2) of special interest to industry. Each student wishing to enroll in Special Topics in Technology will be reviewed based on (1) previous experience, (2) courses completed and (3) aptitude/ability match with selected topic.

DIGITAL MEDIA

DMED 101
Introduction to Digital Media 3 HRS
An intensive, hands-on survey of state of the art multimedia technology and theory. Students will investigate graphic design, hypercard production, sound & navigation principles as well as visual literacy and the impact of multimedia on learning and social concerns. Basic computer skills will be expected in the areas of word processing, graphic and paint programs. Students will also analyze the impact of multimedia on learning, teaching and perception. (FA, SP)

DMED 110
Web Page Development 3 HRS
An introduction to the World Wide Web on the Internet & its uses as a communication tool. The course will cover essential terms and technologies, creating Web pages, critiquing Internet content and a review of ethical & legal issues. Basic computer skills will be expected, especially with word processing & graphic programs. DMED 110 is designed to appeal to students interested in studying the Internet and its many facets and specifically creating pages that can be viewed on the World Wide Web through various viewers, such as Netscape Communicator or Microsoft Explorer. Course covers HTML coding as well using HTML editors to create content. Students learn basics of image manipulation. Continuing emphasis on successfully communicating through the Web, especially considering design & interactivity. (FA, SP, SU)

DMED 120
Computer Imaging and Design 3 HRS
An introduction to creating & manipulating digital images. Emphasis is placed on studying and applying basic design concepts, while dealing with common print, video and computer designing challenges faced in the business world. Computer graphic programs, including Adobe Photoshop and Macromedia Freehand will be used. Students will also become familiar with modern production equipment such as printers and scanners. Students should be familiar with computers & have some experience with drawing programs. (FA, SP, SU)

DMED 145
Video Production 3 HRS
Prerequisite: DMED 101 or permission of instructor. An introduction to how to effectively use video production equipment to record and edit video for business, education, entertainment and personal use. Course will cover equipment, shooting techniques, composition, lighting, planning and non-linear editing. Students will complete a short video production in this course. (SP)

DMED 150
Interactive Digital Media 3 HRS
Prerequisite: DMED 120 or permission of instructor. DMED 110 is recommended. An introduction to creating interactive interfaces to be distributed through a variety of methods, including the Internet and CD-ROM. Emphasis is placed on creating easy-to-navigate and professional-level interfaces for a variety of applications and on successfully deploying those applications across the chosen distribution method. Authoring tools, including Macromedia Director and Flash will be used as well as image editing programs Adobe Photoshop and Macromedia Freehand. Students should be experienced with image editors, graphic design and Web design. (FA, SP)

DMED 160
Web Server Administration 3 HRS
Prerequisite: DMED 101 or CSCI 101 with a grade of “C” or better. Introduction to the design and use of several different current commercial Web servers. Students will install, configure and maintain one current commercial Web server package throughout the duration of the course. (FA, SP)

DMED 170
Dynamic Web Technologies 3 HRS
Prerequisite: DMED 110 with a grade of “C” or better. Introduction to scripting. Covers basic scripting techniques, basic database techniques and surveys major scripting languages. (FA)
DMED 210
Advanced Web Page Design  3 HRS
Prerequisite: DMED 110 & DMED 150, or permission of instructor. Students will use skills built in DMED 110 and DMED 150 to create complicated, professional-level web page design to effectively communicate messages for a variety of situations. This class will pose a variety of real world challenges that students will need to complete at a professional level, including designing interfaces in HTML and Flash and deploying those interfaces to audience members who qualify to view the content. Development tools, including Macromedia Dreamweaver and Flash will be used as well as image editing programs Adobe Photoshop and Macromedia Freehand. Students should be capable graphic designers and have experience with image editors, Web design tools and interactive authoring tools. (FA)

DMED 250
Preparing Print Publications  3 HRS
Prerequisite: DMED 101 and DMED 120, or permission of instructor. Course will cover basic aspects of preparing copy, line-art and pictures for professional print. Students will build on design skills learned in DMED 120, while focusing on preparing printed pieces on the computer that are appropriate to be sent to a professional print house for printing in quantity. Issues of design, audience, interface and environment will be reviewed. (FA)

DMED 260
Computer Animation  3 HRS
Prerequisite: DMED 101 and DMED 120, or permission of instructor. Course will cover basic aspects of animation using animation software, including modeling objects and bringing them into a virtual environment to add lighting, surfaces and motion for a completed scene. Issues of design, audience, interface and environment will be reviewed. (SP)

DMED 270
JavaScript  3 HRS
Prerequisite: DMED 110 and CSCI 130 with a grade of “C” or better in both classes. This course provides a detailed study of JavaScript. It includes program planning, design methods, language procedures and object-oriented programming fundamentals. (SP)

DMED 290
Advanced Media Production  3 HRS
Prerequisite: DMED 145, DMED 210, and/or concurrent enrollment in DMED 260. This course builds on the skills learned in other digital media courses, such as video production, motion graphics, computer animation and Web page design. Students will complete projects on a weekly basis in a realistic production environment. They will create and maintain their own section of a continually updated Web site, with content they conceive, write, produce & post. (SP)

DMED 296
Topics in Digital Media  1.5-3 HRS
Prerequisite: DMED 101 or permission of instructor. An advanced course in a specific topic in digital media communication, such as a specific software program, language or project. The course is intended to familiarize students with some of the latest technologies and trends in new media. The topic will be announced in the schedule book. Because topics studied will change each semester, DMED 296 may be repeated once for a different topic.

DMED 297
Independent Study in Digital Media  1-4 HRS
Prerequisite: DMED 145, DMED 210 and/or concurrent enrollment in DMED 260. This course builds on the skills learned in other digital media courses, such as video production, motion graphics, computer animation and Web page design. Students will complete projects on a weekly basis in a realistic production environment. They will create and maintain their own section of a continually updated Web site, with content they conceive, write, produce and post.

DMED 299
Digital Media Internship  1-3 HRS
Prerequisite: Successful completion of DMED 101 with a grade of “C” or better and faculty/advisor approval. Student interns will work, in a paid or volunteer capacity, to learn about digital media applications in a variety of settings including business, industry, non-profit organizations, education and government. Interns gain practical skills and experience while being supervised on the job and through the college. A total of 75 hours equals one internship credit hour. Credit is available only for work experiences approved in advance, before the internship begins, by the digital media communications department.

INTERIOR DESIGN

DSGN 110
Interior Design I  3 HRS
This course is an introduction to the principles and elements of residential interior planning and functional room analysis. Major content areas are: texture, pattern, color, light and theme, functional planning, window treatments, wall coverings and floor coverings, natural and artificial lighting and textiles. (FA)

DSGN 111
Interior Design II  3 HRS
An introduction to interior and exterior styles featuring the study of furniture and furnishings as related to residential and commercial design. Students will also study the various design movements, furniture arrangement and accessories and the challenges for the future. Content areas include furniture selection, styles and furniture arrangement and wall composition, accessories, the historic heritage of architecture and design, modern architecture and design. (SP)
EARTH SCIENCE

EASC 111 Environment Earth  3 HRS
Topics course for non-science majors who desire a physical science understanding of environmental concerns. Topics may include: ground water, air quality, land management, nuclear energy & solid waste disposal. An optional lab (EASC 122) will apply physical science principles to lecture material. (GECC P1 905) (FA, SP, SU)

EASC 121 Introduction to Earth Science  3 HRS
An introductory physical science class that surveys the fields of geology, oceanography, atmospheric science and astronomy. An optional lab (EASC 122) will apply earth science principles to lecture material. Environmental concerns will be discussed in this class. Suitable for students with minimal course work in the sciences and mathematics. (GECC P1 905) (FA, SP, SU)

EASC 122 Introduction to Earth Science Lab  1 HR
Prerequisite: EASC 111 or 121 or concurrent enrollment. A beginning college-level laboratory science course that will present basic applications with problem-solving challenges and discovery methods in the physical sciences. (GECC P1 905L) (FA, SP, SU)

EASC 151 Introduction to Weather  4 HRS
Prerequisite: Credit or concurrent enrollment in MATH 087. Survey of atmospheric processes, structure and composition. A two-hour lab each week will focus on variables that influence day-to-day weather conditions. Atmospheric environmental concerns will be discussed. (GECC P1 905L) (FA, SP)

EASC 161 Physical Geology  4 HRS
Study of the origin and types of earth materials and the processes at work in our physical environment. Topics include earthquakes, erosion, mountain building, minerals, rocks, volcanoes and glaciers. A two-hour lab each week will emphasize lecture material. Field trip required. (GECC P1 907L) (FA, SP)

EASC 162 Historical Geology  4 HRS
Focuses on the history of the Earth since its formation. Includes analysis of sedimentary rock systems, evolution and life history, plate tectonic changes through time and age determination methods. Emphasizes the origin and evolution of life, illustrating changing faunas and floras through time; the effects of an evolving atmosphere, changing climate and continental drift. (GECC P1 907L)

EASC 297 Independent Study in Earth Science  1-3 HRS
Prerequisite: ENGL 101 and permission of the instructor. Intensive work in an area of the physical sciences of special interest to the student. Each individual project is to culminate in a comprehensive written report.

ECONOMICS

ECON 101 Principles of Microeconomics  3 HRS
Microeconomics, including utility, supply and demand and product and resource pricing with specific emphasis on associated problems of the American economy. (GECC S3 902) (FA, SP, SU)

ECON 102 Principles of Macroeconomics  3 HRS
Prerequisite: ECON 101. Introduction to the American economic system with emphasis on macroeconomics, including national income accounting, employment theory and fiscal and monetary policies. (GECC S3 901) (FA, SP, SU)

ECON 220 Comparative Economic Systems  3 HRS
Comparative analysis of several types of economic systems. Discussion of alternative models of economic decision-making. Case studies of such economies as China, Japan, South Africa, Sweden and Russia.

EDUCATION

EDUC 101 Introduction to Education  3 HRS
This course provides an introduction to the American education system and to teaching as a profession. Throughout the course students will be offered a variety of perspectives on education including: historical, philosophical, social, legal and ethical issues in a diverse society. A study of organizational structure and school governance will also be included. A minimum 15-hour clinical component is required for this class. (IAI Majors Codes EDU 901, EED 901, SED 901, SPE 911) (FA, SP)

EDUC 102 Education Field Experience  3 HRS
Documented clinical experience involving observation of and interaction with children and practitioners at work, according to specified guidelines, within the appropriate subject matter and age category. The experience, comprising 32 hours in the clinical setting and a weekly discussion with course instructor and classmates, is planned, guided and evaluated by the course instructor and can occur in a variety of educational settings. This course is designed to permit students to determine whether they wish to become a teacher or educator paraprofessional. (IAI Majors Codes EED 904, SED 905, SPE 914)
Course Descriptions

EDUC 105
**Students with Disabilities** 3 HRS
*Prerequisite: EDUC 101; concurrent enrollment in or successful completion of PSY 209.* This survey course provides an introduction to educating exceptional students. Topics include the historical, philosophical & legal foundations in special education, an overview of the fundamentals in the field of special education, the characteristics of individuals with disabilities, the programs that serve them under the Individuals with Disabilities Education Act (IDEA) & the diversity of the populations of individuals with disabilities. (IAI Majors Codes EDU 905, SED 904) (FA, SP)

EDUC 200
**Using Technology in Education** 3 HRS
*Prerequisite: EDUC 101 or equivalent; basic skills in keyboarding, word processing, and spreadsheet strongly recommended.* This course will introduce educators to the knowledge & skills required to demonstrate their proficiency in the current technology standards for teaching. The course focuses on both knowledge and performance and includes hands-on technology activities. (IAI Major Code EDU 904) (FA, SP)

EDUC 208
**Principles of Reading** 3 HRS
*Prerequisite: EDUC 101.* This course is a study of various methods of teaching reading in the elementary school. It will include sequences in skill development and evaluation of current literacy trends, aims and practices. Students will also learn techniques for improving comprehension, evaluation of age-appropriate literature, use of technology to support reading, a variety of reading assessments and strategies for word recognition and vocabulary development.

EDUC 209
**Language Arts in Elementary School** 3 HRS
*Prerequisite: EDUC 101. EDUC 209 is an introduction to language arts - reading, writing, listening and speaking - in the elementary school. The course includes recent trends in literacy, techniques for building comprehension, strategies for teaching communication skills and teaching skills to students whose first language is not English.*

EDUC 210
**Using Computers in Education** 3 HRS
This course is designed to introduce current and future educators and trainers to the foundations and applications of educational computing.

EDUC 215
**Online Teaching** 3 HRS
This course is designed to introduce current and future educators and trainers to methods and practices employed in online teaching and training.

EDUC 220
**Educational Psychology** 3 HRS
*Prerequisite: PSY 101.* This course provides an introduction to psychological principles underlying educational practice. Theories concerning cognitive and psychological development, human learning and motivation are studied with emphasis on application for instruction, including assessment. Emphasis will also be placed on learner-centered instruction and diversity. (IAI Majors Codes EDU 903, SED 902) (FA, SP)

EDUC 296
**Selected Topics in Education** 1-4 HRS
An in-depth study of selected topics in education. The content and structure of the course will vary according to the topic and instructor. May be repeated once with a different topic, for a total of 6 credit hours. Specific topic will be stated on student’s transcript.

**ELECTRICIAN APPRENTICE**

ELAP 111
**Electrician Apprentice I** 4 HRS
*Prerequisite: Admission to the IBEW Apprenticeship Program; concurrent employment as an indentured electrician apprentice.* This course covers basic fundamentals of electricity, size of wires, sources of electricity, conduits, fasteners, fittings and materials; also the applied mathematics related to these items.

ELAP 112
**Electrician Apprentice II** 4 HRS
*Prerequisite: ELAP 111.* This course will investigate the scope of work of an electrical contractor and their association with the National Electrical Contractors Association (NECA). Topics include AC and DC circuits, various wiring systems and safety precautions.

ELAP 121
**Electrician Apprentice III** 4 HRS
*Prerequisite: ELAP 112.* Course includes National Electric Code, applied science and math, sketching schematics, rigging, fire alarm systems and basic refrigeration and air conditioning.

ELAP 125
**Electrician Apprentice - Teledata III** 4 HRS
*Prerequisites: ELAP 112.* This course covers advanced topics in DC theory and circuits, introductory topics relating to telephones and their circuitry/cabling systems and the National Electrical Code as it relates to wire and wiring.
ELAP 126
**Electrician Apprentice-Teledata IV** 4 HRS
Prerequisite: ELAP 125. This course covers topics in the National Electrical Code as it relates monitoring systems, introductory networking concepts, grounding and bonding fundamentals and other related circuit/cable/raceway topics.

ELAP 127
**Electrician Apprentice Residential III** 4 HRS
Prerequisite: ELAP 112. This course is a study of various terms, wiring tasks, wiring methods, materials and associated NEC requirements as appropriate for residential wiring.

ELAP 128
**Electrician Apprentice Residential IV** 4 HRS
Prerequisite: ELAP 127. This course involves the theory, applications, calculations and connections associated with transformers and power distribution systems commonly used in the residential electrical field.

ELAP 131
**Electrician Apprentice V** 4 HRS
Prerequisite: ELAP 122. Explores advanced electrical theory related to AC current, electrical and mechanical specifications, protective control and starter relays.

ELAP 132
**Electrician Apprentice VI** 4 HRS
Prerequisite: ELAP 131. Covers troubleshooting electrical circuits, equipment, complex circuits and controls and application of the National Electrical Code.

ELAP 135
**Electrician Apprentice-Teledata V** 4 HRS
Prerequisites: ELAP 126. This course covers electricity concepts (including reactance, Kirchhoff’s Law, Thevenin’s Theorem and Norton’s Theorem), electronics components (including semiconductors, transistors and amplifiers), integrated circuits and closed-circuit television (CCTV) surveillance systems.

ELAP 136
**Electrician Apprentice-Teledata VI** 4 HRS
Prerequisite: ELAP 135. This course covers closed-circuit television (CCTV) surveillance systems, electronic security (including ID systems and locks) and use of test instruments; along with home automation and nurse call systems. This course will also cover advanced topics in cabling, grounding and bonding.

ELAP 137
**Electrician Apprentice Residential V** 4 HRS
Prerequisite: ELAP 128. Introduces the students to residential wiring practices and methods, the NEC requirements and residential blueprint interpretations. Topics include standard residential wiring procedures and practices, NEC requirements, wiring diagrams and wiring layouts. Upon completion, students should be able to read blueprints and know most code requirements.

ELAP 138
**Electrician Apprentice Residential VI** 4 HRS
Prerequisite: ELAP 137. Provides the student with information on how to interpret residential blueprints, wiring diagrams and layouts and will teach them to wire many different circuits in accordance with the National Electric Code. Emphasis is placed on applying the National Electric Code and actual wiring of panels, service and branch circuits. Upon completion, students should be able to interpret and wire most aspects of a residential application to code.

ELAP 141
**Electrician Apprentice VII** 4 HRS
Prerequisite: ELAP 132. Course will cover topics related to the installation of fiber optics, the general principles of industrial motor controls and power generation. There will be strong emphasis placed upon measurement within these topics.

ELAP 142
**Electrician Apprentice VIII** 4 HRS
Prerequisite: ELAP 141. Studies digital electronics and logical controllers typical to industry. Code calculations relative to industrial settings. There will be strong emphasis placed upon measurement within these topics.

ELAP 151
**Electrician Apprentice IX** 4 HRS
Prerequisite: ELAP 142. Introduces steps and practical experience in fire alarm system and smoke detector start-up procedures, with an introduction to digital instrumentation.

ELAP 152
**Electrician Apprentice X** 4 HRS
Prerequisite: ELAP 151. Evaluates installation methods and design of control systems, such as: motion detectors, (PLC) Programmable Logic Controllers, timers and counters and calculating capacities for high voltage systems.

ELAP 211, 212, 221, 222, 231, 232, 241, 242, 251, 252
**Electrician Internship - Semesters 1-10** 1 HR Each
Prerequisite: Admission to the IBEW Electrician Apprenticeship Program. The electrician internship is to be repeated each semester throughout the (5) five years of the electrical apprenticeship program. This course is designed to offer the apprentice valuable field experience.
Course Descriptions

**ELECTRONIC SYSTEMS**

**TECHNOLOGY**

**ELTC 102**

**DC Electronics** 3 HRS

Prerequisite: Concurrent enrollment in TMAT 103 or MATH 109 suggested. The course deals with the descriptive and analytical relationship between voltage, current, resistance, power and energy in series, parallel and series/parallel DC circuits. Ohm’s law, Kirchhoff’s laws and network theorems are applied to DC circuits. Laboratory experiences complement the theories studied and allow students to use test instruments and measuring techniques. (FA, SP)

**ELTC 103**

**AC Electronics** 3 HRS

Prerequisite: Concurrent enrollment in TMAT 103 or MATH 109 suggested. AC electronics is a study of alternating current and its uses. Course topics include magnetism, alternating voltage and current, inductance, capacitance, time constants, resonance and electronic devices. Laboratory experiences complement the theories studied and allow students to use test instruments and measuring techniques. (FA, SP)

**ELTC 206**

**Digital Electronics** 3 HRS

Prerequisite: ELTC 102 and ELTC 103. Digital Electronics is the study of operation, characteristics and applications of discrete and integrated solid state devices in selected digital circuits. Students will study numbering systems, codes, logic gates, Boolean algebra, logic circuits, flip-flops, counters and timers, interfacing the analog world and memory devices. The student will also be introduced to microprocessors and microcomputers. (SP)

**ELTC 207**

**Solid State Electronics** 3 HRS

Prerequisite: ELTC 102 and ELTC 103. The course is a study of the operation, characteristics and applications of linear, solid state devices. Course topics include semiconductor theories, approximations and circuits; transistors in terms of characteristics, switches and amplifiers. (FA)

**ELTC 212**

**Automation & Control**

**Electronics** 3 HRS

Prerequisite: ELTC 206 and ELTC 207. This industrial circuits course is a study of some of the different ways electronics are used in industrial automation and control systems. Students study control devices and circuits, generators and motors, fluid-power principles and devices and transducers and sensors. Microprocessor controllers used in automated manufacturing & manufacturing automation are studied. Students also will study the interfacing of these controllers between user interface and automated equipment. The course culminates with a group project. (SP)

**ELTC 220**

**Data Communications** 3 HRS

Prerequisite: ELTC 206 or NETW 180. This course is an introduction to the operation, characteristics and applications of analog and digital data communications. Topics include electromagnetic signals, optical media, analog and digital modulation forms and telecommunication modes. This course provides a knowledge base of current data communications concepts & terminology as well as introducing emerging technologies in the data communication field. (SP)

**EMERGENCY MEDICAL SERVICES**

**EMT 101**

**EMT-Basic** 8 HRS

Prerequisite: Healthcare Provider CPR certification and high school diploma or GED. An introduction to the principles and practices of pre-hospital emergency care based upon the most recent U.S. Department of Transportation National Highway Traffic Safety Administration national standard curriculum for providers of primary medical care at scenes of accident &/or illness. This course contains a variety of skills which require fine-motor coordination. Students must also be physically able to lift and transfer patients safely and correctly. EMT 101 meets federal and state guidelines for basic EMT training and students who successfully complete this course will be eligible to take the Illinois State or National Registry EMT-Basic licensure exam. (FA, SP)

**EMT 220**

**EMT-Intermediate I** 11 HRS

Prerequisite: EMT 101, completion of MATH 087 with a grade of “C” or higher or placement in MATH 096 or higher, EMT-Basic License, acceptance into the Advanced Level EMT Training Program. Students may be required to purchase malpractice insurance. EMT 220 is the first of a two-semester training program designed for students seeking EMT-Intermediate licensure. Successive completion of both EMT 220 and EMT 221 will qualify students for field preceptorships and licensure examinations. EMT 220 describes the intermediate’s role and unique aspects of the pre-hospital environment, provides an introduction to advanced patient assessment and emergency care, advanced airway management, shock and emergency pharmacology. A thorough presentation of trauma management and respiratory emergencies completes the semester. The course combines lecture, practical exercises and hospital and field clinical rotations to facilitate student learning. This course meets for 8 hours lecture and 6 hours clinical for 11 hours credit (FA)

**EMT 221**

**EMT-Intermediate II** 11 HRS

Prerequisite: EMT 220; valid EMT-B license; acceptance into the Advanced Level EMT Training Program. Students may be required to purchase malpractice insurance. EMT 221 is the second of a two-semester training program designed for students seeking EMT-Intermediate licensure. Successive completion of both EMT 220 and EMT 221 will qualify students for field preceptorships and licensure examinations. EMT 221 begins with an in-depth look at the cardiovascular system, introducing students to electrophysiology and cardiac rhythm interpretation, cardiovascular pharmacology and techniques of managing cardiovascular disorders. Emergencies unique to pediatric and geriatric patients are addressed, as are those involving endocrine, allergic, toxicological, obstetric, gynecological and behavioral presentations. Students may expect a lecture format with practical skills applications in classroom, hospital and field venues. This course meets for 8 hours lecture and 6 hours clinical for 11 hours credit. (SP)
EMT 230  
EMT-Paramedic I  11 HRS
Prerequisite: IL EMT-Basic or EMT-Intermediate license; BIOL 121 or equivalent. First in a sequence of three courses designed to prepare students for EMT-Paramedic licensure. Students must successfully complete all courses to qualify for licensure examinations. EMT 230 utilizes cognitive, psychomotor and affective standard objectives specified in the U.S. Department of Transportation 1998 EMT-Paramedic National Standard Curriculum. Students are exposed to preparatory and operations divisions of the curriculum, including roles and responsibilities, medical-legal aspects, general principles of pathophysiology and medication administration, followed by ambulance, rescue and hazardous materials operations. Didactic formats include lecture and group learning. This is an 8-week course, which meets for 9 hours lecture and 12 hours clinical for 5.5 hours credit. (FA)

ENGLISH  
ENGL 080  
Grammar Fundamentals  3 HRS
An intensive developmental course in the principles of grammar, usage and mechanics, designed to promote the writing of grammatically correct and structurally effective sentences that convey the intended meaning. ENGL 080 uses a process approach to correct grammar, acceptable usage and effective writing mechanics, such as punctuation, capitalization, spelling and basic format. Students are required to write sentences and short essays that are appropriate within the academic setting. Credit for the course does not apply to graduation.

EMT 232  
EMT-Paramedic III  11 HRS
Prerequisite: EMT 231. Third in a sequence of three courses designed to prepare students for EMT-paramedic licensure. Students must successfully complete all courses to qualify for licensure examinations. EMT 232 utilizes cognitive, psychomotor and affective standard objectives specified in the U.S. Department of Transportation 1998 EMT-Paramedic National Standard Curriculum. The curriculum's medical division is presented this semester with an emphasis on cardiovascular emergencies. Students learn to recognize dysrythmias, administer cardiac medications and assess and manage cardiovascular disorders. Respiratory, endocrine, toxicological and neurological emergencies among others are discussed with emphasis on assessment-based management techniques. Didactic formats include lecture and group learning. This course meets for 9 hours lecture and 12 hours clinical for 11 hours credit. (FA)

EMT 231  
EMT-Paramedic II  11 HRS
Prerequisites: EMT 230. Second in a sequence of three courses designed to prepare students for EMT-Paramedic licensure. Students must successfully complete all courses to qualify for licensure examinations. EMT 231 utilizes cognitive, psychomotor and affective standard objectives specified in the U.S. Department of Transportation 1998 EMT-Paramedic National Standard Curriculum. Students are exposed to airway management and ventilation, patient assessment and trauma divisions of the curriculum, including advanced airway care, advanced patient assessment and physical examination techniques and advanced care and management of traumatized victims. The semester concludes with a look at special needs patients. Didactic formats include lecture and group learning. This course meets for 9 hours lecture and 12 hours clinical for 11 hours credit. (SP)

ENGL 090  
Writing Fundamentals I  3 HRS
An intensive preparatory writing course designed to promote fluency in writing and self-confidence in the student. Writing Fundamentals is an intensive introduction to the basics of a process approach to reading and writing. With a focus on reading and textual production, ENGL 090 will enable students to develop sensitivity to the uses of the English language in public and academic discourses. Course grades will be determined by portfolio assessment. (FA, SP, SU)

ENGL 094  
Writing Skills Review I  3 HRS
Prerequisite: Satisfactory score on English placement exam or consent of the department. Concurrent enrollment in READ 090 is strongly recommended. A reading/writing course that uses an error analysis approach to review English fundamentals, including grammar and sentence structure, punctuation, usage and mechanics. The course introduces students to audience, invention, arrangement and purpose in composing. Course grades will be determined by portfolio assessment. (FA, SP, SU)
Course Descriptions

ENGL 095
Writing Skills Review II 3 HRS
Prerequisite: Satisfactory score on English placement exam and concurrent enrollment in READ 091 is strongly recommended. A reading/writing course that offers a rhetoric-based review of composing for developing writers. The course offers students extensive practice in reading and writing for various audiences. Students learn to shape rough preliminary texts into more complex and mature ones. ENGL 095 provides a foundation for college-level writing. Course grades will be determined by portfolio assessment. (FA, SP, SU)

ENGL 096
Writing Skills Reinforcement 3 HRS
Prerequisite: Satisfactory score on English placement exam and concurrent enrollment in an appropriate section of ENGL 101. An intensive tutorial for students with borderline scores on the placement test for ENGL 101. Reviews grammatical and syntactic principles to enable students to write confidently and with success at the college level.

ENGL 101
Composition I 3 HRS
Prerequisite: Successful completion of ENGL 095 (grade of “C” or Better) at HCC, satisfactory score on English placement exam or consent of the department. (Placement in ENGL 101 presupposes competence in English grammar, mechanics, punctuation and spelling.) An introduction to college-level writing, with training in the skills needed at each phase of the writing process, including generating ideas about a topic, determining a purpose, forming a controlling idea, analyzing the needs of your audience, organizing and planning your writing and composing effective sentences, paragraphs and essays. ENGL 101 is intended to prepare students to write effectively for a variety of audiences and purposes. A research paper is required. Course grades will be determined by portfolio assessment. (GECC C1 900) (FA, SP, SU)

ENGL 102
Composition II 3 HRS
Prerequisite: Successful completion of ENGL 101 (grade of “C” or better) or equivalent. A continuation of ENGL 101, providing further practice in the skills developed in that course, but with an emphasis on the rhetorical strategies used in academic and professional/occupational writing situations including logical analysis, critical thinking, the interpretation and evaluation of primary and secondary sources and the conventions of academic discourse. A research paper is required. Course grades will be determined by portfolio assessment. (GECC C1 901) (FA, SP, SU)

ENGL 106
Introduction to Literature 3 HRS
Prerequisite: Successful completion of ENGL 101. An introduction to a wide variety of literature, which may include such genres as fantasy, fairy tales, folklore, myths and legends, poetry, nonsense rhymes, historical fiction, picture books and so forth. The course encourages critical thinking & development of analytical skills that are used in the understanding of children’s literature. (FA, SP, SU)

ENGL 107
Technical Writing 3 HRS
Prerequisite: Satisfactory completion of ENGL 101 or consent of the department. A study of the characteristics, concepts and procedures involved in the preparation of scientific, technical and industrial communications, providing models for, and practice in, writing descriptive, instructional and analytical material, professional correspondence and informal and formal reports. This course also includes attention to elements used to augment reports (illustrations, abstracts, summaries) and organizational patterns for oral and written presentations whose purpose and audience are clearly demarcated. Emphasis is upon current practice in professions and trades. (FA, SP)

ENGL 108
Understanding Fiction 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Reading and discussion of works of fiction, chiefly short stories, from a variety of authors and periods, with the aim of providing competence in critical judgment and analysis, knowledge of formal characteristics and appreciation of literary excellence. (GECC H3 901) (FA, SP)

ENGL 109
Understanding Drama 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Reading and discussion of selected dramatic works, with the aim of providing competence in critical judgment and analysis, knowledge of formal characteristics and appreciation of literary excellence. (GECC H3 902) (FA, SP)

ENGL 110
Understanding Poetry 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Reading and discussion of selected poems, with the aim of providing competence in critical reading and analysis, knowledge of formal characteristics and appreciation of literary excellence. (GECC H3 903, IAI Major Code EGL 915) (FA, SP)

ENGL 111
Children’s Literature 3 HRS
Prerequisite: Completion of ENGL 101 with a “C” or better. An introduction to a wide variety of children’s literature, which may include such genres as fantasy, fairy tales, folklore, myths and legends, poetry, nonsense rhymes, historical fiction, picture books and so forth. The course encourages critical thinking & development of analytical skills that are used in the understanding of children’s literature. (FA, SP, SU)
ENGL 119  
Adolescent Literature  3 HRS  
Prerequisite: Completion of ENGL 101 with a “C” or better. An introduction to a wide variety of adolescent literature, which might include such genres as fantasy, drama, classic texts, realistic fiction, the problem novel, series and texts dealing with a variety of themes including marginalization, sexuality, technology, diversity, disability, the supernatural and so forth. Although the course focuses on literature written for an adolescent audience, the course will also analyze cultural and literary assumptions about adolescents and the ideologies that result from such assumptions. The course encourages critical thinking and the development of analytical and evaluative strategies that are used in the understanding of adolescent literature.

ENGL 206  
Creative Writing  3 HRS  
An introductory course in writing in the principal belletristic genres, providing extensive practice in writing and in-class analysis and discussion of student work, with particular attention to the creative process and the development of technique. (FA, SP, SU)

ENGL 209  
Introduction to Creative Writing - Poetry  3 HRS  
Prerequisite: ENGL 101 with a grade of “C” or better. ENGL 206 with a grade of “C” or better, or consent of instructor. This course provides a continuation of skills learned in ENGL 206 with an emphasis on the creation of poetic writing and publication. Requirements include analysis and practical application of past and current trends in writing and publishing poetry, peer workshops and a creative portfolio with a critical introduction that demonstrates an understanding of the structure, elements and critical terminology of non-fiction. Topics to be covered include historical trends and practices, theoretical and cultural influences, contemporary non-fiction practices, requirements for interaction in workshops and analysis of current publication opportunities.

ENGL 210  
Introduction to Writing  
Literary Non-Fiction  3 HRS  
Prerequisite: ENGL 101 with a grade of “C” or better. ENGL 206 with a grade of “C” or better, or consent of instructor. This course provides a continuation of skills learned in ENGL 206 with an emphasis on the creation of non-fiction writing & publication. Requirements include analysis and practical application of past and current trends in writing and publishing non-fiction, peer workshops and a creative portfolio with a critical introduction that demonstrates an understanding of the structure, elements and critical terminology of non-fiction. Topics to be covered include historical trends and practices, theoretical and cultural influences, contemporary non-fiction practices, requirements for interaction in workshops and analysis of current publication opportunities.

ENGL 231  
American Literature I  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101. A survey of major writers from the colonial period to the Civil War. (GECC H3 914) (FA)

ENGL 232  
American Literature II  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. A survey of major writers from the Civil War to the present. (GECC H3 915) (SP)

ENGL 241  
Survey of English Literature I  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Development of English literature from its beginnings to roughly 1790. (GECC H3 912) (FA)

ENGL 242  
Survey of English Literature II  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Development of English literature from roughly 1790 to the present, including works by native writers in the decolonized parts of the former British Empire. (GECC H3 913) (SP)

ENGL 254  
African-American Literature  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. The study of poetry, drama, fiction and essays by African-Americans. The selections highlight the contribution that these authors make to American Literature historically and currently. (GECC H3 910D) (FA)

ENGL 255  
Women in Literature  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Discussion and analysis of literature by and about women. The course will look at both canonical and non-canonical authors. (GECC H3 911D) (FA)

ENGL 270  
African Literature  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Discussion and analysis of African Literature from the ancient Egyptian to the present. (GECC H3 908N) (SP)

ENGL 271  
Asian Literature  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Reading and analysis of representative masterpieces from Asia. (GECC H3 908N)

ENGL 272  
Latin American & Caribbean Literature  3 HRS  
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Reading and analysis of representative masterpieces from Latin America and the Caribbean. (GECC H3 908N) (SP)
Course Descriptions

ENGL 296
Special Topics in English Studies 1-3 HRS
Prerequisite: Completion of ENGL 101 with a “C” or higher. This is a course in English Studies that is appropriate for students in the second year of college. The course advances strategies of research, writing and interpretation. The particular topic of the course introduces or advances study of written, oral, visual or multimedia texts pertinent to any field within English studies, including literature, creative writing, rhetoric, linguistics, English education, advanced writing, composition, critical theory, cultural studies and textual production. The study might include formal qualities, historical frameworks, theoretical groundings, secondary literature, cultural dimensions, linguistic features, rhetorical characteristics, symbolic implications, literary elements or aesthetic applications pertinent to a defined group of texts. Because topics and research studied change each semester, ENGL 296 may be repeated for a total of six credits. (FA, SP)

ENGINEERING

ENGR 110
Engineering Graphics 3 HRS
The course includes the use of traditional and computer-based methods as tools in engineering graphics. Topics covered will include text creation, sketching, instrument usage, charts and diagrams, pictorial drawings, orthographic projection, auxiliary views, sectioned views, dimensioning, production drawings, engineering design concepts and fundamental descriptive geometry. (IAI Majors Codes EGR 941, MTM 911) (FA)

ENGR 272
Engineering Mechanics: Statics 3 HRS
Prerequisite: PHYS 171 and credit, or concurrent enrollment in, MATH 162. Mechanics is the study of the effects that forces produce on bodies. This is a course in statics, the branch of mechanics in which bodies are at rest or moving at constant velocity. Topics include a study of force systems, equilibrium, beams, trusses, friction, center of gravity and moment of inertia. (IAI Major Code EGR 942) (FA)

ENGR 272
Engineering Mechanics: Dynamics 3 HRS
Prerequisite: ENGR 271. Mechanics is the study of the effects that forces produce on bodies. This is a course in dynamics, the branch of mechanics devoted to the study of bodies that experience accelerations due to unbalanced forces. Topics include kinematics, translation, rotation, acceleration, work, energy and momentum. (IAI Major Code EGR 943) (SP)

FAMILY AND COMMUNITY

FACS 201
Family and Community 3 HRS
This course will utilize psychological, sociological, anthropological, political, historical and economic theory to analyze the relationships between families and their cultural environment. An emphasis will be placed on exploration of the cultural myths circulating around contemporary notions of family. The course will incorporate service learning as a tool to acquire knowledge and skills.

FILM

FILM 101
Introduction to Film Studies 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. An advanced course in film studies, including films from the genres of the western, film noir, the foreign film, the musical, the science fiction film and others. Each film will be considered by examining the constituent elements and formal qualities that are intrinsic to that particular film and the genre, as well as by studying the relationship of one film to another and to the societies from which they developed. Because topics and films studied will change each semester, FILM 296 may be repeated for a total of six credits. (SP)

FRENCH

FREN 101
French I 4 HRS
A beginning course in French, with emphasis on the development of basic listening, speaking, reading & writing skills. Basic vocabulary, essentials of French grammar and syntax, correct pronunciation and intonation and the use of actual speech patterns are covered. Students with two or more years of high school French should not enroll in FREN 101. (FA)

FREN 102
French II 4 HRS
Prerequisite: FREN 101 or equivalent. A continuation of French I, with emphasis on expanding the basic conversational vocabulary and more detailed study of grammatical principles and syntactic patterns. (SP)
GENERAL STUDIES

GENS 070
**Preparation for College Success**  3 HRS
A beginning course focusing on the learner’s academic and social preparedness for developmental and subsequent college-level coursework. Successful completion of this course will demonstrate students’ ability to benefit from instruction at the college level and will result in enrollment in READ 070.

GENS 100
**College Success**  1 HR
A foundational course in active learning strategies and effective study skills that focuses on the learner’s role and responsibility in the learning process. (FA, SP, SU)

GENS 101
**Career Choice**  1 HR
Students explore significant factors such as interests, abilities, values and personality preferences as they relate to career choices. Standardized measurement instruments, peer feedback, career information and resource persons enable the individuals to explore themselves and the world of work. (FA, SP)

GENS 102
**Personal Success**  1 HR
An introduction to success skills necessary for taking personal responsibility for positive life changes with special emphasis on definition of self and self-esteem, as well as the development of strategies for improvement of self-esteem and conflict. (FA, SP)

GENS 103
**Information Technology Skills**  1 HR
An introduction to skills necessary in accessing current information technologies needed by students and members of the community while at Heartland Community College. Students will learn to use a computer, basic Windows concepts, basic word processing and research/communication tools. Course will be revised as needed to keep pace with current technologies and changes in instructional delivery methods. (FA, SP, SU)

GENS 104
**Library Research Skills**  1 HR
An introduction to research skills, this course covers the production, organization and retrieval of information and knowledge within a societal context. Concepts include creating strategies for locating, evaluating and incorporating information into a written product. Intellectual freedom, copyright and plagiarism will be examined. Principles learned in this course will apply to evaluation and analysis of research in other courses. Completion of, or concurrent enrollment in, English 094 is strongly recommended. (FA, SP)

GENS 105
**Life Success**  3 HRS
This course will help students gain awareness of their academic career and personal selves and facilitate development in each of these areas. Focus will be placed on gaining knowledge of each self, identifying areas of strength and those needing improvement and mastering the tools necessary to achieve growth in these life areas. Students cannot receive credit for both GENS 105 and GENS 100, GENS 101 or GENS 102. (FA, SP, SU)

GEOGRAPHY

GEOG 101
**World Geography**  3 HRS
A study of world geographic structures and regions particularly as they relate to world cultures. Includes human origins and distribution, population, migration, health, climate, culture, language, settlements, industry and agriculture. (GECC S4 900N) (FA, SP, SU)

GEOG 110
**Economic Geography**  3 HRS
A study of relationships between economic activities and geographical associations. Includes trade and transportation routes, economic interdependence of nations and geographical influence on world conditions. (GECC S4 903N)

GERMAN

GERM 101
**German I**  4 HRS
A beginning course in German, with emphasis on the development of basic listening, speaking, reading & writing skills. Basic vocabulary, essentials of German grammar and syntax, correct pronunciation and intonation and the use of actual speech patterns are covered. Students with two or more years of high school German should not enroll in GERM 101. (FA)

GERM 102
**German II**  4 HRS
Prerequisite: GERM 101 or equivalent. A continuation of GERM 101, with emphasis on expanding the basic conversational vocabulary and more detailed study of grammatical principles and syntactic patterns. (SP)

GERM 201
**German III**  4 HRS
Prerequisites: GERM 101 and 102 or equivalent. Intensive practice in conversation and composition, combined with a review of grammatical and syntactic principles to improve speaking skills, written composition and the reading of German.
HEBR 101
Hebrew I 4 HRS
An introduction to biblical and modern Hebrew, emphasizing skills in reading, reading comprehension and basic vocabulary, simple writing and systematic study of grammatical structures. The original Hebrew biblical text will be used along with other reading selections. Students will acquire a basic knowledge of the language along with some knowledge of the culture.

HISTORY

HIST 101
Western Civilization to 1500 3 HRS
This course covers the main stream of Western civilization from the first millennium B.C. to 1500. The course considers religious, economic and cultural trends and developments as well as the major political events of the period. The focus of the course is on Europe but the great Middle Eastern civilizations and cultural contributions are considered as they impact Europe and help shape the West. Special attention is given to individuals and their contributions as well as to the rise of nations. (GECC S2 902, IAI Major Code HST 913) (FA, SP)

HIST 102
Modern Western Civilization 3 HRS
This course covers the development of the modern West in terms of the great movements of the past five centuries: The Reformation, The Enlightenment, Absolutism and the rise of the nation state, the French Revolution, Industrialization, the emergence of modern political ideology, the World Wars, the Cold War and the roots of the present political situation. The course emphasizes watershed events in the realm of religion, politics, economics, artistic and cultural developments and war. Special attention is given to the contributions of individuals in shaping the modern world. (GECC S2 903, IAI Major Code HST 914) (FA, SP)

HIST 107
Survey of British History I 3 HRS
Survey of British history from the early Britons to 1714. Topics covered include early Britons and Roman invasions, emergence of England, Norman conquest and relation with Europe, conquest of Wales, wars between England and Scotland, the War of the Roses, Henry VIII and English Reformation, 1688 Revolution, Parliament & rise of the House of Windsor.

HIST 108
Survey of British History II 3 HRS
Survey of British history from 1714 to present. Topics covered include Whigs, Tories and Walpole as “First Prime Minister,” Scotland, Wales and “Celtic Nationalism,” the Irish Question, growth of the British Empire in India and North America, American Revolution, Industrial Revolution, Gladstone, Disraeli and Victorian Britain, the rise of the Labour Party, the Irish Revolution, the Common Market and Britain today.

HIST 135
History of the US to 1865 3 HRS
This course covers the major political, social, economic and diplomatic trends that have shaped the United States from the early explorations of America to the Civil War and Reconstruction. (GECC S2 900, IAI Major Code HST 911) (FA, SP, SU)

HIST 136
History of the US Since 1865 3 HRS
This course covers the major political, social, economic and diplomatic trends that have shaped the United States from the end of the Civil War to the present. (GECC S2 901, IAI Major Code HST 912) (FA, SP, SU)

HIST 150
Latin American History 3 HRS
The history of Latin America from Pre-Columbian civilizations to the present will be covered. Special emphasis will be placed on developing historical and cultural understanding of the nations that emerged in the 19th century and their growth and development to the present. This course utilizes a comparative approach to political, economic and social history. (GECC S2 910N)

HIST 210
African-American History 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. This course examines major political, social and economic events in African-American history. The topics to be included are: the African background, slavery, emancipation, the Civil War and Reconstruction, Blacks in the 20th Century, the civil rights movement and social, cultural and economic aspects of black history.

HIST 240
History of the American Frontier 3 HRS
Westward movement and the influence of the frontier on American life and institutions are covered. Focus on local and Midwestern context.

HIST 255
The Russian Empire, 1890 to Present 3 HRS
Learn of historical forces which led to the rise and fall of the USSR. Topics include extension into the Far East, the Russo-Japanese War, the overthrow of the Czar, the Revolution of 1917, Stalinism, World War II expansion of the Empire, the Cold War and military build-up, Perestroika and recent revolutions in the Republics.

HIST 259
History of Illinois 3 HRS
This course presents Illinois history from the earliest times to the present. Includes political, economic, social, cultural, educational and constitutional developments. (SP)

HIST 261
Non-Western Civilization I 3 HRS
This course is designed as an introduction to the study of non-western civilizations from their earliest origins to the early to mid-seventeenth century. The cultural, political, economic and social roots will be explored. An appreciation of the organizing principles and philosophical and religious tenets of these diverse civilizations will be developed through in-depth readings on selected topics in all of the following areas: East Asian, South Asian, Western and Central Asian, African and native American. (GECC S2 904N) (FA)
HEALTH

HLTH 101
Heartsaver CPR 0.5 HRS
The Heartsaver CPR Course has no specific prerequisites. Individuals taking this course should be interested in learning cognitive and motor skills to meet performance criteria in adult, child and infant CPR and relief of foreign-body airway obstruction (FBAO). This course is designed for lay rescuers particularly those who are expected to respond to emergencies in the workplace, including security guards, firefighters, police and other lay responders who are required to obtain a credential documenting completion of a CPR course.

HLTH 103
Heartsaver AED 0.5 HRS
The Heartsaver AED Course has no specific prerequisites. Heartsaver AED, a comprehensive course for the first responder, is designed to teach cardiopulmonary resuscitation (CPR), use of an automated external defibrillator (AED) and relief of foreign-body airway obstruction (FBAO) to all lay rescuers, particularly those who are expected to attend a CPR course for the workplace or to participate in a public access defibrillator program at home or in the community.

HLTH 104
BLS for Healthcare Providers 0.5 HRS
The American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers Course has no specific prerequisites. The vast majority of participants will consist of individuals preparing for emergency medical services, nursing and other healthcare providers. This course meets the requirements for lifeguards, police, firefighters, childcare workers and lay workers who are completing prerequisites for the BLS Instructor’s Course, EMT 101 and the nursing curriculum. (FA, SP, SU)

HLTH 110
Medical Terminology 3 HRS
Through the study of medical prefixes, roots and suffixes, students will learn how to define and use medical terms as they relate to body structure and function, medical procedures and disease processes. Spelling, pronunciation and abbreviations will also be emphasized. (FA, SP)

HLTH 111
Diseases of the Human Body 3 HRS
Prerequisite: BIOL 181 and completion of, or concurrent enrollment in, BIOL 182 or completion of BIOL 121. An introduction to the current understanding of disease processes across the life span. This course examines the major health problems in the United States, emphasizing etiology, risk factors, gender differences, physiologic changes of specific diseases and treatment approaches.

HLTH 116
Health Effects of Recreational Drugs 3 HRS
Content will address the use, misuse and abuse of legal and controlled drugs and their medical, pharmacological, legal and economical impacts that they have on the individual, one’s relationships and society. A brief history of drug use in the world and America will also be studied.

HLTH 118
Personal Health and Wellness 3 HRS
Principles covering responsible behavior and risk factors influencing one’s physical health, psychological health & sexual health throughout the lifespan will be studied.

HLTH 120
Nutrition 3 HRS
Principles and concepts of nutrition will be emphasized along with the functions and sources of nutrients. Factors affecting nutrition throughout the life span, potential nutritional problems and nutritional planning will be studied. (FA, SP)

HLTH 125
Nutrition for Healthcare Majors 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, BIOL 182. Introduces the role nutrition plays in health maintenance and disease management. Includes essential nutrients, their function and dietary sources; food and nutrition issues and applications throughout the life cycle; & diet therapy for specific disease states. Introduces nutrition screening, assessment and counseling.

HLTH 131
Principles of Weight Management 3 HRS
The class will focus on the impact of weight loss/gain on chronic disease development, psychological influences and physiological processes that impact weight management, nutritional & physical activity principles and evaluation of popular weight management methods. At the end of this course, students will be able to create a nutritious eating plan and physical activity program for their particular lifestyles & health goals. A field trip(s) is/are tentatively planned.

HLTH 135
Pharmacology for Health Professionals 3 HRS
This course provides a broad overview of the history, applications, metabolism and terminology of prescribed drugs for the allied health professional. It will also include a systemic review of the most commonly prescribed drugs/medications and pharmacological references. This course cannot be substituted for NURS 113 or any other NURS course.
Course Descriptions

HLTH 201
Community Public Health  3 HRS
Introduces the political, cultural, and economic principles and concepts of health and disease relative to community living. Including the study of provision of healthcare, community health programs, healthcare reform, and community health for specific populations. (FA)

HLTH 202
Professional Issues in Health Care  3 HRS
This course will emphasize legal aspects and professional issues that affect all medical and allied-health care professionals. Specific topics include overview of the healthcare system, specialties and scopes of practice, confidentiality and patient rights, liability, medical records, culture and diversity issues and professionalism in the workplace. Students are encouraged to relate the information to their desired profession for all assignments.

HLTH 209
Advanced Medical Terminology  3 HRS
Prerequisite: HLTH 110, or equivalent, with a “C” or better. This course will introduce word parts and abbreviations relating to pharmacology, radiography, oncology, psychiatry/mental health, history/physical examination and surgery. Word building and defining medical terms, recalling abbreviations and eponyms, spelling, diagnostic procedures, medical conditions and pronunciation regarding all body systems will also be emphasized. Since this is a continuation of HLTH 110, concepts from that class will be revisited often.

HLTH 296
Special Topics in Health  1-6 HRS
Prerequisite: Cumulative grade point average of 2.0 or higher and sophomore standing or consent of instructor. The purpose of this course is to develop a greater knowledge of health topics and to influence the beliefs and behaviors of students to achieve a greater state of health. In all cases, the knowledge & skills students gain here can be transferred to situations one may reasonably encounter in the health & medical industries. Refer to the schedule book for specific topics offered.

HLTH 299
Internship in Health  1-6 HRS
Prerequisite: Successful completion of at least 15 semester credit hours, including ENGL 101 and COMM 101. Supervised field experience in a variety of settings related to the healthcare field, including educational institutions, governmental agencies and public and private health care facilities. Students will receive on-the-job experience, in a volunteer or paid capacity, for at least five hours per week (a total of 75 hours per semester equals one internship credit hour) to gain practical skills and experience.

HUMANITIES

HUMA 100
Cultural Tour  3 HRS
An introduction to major art forms, including music, art, painting, sculpture and architecture through travel to various countries or regions of the United States. These arts will be considered by examining the constituent elements and formal qualities that are characteristic of the art form as well as by studying their relationship to one another and to the societies from which they developed. (GECC HF 900) (SP, SU)

HUMA 201
Western Humanities I  3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. Discussion and analysis of major cultural achievements of the Western tradition, as expressed in philosophy, religion, art, music and literature, from earliest times to the Renaissance. Broadly interdisciplinary in approach, this course emphasizes not only the connections between those artistic and literary expressions that Western society has traditionally regarded as significant and the socio-political, economic and historical conditions that in part gave rise to them, but also the continuing role for the idea of tradition itself as a factor in the intellectual heritage of the West. (GECC HF 902) (FA)

HUMA 202
Western Humanities II  3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. Discussion and analysis of major cultural achievements of the Western tradition, as expressed in philosophy, religion, art, music and literature, from the Renaissance to modern times. Broadly interdisciplinary in approach, this course emphasizes not only the connections between those artistic and literary expressions that Western society has traditionally regarded as significant and the socio-political, economic and historical conditions that in part gave rise to them, but also the continuing role for the idea of tradition itself as a factor in the intellectual heritage of the West. (GECC HF 903) (SP)

HUMA 203
Non-Western Humanities  3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. Interdisciplinary survey of the significant intellectual and artistic achievements of several non-Western cultures (Africa, Asia, the Caribbean and Latin America) through selected works of literature, philosophy, visual art and music and other performing arts, as well as a comparative examination of their values, motifs and aesthetics with those of Western cultural expression. (GECC HF 904N) (FA, SP)
HUMA 213
Civilization and Culture of Latin America 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. Interdisciplinary survey of the significant intellectual and artistic achievements of several Latin American cultures through selected works of literature, philosophy, visual art and music and other performing arts, as well as a comparative examination of their values, motifs and aesthetics with those of other cultural expressions. (GECC HF 904N)

HUMA 221
American Popular Culture 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. An intensive and critical investigation of contemporary life and values. Includes study of the nature of popular culture in social and political change and social history as reflected in popular music, radio, television, movies, sports, advertising and printed materials intended for a mass audience. (SP)

HUMA 242
British Culture and Society 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. An examination of contemporary social, cultural and political life in Britain, focusing on such subjects as the Monarchy and Parliament, the political parties and the electoral systems, media, art and architecture, leisure and humor, the idea of “class,” educational system, trade unions and geographical diversity. For study abroad program only.

HUMA 250
Classical Mythology 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. An interdisciplinary introduction to classical Greek and Roman mythology, from the myths of creation to the legends of gods and heroes. Myths and legends are related not only to their own time and culture but are traced through the later art and culture of Western civilization - through their expression in literature, painting, sculpture, music and film - revealing how they have influenced thought, art and cultural events that are still with us today. (GECC H9 901) (FA, SP, SU)

HUMA 276
The American Experience 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. An interdisciplinary introduction to American culture from its origins to the present time, including readings from and discussions of American history, literature, philosophy, painting, architecture, music and other arts. (SU, FA)

HUMA 290
Culture and Science 3 HRS
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. Interdisciplinary study tracing the interrelation between culture and science & the impact of science and the natural world on philosophy, religion & art from ancient to contemporary civilizations. This study includes both classroom and field experiences.

HUMA 299
Internship in the Humanities & Fine Arts 1-6 HRS
Prerequisite: Completion of, or enrollment in, 12 semester credit hours. Supervised field experience in a variety of settings related to the humanities and/or fine arts, including educational institutions, governmental agencies, businesses and public and private museums, art galleries and performance centers. Students will receive on-the-job experience in a volunteer or paid capacity for at least five hours a week (a total of 75 hours a semester equals one internship credit hour) to gain practical skills and experience. Work experience must be approved in advance by the internship coordinator.

INDEPENDENT STUDY

INDP 297
Independent Study 1-6 HRS
Prerequisite: Completion of ENGL 101 with a grade of “C” or better. (This prerequisite may be waived with permission of the chair of the division in which the study is undertaken.) Advanced study, special project, or experiment, under supervision of an instructor, in an area of special interest to the student. This course provides an opportunity for students to do more advanced or extended work in a subject than current course offerings allow. A minimum of 45 hours of combined classroom/laboratory and supervised study time is required for each hour of credit. A plan, containing information about the nature of the study, criteria for evaluation, semester hours assigned, name of the faculty advisor assigned and the division chair’s approval must be submitted prior to registration. This plan, along with a copy of the course project and the faculty member’s assessment report, will remain on file in the division office. The student’s transcript will show the discipline in which the independent study was completed and it will identify the subject of the study. INDP 297 may be repeated once for a total of no more than 6 semester hours credit in independent study.

INSURANCE

INSR 115
Life and Health Insurance I 3 HRS
Provides students with an introduction to the principles of insurance, the process of becoming insured and the policy owner’s contractual rights. The course includes information on the features of individual and group life insurance, health insurance and annuity products. In addition, this course is designed to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 280 examination.

INSR 116
Life and Health Insurance II 3 HRS
Focuses on the organization of insurance companies and the environment in which they operate. Examines specific company operations such as marketing, actuarial, underwriting and financial activities. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 280 examination.
Course Descriptions

INSR 130  
**Customer Relations in Insurance**  
2 HRS  
This course is designed to give the student a solid base of knowledge in the following areas of customer service: understanding customer service concepts and strategies, building a customer service culture, developing a customer service strategy, understanding customer and customer service research, establishing & measuring the performance of customer service systems and developing a dedicated customer service staff. In addition, this course is geared to prepare the student to successfully sit for the Associate, Customer Service Program (ACS 100) examination.

INSR 140  
**Legal Aspects of Life & Health Insurance**  
3 HRS  
Life and health insurance companies operate in a legal environment that affects each company’s products and operations. The basic features of contract law, property law, agency law and corporate law are presented in this course. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 310 examination.

INSR 150  
**Marketing Life and Health Insurance**  
3 HRS  
Marketing principles and the function of marketing as an integral aspect of the life and health insurance industry are covered in this course. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 320 examination.

INSR 160  
**Information Management in Insurance**  
3 HRS  
Provides an understanding of the importance and use of information management in insurance companies. The course introduces students to information systems concepts, management science, the hardware and software components of computer systems and the statistical tools used in decision making. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 340 examination.

INSR 170  
**Financial Services Environment**  
3 HRS  
Provides a foundation in economic principles and general investment practices of the insurance industry. This course promotes an understanding of the financial environment in which insurance companies operate. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 351 examination.

INSR 180  
**Accounting for Life & Health Insurance**  
3 HRS  
Provides a broad-based exposure to financial and managerial accounting in life and health insurance companies. The corporate and regulatory environment in which accounting functions occur is also explored in this course. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 361 examination.

INSR 190  
**Insurance Administration**  
3 HRS  
Describes the insurance administration activities involved in individual and group life and health insurance & annuities. Focus is on administrative activities in underwriting, reinsurance, claims and policy owner service. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 301 examination.

INSR 200  
**Finance in Life & Health Insurance**  
3 HRS  
Financial management issues affecting the solvency and probability of life and health insurers are explained. Students will gain an understanding for the complexity of insurance companies through study of topics including: risk/return tradeoff, establishing prices, managing assets and monitoring financial performance. In addition, this course is geared to prepare the student to successfully sit for the Fellow, Life Management Institute (FLMI) 371 examination.

JAPN 101  
**Japanese I**  
4 HRS  
A beginning course in Japanese, with emphasis on the development of basic listening, speaking, reading & writing skills. Basic vocabulary, essentials of Japanese grammar and syntax, correct pronunciation and intonation and the use of actual speech patterns are covered. Students with two or more years of high school Japanese should not enroll in JAPN 101.

JAPN 102  
**Japanese II**  
4 HRS  
Prerequisite: JAPN 101 or equivalent. A continuation of Japanese 101, with emphasis on expanding the basic conversational vocabulary and more detailed study of grammatical principles and syntactic patterns.

JAPN 201  
**Japanese III**  
4 HRS  
Prerequisite: JAPN 101 and 102. Intensive practice in conversation and composition, combined with a review of grammatical and syntactic principles to improve speaking skills, oral composition and the reading and writing of Romaji script, additional kan’ji and the kana syllabaries.

JAPN 202  
**Japanese IV**  
4 HRS  
Prerequisite: JAPN 101, 102, and 201. Continued practice in oral and written expression, with an emphasis on the development of vocabulary and syntax necessary for sustained conversation in Japanese. A final review of grammar is combined with composition exercises based on readings about Japanese culture and society. (GECC H1 900)
LABORER APPRENTICE

ILAP 111
Craft Orientation & Safety Training 3 HRS
Prerequisite: Admittance to the Illinois Laborers & Contractors program. This course provides an introduction to the construction craft industry. It covers basic information related to health and safety and specific information related to first aid, OSHA, highway workzone safety and hazard communication. Students will review basic math for application in the construction craft industry.

ILAP 112
Mason Tending 3 HRS
Prerequisite: ILAP 111. This course includes lecture, lab and work experience. This course provides students the technical knowledge and skills involved with erecting scaffolding, mixing grout and mortar, use of forklifts and correctly tending the mason.

ILAP 113
Concrete Practices & Procedures 3 HRS
Prerequisite: ILAP 112. This course includes lecture, lab and work experience. The contents include concrete practices and procedures, use of tools and power equipment, estimating quantities and finishing techniques.

ILAP 114
Asphalt Technology & Construction 3 HRS
Prerequisite: ILAP 113. This course includes lecture, lab and work experience. The contents include preparation of a subgrade and safe use of equipment to apply and finish an asphalt surface.

ILAP 121
Asbestos Abatement 3 HRS
Prerequisite: ILAP 114. This course includes lecture, lab and work experience. Students are prepared for asbestos abatement in a work environment. Additional course topics include federal, state and local regulatory requirements and the use of personal protective equipment and clothing.

ILAP 122
Principles of Pipelaying 3 HRS
Prerequisite: ILAP 121. This course includes lecture, lab and work experience. The contents include trenching and excavation safety, pressure pipe laying techniques, utility line and grade and gravity flow piping systems.

ILAP 123
Introduction to Blueprint Reading 3 HRS
Prerequisite: ILAP 122. This course includes lecture, lab and work experience. Students will learn to interpret information incorporated into an architectural drawing. It is necessary to learn to read a ruler and scales and be able to use and convert between different scales and measurement systems. Course will examine plans, elevations and sections, detail and assembly drawings and structural, mechanical, plumbing & electrical drawings.

ILAP 131
Basic Surveying 3 HRS
Prerequisite: ILAP 123. This course includes lecture, lab and work experience. The contents include basic construction surveying, line and grade checking and laser tracking leveling.

ILAP 132
Bridge Construction 3 HRS
Prerequisite: ILAP 113. This course includes lecture, lab and work experience. The contents include preparation of a subgrade and safe use of equipment to apply and finish an asphalt surface.

ILAP 133
ACG Hazardous Waste Worker 3 HRS
Prerequisite: ILAP 132. This course covers the types of hazards and situations that may be encountered at a hazardous waste job site, the protective measures and equipment to use and associated safety and health measures.

ILAP 211, 221, 231
Laborer Internship I-III 3 HRS EACH
Prerequisite: Admittance to the Illinois Laborers & Contractors program. The Laborer Internship is to be repeated each year throughout the three (3) years of the laborer apprentice program. This course is designed to offer the apprentice valuable field experience.

LATIN

LAT 101
Latin I 4 HRS
A beginning course in Latin, emphasizing the acquisition of grammatical skills and vocabulary and the development of reading and writing ability. The course will also encourage reading aloud with correct pronunciation and will include adjunct material concerning life and letters in ancient Rome. Students with two or more years of high school Latin should not enroll in LAT 101.

LAT 102
Latin II 4 HRS
Prerequisite: LAT 101. A continuation of Latin I, with an emphasis on the acquisition of further and more complex grammatical skills as well the development of students' vocabulary in order to enhance reading and writing ability. The course will also continue to develop the skill of reading aloud and will include further adjunct material concerning life and letters in ancient Rome. Students with one or two years of high school Latin may enroll in LAT 102.
Course Descriptions

MAINTENANCE

MAIN 101 Industrial Electricity and Systems 3 HRS
Prerequisite: TMAT 103 or instructor approval. Industrial Electricity and Systems is a basic course in the operation, characteristics and applications of industrial electricity & industrial systems. This course covers function and practice of industrial controls in systems such as fluid power, mechanical and electrical. This course stresses the theory & practice of industrial electricity as it relates to industrial systems and other technological fields. (FA, SP, SU)

MAIN 102 Industrial Mechanical Systems 3 HRS
This course examines general mechanical and physics principles and how they apply to common industrial mechanical devices. Students will also experience hands-on sessions where they will install and maintain equipment. (SP)

MAIN 104 Air Conditioning and Refrigeration 3 HRS
Prerequisite: MAIN 101 suggested. This course introduces general air conditioning and refrigeration principles and how they are applied in industrial facilities. The course also includes the operation and maintenance of the individual components and functions of industrial cooling equipment.

MAIN 201 Electric Wiring and Maintenance 3 HRS
Prerequisite: MAIN 101. A course in electrical safety and electrical components; includes principles of installation of electrical circuits within a facility. Lectures emphasize principles of component selection, installation and maintenance of electrical distribution systems. (FA)

MAIN 202 Hydraulic & Pneumatic Maintenance 3 HRS
Prerequisite: TMAT 103. This course examines basic fluid power theories and advantages, schematic reading and development, equipment specification and installation and maintenance and rebuilding of individual components. Troubleshooting techniques will be emphasized. (SP)

MAIN 220 Machine Installation and Maintenance 3 HRS
Prerequisite: MAIN 102 and MAIN 201. This course covers the process required for the planning and actual installation of industrial machinery. The course includes preventative maintenance and planning for in-plant operations.

MAIN 221 Heating Systems 3 HRS
Prerequisite: MAIN 101 suggested. Heating Systems is a course in theory, operation and maintenance of industrial boilers and their related systems. Topics include boilers and their operation, disassembly, inspection and repair. Preventative maintenance procedures & regulations governing maintenance programs are also discussed.

MAIN 222 Industrial Controllers 3 HRS
Prerequisite: MAIN 101. This course includes the application and programming of programmable logic controllers (PLCs). Topics include: theory and operation of controllers and ladder logic program development and implementation. (FA)

MATH

MATH 070 Fundamentals of Math 3 HRS
Prerequisite: Placement by assessment. Designed for students who need to develop basic arithmetic skills before taking Beginning Algebra. Topics include basic operations with whole numbers, fractions, decimals, signed numbers and solving equations. Problem solving will be stressed throughout the course. (FA, SP, SU)

MATH 087 Beginning Algebra 4 HRS
Prerequisite: Math 070 with a grade of “C” or higher, or assessment. Topics include signed numbers, order of operations, ratio, proportion, percent, data analysis, geometry, exponents, polynomials, factoring, rational expressions, linear equations and inequalities. Problem solving is stressed throughout the course. (FA, SP, SU)

MATH 096 Intermediate Algebra for Business & Social Science 3 HRS
Prerequisite: MATH 087 with a grade of “C” or higher, or assessment. Topics include linear functions, exponents and modeling problems. Problem solving will be stressed throughout the course. Note, a graphing calculator is required for this course (instruction will be based on a TI 83+). (FA, SP, SU)

MATH 098 Geometry 3 HRS
Prerequisite: MATH 087 with a grade of “C” or higher, or equivalent, or assessment. This course fulfills a geometry requirement for students who have not previously studied the subject or who need a review of geometry. The course includes geometric constructions using a straight-edge, protractor and compass. In addition, it introduces traditional “two-column” proofs; such proofs reinforce higher-order logical skills that are important in many professions. Topics include triangles, polygons, similarity, Pythagoras’ Theorem and circles. (FA, SP)

MATH 099 Intermediate Algebra for Math & Science 5 HRS
Prerequisite: MATH 087 and MATH 098 with a grade of “C” or higher; concurrently enrolled in MATH 098 will be allowed), or assessment. Topics include linear, quadratic, polynomial, rational and radical functions, inequalities, systems of linear equations and inequalities. Problem solving will be stressed throughout the course. Note, a graphing calculator is required for this course (instruction will be based on a TI 89). (FA, SP, SU)
MATH 106
College Algebra for Business & Soc Science 4 HRS
Prerequisite: MATH 096 or MATH 099 with a grade of "C" or higher, or assessment. The main concept of this course is required for this course (instruction will be based on a TI 83+). (FA, SP, SU)

MATH 109
College Algebra for Math & Science 4 HRS
Prerequisite: MATH 096 or MATH 107 with a grade of "C" or higher, or equivalent, or assessment. The main concept of this course is the notion of a function. Polynomial, radical, rational, exponential and logarithmic functions are studied from a symbolic, as well as graphical, perspective. The course is intended to prepare college students for studying calculus. Additional topics include: linear systems of equations, matrix algebra, series and sequences and analytic geometry. Graphing utilities are used extensively as learning tools. Note, a graphing calculator is required for this course (instruction will be based on a TI 89). (FA, SP, SU)

MATH 111
Finite Math for Business and Social Science 4 HRS
Prerequisite: MATH 106 or MATH 109 with a grade of "C" or higher, or equivalent, or assessment. This class focuses on applications of the following topics: matrices, matrix algebra, linear programming, sets and counting techniques, probability and the mathematics of finance. Note, a graphing calculator is required for this course (instruction will be based on a TI 83+). (GECC M1 906) (FA, SP, SU)

MATH 128
Trigonometry 3 HRS
Prerequisite: MATH 099 with a grade of "C" or higher, or assessment. This course begins with a definition of the six trigonometric functions. The course work follows an investigation of these functions, their graphs, their relationships to one another and ways in which they can be used in a variety of applications. Specific applications include triangles, vectors, polar and parametric equations and conic sections. The course is designed to equip students with an understanding of trigonometry necessary for the study of calculus. Note, a graphing calculator is required for this course (instruction will be based on a TI 89). (I AI Major Code MTM 901) (FA, SP, SU)

MATH 131
Explorations in Mathematics 3 HRS
Prerequisite: MATH 096 or MATH 099 with a grade of "C" or higher, or assessment) and MATH 098 (or at least one year of high school geometry) with a grade of "C" or higher. This course focuses on mathematical reasoning and the solving of real life problems, rather than on routine skills and appreciation. Three or four topics are studied in depth, with at least three chosen from the following list: counting techniques and probability, geometry, graph theory, logic and set theory, mathematical modeling, mathematics of finance, game theory, linear programming and statistics. Note, a scientific calculator is required for this course (a graphing calculator is also acceptable). (GECC M1 904) (FA, SP, SU)

MATH 135
Mathematics for Elementary Teachers I 3 HRS
Prerequisite: MATH 098 (or high school geometry), and either MATH 096 or MATH 099 (or assessment) with a grade "C" or better, or equivalent. This course focuses on mathematical reasoning and problem solving; and provides instruction in the teaching of mathematics at the elementary grade level. Topics include properties of whole numbers and rational numbers, the four basic arithmetic operations and problem solving through various representations including algebraic. (FA)

MATH 136
Mathematics for Elementary Teachers II 3 HRS
Prerequisite: MATH 135 with a grade of "C" or higher or equivalent or permission of instructor. This course focuses on mathematical reasoning and problem solving; and provides instruction in teaching mathematics at the elementary grade level. Topics include algebra, probability, statistics, geometry, measurement and the use of manipulatives and technology in the elementary school classroom. Note, a scientific calculator is required for this course (a graphing calculator is also acceptable). (GECC M1 903) (SP)

MATH 141
Introduction to Statistics 3 HRS
Prerequisite: MATH 096 or MATH 099 with a grade of "C" or higher, or assessment and MATH 098 (or at least one year of high school geometry with a "C" or higher). A course in statistics that introduces various topics in probability and statistics and demonstrates a variety of real life applications. Some of the topics covered are sampling techniques and simulation, data organization, distributions, measure of central tendency and variability, probability, estimation and hypothesis testing. A graphing calculator is required for this course (instruction will be based on a TI 83+). (GECC M1 902) (FA, SP, SU)

MATH 142
Business Statistics 3 HRS
Prerequisite: MATH 106 or MATH 109, with grade of "C" or higher, or equivalent, or assessment. A statistics course that emphasizes applications of statistics to business. Topics include data organization, frequency distributions, measures of central tendency and variability, probability theory, probability distributions, sampling, estimation, hypothesis testing and regression analysis. Note, a graphing calculator is required for this course (instruction will be based on a TI 83+). This course is not intended for a mathematics major or minor. (GECC M1 902, IAI Major BUS 901) (FA, SP, SU)
Course Descriptions

MATH 151
Calculus for Business & Social Science 4 HRS
Prerequisite: MATH 106 with grade of "C" or higher, or equivalent, or assessment. Mathematical analysis of calculus with applications to business and social sciences. Topics include function, the derivative, basic techniques of differentiation, optimization, the definite integral, curve sketching and multivariable functions. The course focuses on interpretation and applications. Topics are presented numerically, graphically, algebraically and verbally. Note, a graphing calculator is required for this course (instruction will be based on a TI 83-+). (GECC M1 900-B) (FA, SP, SU)

MATH 161
Calculus I 4 HRS
Prerequisite: MATH 109 and MATH 128 with grade of "C" or higher, or equivalent, or assessment. A first course in calculus. Topics include functions, curve sketching, limits, continuity, definition of derivative, rate of change, slope, derivatives of polynomial and rational functions, the chain rule, implicit differentials, approximation by differentials, higher order derivatives, Rolle’s theorem, mean value theorem, applications of the derivative, the definite integral, the fundamental theorem of calculus, integration with applications and the calculus of trigonometric, logarithmic and exponential functions. Every topic is presented numerically, graphically and symbolically. Note, a graphing calculator is required for this course (instruction will be based on a TI 83-+). (GECC M1 900-B) (FA, SP, SU)

MATH 162
Calculus II 4 HRS
Prerequisite: MATH 161 with a grade of “C” or higher, or equivalent. A second course in calculus. Topics include area, volume and other applications of the integral, calculus of trigonometric, logarithmic and exponential functions, techniques of integration including numerical methods, indeterminate forms: L’Hospital’s rule, improper integrals, sequences and series, Taylor series, convergence tests, polar coordinates and parametric forms. Topics are presented numerically, graphically and symbolically. Note, a graphing calculator is required for this course (instruction will be based on a TI 89) (GECC M1 900-2, IAI Majors Codes EGE 902, MTH 902) (FA, SP, SU)

MATH 163
Calculus III 4 HRS
Prerequisite: MATH 162 with a grade “C” or higher, or equivalent. The third semester of the calculus sequence, focusing on multi-variable functions. Topics include differentiation and integration of functions with multiple variables, partial derivatives, the differential, directional derivatives, gradients, two- and three-dimensional motion, vector fields and line integrals. Concepts are examined in three representations: numerically, graphically and symbolically. Note, a graphing calculator is required for this course (instruction will be based on a TI 89). (GECC M1 900-3, IAI Majors Codes EGR 903, MTH 903) (FA)

MATH 271
Linear Algebra 4 HRS
Prerequisite: MATH 162 with a grade of “C” or higher, or equivalent. This is an introductory course in linear algebra. Topics include vectors & matrices, vector spaces & subspaces, linear independence & dependence, transformations, basis & dimension, determinants and orthogonality. (IAI Major Code MTH 911) (SP)

MATH 272
Differential Equations 4 HRS
Prerequisite: MATH 163 with a grade of “C” or higher, or equivalent. This is an introductory course in differential equations. Topics include first order linear equations with constant coefficients, undetermined coefficients, exact equations, separation of variables, solution by Laplace transforms and partial differential equations. (IAI Majors Codes EGR 904, MTH 912) (SP)

MATH 297
Independent Study in Mathematics 1-3 HRS
Prerequisite: ENGL 101 and MATH 109 or equivalent, or assessment, and permission of the instructor. Intensive work in an area of mathematics of special interest to the student. Each individual project is to culminate in a comprehensive written report.

MANUFACTURING TECHNOLOGY

MFTG 101
Principles of Dimensional Metrology 2 HRS
The course is designed to develop dimensional measurement understanding and ability. The correlation between industrial process and skilled workers or technicians using the communication aspects of measurement will be discussed. Topics include the traditional concepts of mechanical contact measurement, the principles of standards, comparison measurement, piece-part features, calibration of instruments and non-traditional techniques of non-contact measurement. Metric measurement and related practice will be emphasized.

MFTG 110
Manufacturing Processes I 3 HRS
The course is designed to help students develop an understanding of the basic materials and processes used in manufacturing. Topics include engineering materials, traditional and nontraditional machining processes, flexible & computer-integrated manufacturing. (FA, SP)

MFTG 120
Computer Numerically Controlled Manufacturing 4 HRS
Prerequisite: MFTG 110. This course provides an introduction to numerical control (NC) and computer numerical control (CNC) and the programming of CNC machines. Emphasis is placed on the fundamentals of NC/CNC lathe and mill operations and good programming practices. (IAI Majors Codes MTM 915,933) (SP)
MFTG 205
**Statics & Strength of Materials**  3 HRS
Prerequisite: PHYS 161 or TPHY 103. The course serves as an introduction to the strength of materials, methods of determining the stresses and deflections of basic load-carrying members. The laboratory is designed to supplement the classroom presentation and give the student a clearer understanding of the response of components and structures to external loads. The concept of principle stress is emphasized.

MFTG 215
**Statistics and Quality Control**  3 HRS
This course focuses on the fundamentals basic to the control and improvement of quality materials, products and processes, services and systems. The principles of industrial statistics are applied to the analysis of data, control of product and process and the evaluation of human resources, materials, equipment and systems in meeting design specifications for products or services during production end use. (IAI Major Code MTM 914)

MFTG 216
**Statistical Process Control**  2 HRS
The course focuses on the fundamentals basic to the control and improvement of quality materials, products, processes, services and systems. The principles of industrial statistics are applied to the analysis of data, control of product and process. Course will cover collection of data, calculation of basic parameters and the creation, interpretation and application of control charts.

MFTG 220
**Materials Science**  3 HRS
The course is a study of the basic chemical and physical principles determining the nature, behavior and treatments of materials for modification of structure and mechanical properties. Application of laboratory methods occurs in relation to the examination, treatment and evaluation of metals & alloys. (IAI Major Code MTM 912)

MFTG 230
**Integrated Manufacturing Systems**  3 HRS
The course acquaints the student with the concepts of integrated manufacturing systems, emphasizing the impact of computer technology in improving traditional manufacturing systems. Topics discussed reflect the challenges of implementing computer-integrated systems; the benefits and costs of planning and implementing automated manufacturing systems; and the changes in managerial style needed to effectively implement the integration of emerging computer technologies.

**MILITARY SCIENCE**

MSC 101
**Introduction to Military Science**  1 HR
An introduction to the organization, mission and functions of the Army. Covers the basic problem solving and time management techniques necessary for basic military operations. Also examines the service components and describes how each is important in accomplishing the Army mission.

MSC 102
**Introduction to Leadership & Tactics**  1 HR
An introduction to military leadership and basic military skills. Students examine common leadership traits and techniques necessary to accomplish military objectives. Military skills such as map reading and field hygiene are also presented.

MSC 111
**Applied Leadership II**  2 HRS
Gives students comprehensive knowledge of all aspects of military land navigation. Covers the grid reference system & how to use it to determine the precise coordinates of any known point. Examines techniques useful for successfully navigating from one known point to the next.

MSC 112
**Introduction to Military Leadership**  2 HRS
Introduction to principles, responsibilities, techniques of military leadership and problems of leadership in the military environment. Students will learn the basic principles of leadership, counseling and management skills. Students are introduced to the role and responsibilities of the Army Noncommissioned Officer (NCO). The effective application of communication skills in solving problems & accomplishing various missions is also included.

**MATERIALS AND LOGISTICS MANAGEMENT**

MTRL 101
**Basics of Supply Chain Management**  3 HRS
Students explore the basic concepts in managing the flow of materials in a supply chain. In the basics course students will get a complete overview of material flow, from internal and external suppliers, to and from an organization.

MTRL 210
**Master Planning of Resources**  3 HRS
Prerequisite: MTRL 101. Students will explore processes used to develop sales and operations plans and identify and assess internal and external demand and forecasting requirements. The course focuses on the importance of producing achievable master schedules that are consistent with business policies, objectives and resource constraints.

MTRL 220
**Detailed Scheduling & Planning**  3 HRS
Prerequisite: MTRL 101. Students focus on the various techniques for material and capacity scheduling. The course includes detailed descriptions of material requirements planning (MRP), capacity requirements planning (CRP), inventory management practices and procurement and supplier planning.
Course Descriptions

MTRL 230
Execution & Control of Operations  3 HRS
Prerequisite: MTRL 101. Students focus on the areas of prioritizing and sequencing work, executing work plans and implementing controls, reporting activity results and providing feedback on performance. The course explains techniques for scheduling and controlling production processes, the execution of quality initiatives and continuous improvement plans and the control and handling of inventories.

MTRL 240
Strategic Management & Resources  3 HRS
Prerequisite: MTRL 101. Candidates explore the relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain-related functions. The course addresses three main topics: aligning resources with the strategic plan, configuring and integrating operation processes to support the strategic plan & implementing change.

MACHINE TOOL TECHNOLOGY

MTT 101
Machine Tool I  4 HRS
This course introduces the student to precision measuring tools, hand tools and their uses for machining and layout. The student will perform basic machining tasks which includes the use of drilling machines, bandsaw and engine lathes. (IAI Major Code MTM 921)

MTT 110
Toolmaking I  3 HRS
Prerequisite: completion of or concurrent enrollment in MTT 101. An introduction to the fundamentals of tool design and toolmaking. The student will review designs of basic jigs, gages and fixtures for specific machining applications. Design and fabrication of various tooling will be required. Dimensional accuracy and machining efficiency will be emphasized. (IAI Major Code MTM 923)

MTT 150
Ferrous Metallurgy  3 HRS
A comprehensive study of refining properties, mechanical properties and physical properties of ferrous materials, including the theory of alloys, heat treatment and testing.

MTT 201
Machine Tool II  3 HRS
Prerequisite: MTT 101. An introduction to common types of milling machines, surface grinders and their accessories. The course acquaints the student with the basic machine parts, procedures of set-up and operations of machining for general tool room usage.

MTT 210
Toolmaking II  3 HRS
Prerequisite: MTT 110. A comprehensive study of mass production tooling such as punch press dies, roll formers and injection molds. Emphasis will be placed on die construction and repair/maintenance of production tools. The students will be required to develop and implement a new build or repair procedure for a given die or mold. Dimensional accuracy and machining efficiency will be evaluated.

MUSIC

MUSI 104
Group Instruction-
Basic Guitar  2 HRS
An introduction to playing the acoustic guitar, with practice in simple chords and melodies. Previous experience in music and in playing guitar are not required. Students need to furnish their own guitar. (SP)

MUSI 105
Class Piano I  2 HRS
An introduction to reading and performing keyboard music along with the fundamentals of music theory. Particular focus is on learning and performing musical scales, chords and short piano pieces. Some goals of this course are to stimulate interest in performing music, to provide information about music fundamentals and ultimately to enhance each student’s appreciation for music. (FA, SP, SU)

MUSI 106
Class Voice I  2 HRS
An introduction to reading and performing vocal music with the fundamentals of music theory. Particular focus is on learning and performing musical scales, exercises and short songs. Some of the goals of this course are to stimulate interest in performing music, to provide information about music fundamentals and ultimately to enhance each student’s appreciation for music.

MUSI 110
Music Theory, Keyboard, and Aural Skills  4 HRS
A beginning course in music theory includes introductory materials in harmony, form, analysis and compositional methods. This is the first in a four-semester sequence of courses in music theory for those intending to major in music. The music theory component includes introductory materials in diatonic and chromatic harmony, form, analysis and compositional methods. The keyboard component involves the performance of major and minor scales and harmonization of simple melodies. Aural skills covered in this course include the sequential development of ear training, sight singing and dictation. (IAI Major Code MUS 903)

MUSI 111
Music Theory, Keyboard, and Aural Skills II  4 HRS
A course in music theory including introductory materials in harmony, form, analysis and compositional methods. This is the second in a four-semester sequence of courses in music theory for those intending to major in music. The music theory component includes introductory materials in diatonic and chromatic harmony, form, analysis and compositional methods. The keyboard component involves the performance of major and minor scales and harmonization of simple melodies. Aural skills covered in this course include the sequential development of ear training, sight singing and dictation. (IAI Major Code MUS 904)
MUSI 120
Choir 1 HR
Repertoire of choral works from the Renaissance to the present, with an emphasis on the students’ vocal development and improved musicianship. No audition required. (IAI Major Code MUS 908) (SP)

MUSI 145
Jazz Ensemble 1 HR
Rehearsal & performance in jazz ensemble.

MUSI 150
Music Appreciation 3 HRS
An introduction to music appreciation and theory for students who do not intend to major in music. This course is designed to provide familiarity with the elements of music and with various musical forms and stylistic periods so the students can actively and perpectively listen to a wide variety of music. The ability to read music is not required for enrollment in MUSI 150. (GECC F1 900) (FA, SP, SU)

MUSI 155
Introduction to Opera 3 HRS
An introductory course in opera, from its earliest inception in the Baroque era to the twentieth century. The major operas experienced in the course through video and recorded performance are related to their own time and culture and the student is made familiar with the myths, legends and stories that gave rise to opera’s plots, characters and dramatic actions. The ability to read music is not required for enrollment in the course.

MUSI 160
Non-Western Music 3 HRS
A survey of representative music of selected cultures of the non-Western world, with an emphasis on understanding music in cultural and social contexts.

MUSI 170
Music History & Literature I: Antiquity to the 18th Century 4 HRS
Prerequisite: ENGL 101. This course focuses on music as an art in Western civilization from Antiquity to 1750, emphasizing the study of representative musical works and styles of major periods of music history: Antiquity, the Middle Ages, the Renaissance and the Baroque era. Particular attention is given to understanding musical works, aesthetics and concepts in their historical, social and cultural contexts. (IAI Major Code MUS 905)

MUSI 171
Music History and Literature II: The Classical Era to the Present 4 HRS
Prerequisite: ENGL 101. This course focuses on music as an art in Western civilization from 1750 to the present time, emphasizing the study of representative musical works and styles of major periods of music history. Particular attention is given to understanding musical works, aesthetics and concepts in their historical, social and cultural contexts. (IAI Major Code MUS 905)

MUSI 176
Applied Music Instruction for Non-majors 1-2 HRS
Individual music instruction for students on a particular instrument or voice, for 30 or 60 minutes a week. MUSI 176 is for students who do not intend to major in music. The courses will be appropriate for the skill of the student. The courses are designed to stimulate interest in the respective instrument, in performing music, in learning and applying music fundamentals and in understanding the aesthetical qualities of music. Graduation credit for non-major applied music lessons is limited to four hours.

MUSI 196
Applied Music Instruction for Non-majors 1-2 HRS
Prerequisite: Completion of MUSI 196 with a grade of “C” or higher. A course in music performance for students who do not intend to major in music. Individual instruction for students on a particular instrument or voice, for 30 or 60 minutes a week. MUSI 196 is for students who do not intend to major in music. The courses will be appropriate for the skill of the student. The courses are designed to stimulate interest in the respective instrument, in performing music, in learning and applying music fundamentals and in understanding the aesthetical qualities of music. Graduation credit for non-major applied music lessons is limited to four hours.

MUSI 197
Applied Music Instruction for Non-majors 1-2 HRS
Prerequisite: Completion of MUSI 197 with a grade of “C” or higher. A course in music performance for students who do not intend to major in music. Individual instruction for students on a particular instrument or voice, for 30 or 60 minutes a week. MUSI 197 is for students who do not intend to major in music. The courses will be appropriate for the skill of the student. The courses are designed to stimulate interest in the respective instrument, in performing music, in learning and applying music fundamentals and in understanding the aesthetical qualities of music. Graduation credit for non-major applied music lessons is limited to four hours.

MUSI 198
Applied Music Instruction for Non-majors 1-2 HRS
Prerequisite: Completion of MUSI 198 with a grade of “C” or higher. A course in music performance for students who do not intend to major in music. Individual instruction for students on a particular instrument or voice, for 30 or 60 minutes a week. MUSI 198 is for students who do not intend to major in music. The courses will be appropriate for the skill of the student. The courses are designed to stimulate interest in the respective instrument, in performing music, in learning and applying music fundamentals and in understanding the aesthetical qualities of music. Graduation credit for non-major applied music lessons is limited to four hours.

MUSI 199
Applied Music Instruction for Non-majors 1-2 HRS
Prerequisite: Completion of MUSI 199 with a grade of “C” or higher. A course in music performance for students who do not intend to major in music. Individual instruction for students on a particular instrument or voice, for 30 or 60 minutes a week. MUSI 199 is for students who do not intend to major in music. The courses will be appropriate for the skill of the student. The courses are designed to stimulate interest in the respective instrument, in performing music, in learning and applying music fundamentals and in understanding the aesthetical qualities of music. Graduation credit for non-major applied music lessons is limited to four hours.
Course Descriptions

MUSI 200
Applied Music Instruction for Majors  2 HRS
Prerequisite: Consent of the instructor or the division chair. Individual instruction in voice or a particular instrument for 60 minutes a week. The lessons will be appropriate for the skill of the student. MUSI 200 lessons are designed for students who intend to major in music in a bachelor’s degree program. The lessons will incorporate representative solo and study materials for the respective instrument and will guide the student in acquiring a basic knowledge of the care and use of the instrument, knowledge and interpretation of the appropriate literature for the instrument and performance skills, including both preparation & opportunities for public performance. Both attendance and performance at student recitals are required. Performance evaluation is juried. Graduation credit for applied lessons for music majors is limited to eight hours. (SP)

MUSI 201
Applied Music Instruction for Majors  2 HRS
Prerequisite: Completion of MUSI 200 with a grade of “C” or higher. Individual instruction in voice or a particular instrument for 60 minutes a week. The lessons will be appropriate for the skill of the student. MUSI 201 lessons are designed for students who intend to major in music in a bachelor’s degree program. The lessons will incorporate representative solo and study materials for the respective instrument and will guide the student in acquiring a basic knowledge of the care and use of the instrument, knowledge and interpretation of the appropriate literature for the instrument and performance skills, including both preparation & opportunities for public performance. Both attendance and performance at student recitals are required. Performance evaluation is juried. Graduation credit for applied lessons for music majors is limited to eight hours.

MUSI 202
Applied Music Instruction for Majors  2 HRS
Prerequisite: Completion of MUSI 201 with a grade of “C” or higher. Individual instruction in voice or a particular instrument for 60 minutes a week. The lessons will be appropriate for the skill of the student. MUSI 202 lessons are designed for students who intend to major in music in a bachelor’s degree program. The lessons will incorporate representative solo & study materials for the respective instrument and will guide the student in acquiring a basic knowledge of the care and use of the instrument, knowledge and interpretation of the appropriate literature for the instrument & performance skills, including both preparation & opportunities for public performance. Both attendance & performance at student recitals are required. Performance evaluation is juried. Graduation credit for applied lessons for music majors is limited to eight hours.

MUSI 203
Applied Music Instruction for Majors  2 HRS
Prerequisite: Completion of MUSI 202 with a grade of “C” or higher. Individual instruction in voice or a particular instrument for 60 minutes a week. The lessons will be appropriate for the skill of the student. MUSI 203 lessons are designed for students who intend to major in music in a bachelor’s degree program. The lessons will incorporate representative solo and study materials for the respective instrument and will guide the student in acquiring a basic knowledge of the care and use of the instrument, knowledge and interpretation of the appropriate literature for the instrument and performance skills, including both preparation & opportunities for public performance. Both attendance and performance at student recitals are required. Performance evaluation is juried. Graduation credit for applied lessons for music majors is limited to eight hours.

MUSI 260
Jazz, Blues and Rock ‘n’ Roll  3 HRS
An exploratory history of various types and styles of African-American music in the United States & the Caribbean which manifested themselves in the forms of blues, jazz, rock ‘n’ roll and other related musical types. (GECC F1 905D) (FA, SP, SU)

MUSI 296
Special Topics in Music  1-3 HRS
Prerequisite: Some topics will require ENGL 101 with a “C” or better. This is an advanced course in music, with variable content that is focused on research, theory and application in a particular area of music (such as critical theory and the study of music, theory and practice of the blues, film music, etc.). Readings will center on current developments in the study of music and may have an interdisciplinary, social, scientific, ethnographic and/or critical perspective. Because topics and research studied will change each semester, MUSI 296 may be repeated for a total of six credits toward graduation.

COMPUTER NETWORKING

NETW 121
Cisco Network Academy I  3 HRS
Prerequisite: NETW 150 or concurrent enrollment. This is the first of four courses in the Cisco Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction includes, but is not limited to: safety, networking, network terminology and protocols, network standards, LANs, WANs, OSI models, cabling, cabling tools, routers, router programming, topologies & IP addressing. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication and social studies concepts to solve networking problems. In addition, instruction and training are provided in the proper care, maintenance and use of networking software, tools and equipment and local, state and federal safety, building and environmental codes and regulations. (FA, SP)
Cisco
Network Academy II 3 HRS
Prerequisite: NETW 121. This is the second of four courses in the Cisco Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction includes, but is not limited to, network terminology and protocols, network standards organizations and specifications, LANs, WANs, OSI models, Ethernet, Token Ring, Fiber Distributed Data Interface, TCP/IP Addressing Protocol, dynamic routing, routing and the network administrator’s role and function. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication and social studies concepts to solve networking problems. In addition, instruction and training are provided in the proper care, maintenance and use of networking software, tools & equipment and local, state and federal safety, building & environmental codes and regulations. (FA, SP)

NETW 123
Cisco
Network Academy III 3 HRS
Prerequisite: NETW 122. This is the third of four courses in the Cisco Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction includes, but is not limited to, Novell IPX protocol configuration on routers, Fast Ethernet, LAN switching methods, LAN segmentation with bridges, routers and switches. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication and social studies concepts to solve networking problems. In addition, instruction and training are provided in the operation and benefits of Spanning Tree protocol and virtual LANs. (FA, SP)

NETW 124
Cisco
Network Academy IV 3 HRS
Prerequisite: NETW 123. This is the last of four courses in the Cisco Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction includes, but is not limited to: WAN services, LAPB, frame relay terms and features, integrated services digital network, router commands to monitor and configure frame relay LMs, maps and subinterfaces, Novell IPX protocol configuration on routers, Fast Ethernet, LAN switching methods, LAN segmentation with bridges, routers and switches. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication and social studies concepts to solve networking problems. (FA, SP)

NETW 150
Workstation Operating Systems 3 HRS
Prerequisite: CSCI 101. This course presents the features of a workstation operating system and takes a detailed look at command line based and graphical user interface based microcomputer operating systems. The class will be taught using Windows 98, Windows 2000, Windows XP and DOS in a Windows format. Includes discussion concerning network operating systems and functional criteria for operating system design, job management, task management, data management, resource allocation and dump and trace facilities. (FA, SP, SU)

NETW 151
PC Hardware Maintenance & Repair 3 HRS
Prerequisite: CSCI 101. This course covers the common microcomputer hardware maintenance functions. This course is not intended to train experienced technicians but rather to assist the common microcomputer user concerning basic maintenance functions and to determine when to call an expert technician for help. This course also covers basic installation procedures for commercial microcomputer software. (FA, SP)

NETW 160
Introduction to Networking 3 HRS
Prerequisite: NETW 150. This course is an introduction to hardware and software used in data communication and networking. Topics include network types, architecture and protocols, layers in the OSI and SNA models, local area networks and inter-networking. This course provides a knowledge base of networking concepts and terminology in preparation for more advanced study of networks. Practical experience with networks is part of the course. (FA, SP)

NETW 162
Networking Technologies 4 HRS
Prerequisite: NETW 150 with a grade of “C” or better. This course provides students with a comprehensive overview of the TCP/IP protocol stack including its history, development, current applications and future implications. This will include the presentation of both the TCP/IP model of networking and the OSI reference model. It also helps students as a beginning technical course for more advanced networking courses. Topics are basic TCP/IP functionality and how it relates to the OSI reference model, related LAN and WAN protocols, TCP/IP network addressing, security, routing, monitoring and managing IP networks. (FA, SP)

NETW 163
Netware Administration 3 HRS
Prerequisite: NETW 162 or equivalent. This course prepares students to manage a Novell NetWare network. Students perform a variety of tasks typically required of a system administrator, such as installing the NetWare Network Operating System and client software, creating and modifying user accounts, setting up and maintaining the file system, configuring print services, ensuring system security and automating users’ environments. Information in this course prepares students to take the Certified Novell Administrator exam.

NETW 164
Advanced Netware Administration 3 HRS
Prerequisite: NETW 163 or equivalent. This course will provide students with advanced administration skills for use in a Novell NetWare network environment. Students will learn how to manage and optimize network servers for better performance, manage the Novell Directory Services (NDS) database, install and backup Netware operating system, build a TCP/IP network and security.
NETW 166
Windows Workstation Administration 3 HRS
Prerequisite: NETW 162 or equivalent. This course prepares students to setup and support the Microsoft Windows workstation operating system. It also helps prepare students for the Microsoft Certified Professional examination. (FA, SP)

NETW 167
Windows Server Administration 3 HRS
Prerequisite: NETW 166 with a grade of “C” or better. This course prepares students to install and configure Microsoft Windows Server. Various file systems and disk management functions, administering the operating system, network protocols and remote access are included. It also helps prepare students for the Microsoft Certified Professional examination. (FA, SP)

NETW 168
Managing a Windows Network Environment 3 HRS
Prerequisite: Completion of NETW 167 with a grade of “C” or better. The goal of this course is to provide the knowledge required by System Administrators, Network Administrators and IT professionals who implement, manage and troubleshoot existing network and server environments based on the Microsoft Windows® platform. These skills are generally required in medium to large size organizations that maintain user desktops and servers, spanning multiple physical locations via Large Area Networks (LANs) and the Internet or Intranets. This course will help prepare for the MCSA/MCSE certification exam, “Implementing and Maintaining a Microsoft Windows Server 2003 Network Infrastructure”. (FA, SP)

NETW 170
Network Security Fundamentals 3 HRS
Prerequisite: NETW 124 or NETW 167 with a grade of “C” or better. The goal of this course is to provide a comprehensive overview of the network security for system administrators, network administrators and IT professionals who implement, manage and troubleshoot existing network and server environments. These skills cover an understanding of general security concepts, communication security, infrastructure security, cryptography and operational & organizational security. This course will help prepare for the CompTIA's Security+ certification exam. (FA, SP)

NETW 172
Wireless Networking with Security 3 HRS
Prerequisite: NETW 122. This course is designed to introduce students to the topics pertaining to the Cisco Wireless LAN Support Specialist certification. The course will introduce and extend the students’ knowledge of, and practical experience with, wireless networks. The concepts covered in this course will help individuals develop practical experience in skills related to designing, planning and implementing wireless networks. Also covered in this course will be in-depth discussions of the continued operation and troubleshooting of wireless networking security.

NETW 181
UNIX Fundamentals 3 HRS
Prerequisite: NETW 162. Fundamental command-line features of the UNIX environment including file system navigation, file permissions, the vi text editor, command shells and basic network use.

NETW 182
Linux Administration 3 HRS
Prerequisite: NETW 150 with a grade of “C” or better. The goal of this course is to provide the knowledge and skills necessary for system administrators, network administrators and IT professionals who install, configure, manage and support Linux networks. This course helps prepare for the Linux + Certification Exam. (FA, SP)

NETW 183
Linux Security 3 HRS
Prerequisite: NETW 182 with a grade of “C” or better. The goal of this course is to provide the knowledge and skills necessary for managing and implementing Linux networking and security. The course introduces networking technologies and protocols, then moves into configuring a Linux network using a variety of command line and graphical utilities. Specific protocols and applications are covered, including the r-utilities, NFS, Samba and FTP, plus business-critical services such as e-mail, Web and DNS. Also included is a discussion of security in the context of protecting business assets and user privacy, with emphasis on system administrator ethics. Cryptography and encrypted protocols lay a foundation for discussion of specific Linux security tools, including PAM, sudo and GPG. User, file and network security are covered. The network security discussion includes firewalls, VPNs and utilities such as nmap, ethereal and the SAINT profiling tool.

NETW 208
Data & Cabling Systems 3 HRS
Data and Cabling Systems is the study of operation, characteristics and applications of data cabling. Students will study safety, troubleshooting and installation of various data cabling systems. The student will be introduced to current cabling methods and emerging cabling technologies. (FA, SP)

NETW 221
Cisco Network Academy V 3 HRS
Prerequisite: NETW 124 or active CCNA Certificate. This is the first of four advanced courses in the CISCO Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction focuses on advanced routing and using Cisco routers connected in local area networks (LANs) and wide area networks (WANs) typically found at medium to large network sites.
NETW 222
Cisco
Network Academy VI 3 HRS
Prerequisite: NETW 124, or NETW 221, or active CCNA Certificate. This is the second of four advanced courses in the Cisco Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction focuses on remote access and using Cisco routers connected in LANs and WANs typically found at medium to large network sites.

NETW 223
Cisco
Network Academy VII 3 HRS
Prerequisite: One of the following: NETW 124, NETW 221, NETW 222, or active CCNA Certificate. This is the third of four advanced courses in the CISCO Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. Instruction focuses on advanced switching and using Cisco switches connected in campus networks and WANs typically found at medium to large network sites.

NETW 224
Cisco
Network Academy VIII 3 HRS
Prerequisite: NETW 221, 222, and 223 with a grade of "C" or better. This is the fourth of four advanced courses in the CISCO Networking Academies designed to provide students with classroom and laboratory experience in current and emerging networking technology. This course looks at the methodology of breaking down the process of troubleshooting into manageable pieces. Troubleshooting is arguably the process that takes the greatest percentage of a network engineer’s time. This course will cover troubleshooting procedures for TCP/IP, VLANs, frame relay, ISDN and various networking devices such as routers and switches.

NETW 261
Windows Network Infrastructure 3 HRS
Prerequisite: NETW 167 with a grade of “C” or better. The goal of this course is to provide the knowledge required by System Administrators, Network Administrators and IT professionals who install, configure, manage and support a network infrastructure that uses the Windows® server products. This course helps prepare for the MCSE Exam, Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure. (SP)

NETW 262
Windows Directory Services 3 HRS
Prerequisite: NETW 167 with a grade of “C” or better. The goal of this course is to provide the knowledge and skills necessary for System Administrators, Network Administrators and IT professionals who install, configure, manage and support network directory services. This course helps prepare for the MCSE Exam, Planning, Implementing and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure.

NETW 263
Windows Security 3 HRS
Prerequisite: NETW 170 and NETW 167 with a grade of “C” or better. This course focuses on implementing and administering network security in a Windows Server 2003 environment. This course helps prepare for the MCSE Exam 70-299 Implementing and Administering Security in a Microsoft Windows Server 2003 Network.

NETW 271
Cisco Router Security 3 HRS
Prerequisite: NETW 122. This is the first of five advanced courses in the CISCO Networking Academies designed to provide students with classroom and laboratory experience in securing Cisco IOS Routers and the networks they are connected to. Instruction focuses on network security essentials, attack threats and basic router management. Secure router administration, authentication, configuring RADIUS and TACACS+ servers, access lists and context-based access control along with Intrusion detection and VPN configuration and management will also be covered.

NETW 272
Configuring Cisco PIX Boxes 3 HRS
Prerequisite: NETW 172. This is the second of five advanced courses in the CISCO Networking Academies designed to provide students with classroom and laboratory experience in configuring Cisco PIX boxes and the networks they are connected to. Instruction focuses on network security essentials, attack threats and basic PIX Box management. Routing and Multicast, DHCP, PIX translations and connections, PIX box access lists will be covered. Configuring RADIUS and TACACS+ servers, advanced protocols and intrusion detection, PIX failover and system maintenance, along with VPN configuration and management will also be covered.

NETW 296
Special Topics in Networking 1-4 HRS
Prerequisite: As set by faculty. Course will offer students an opportunity to study a topic which is (1) unique and infrequently offered as a part of their program curriculum or (2) of special interest to industry. Each student wishing to enroll in Special Topics in Networking will be reviewed based on (1) previous experience, (2) courses completed and (3) an aptitude/ability match with selected topic.
Course Descriptions

NURSING

NURS 110
Nursing Assistant 8 HRS
Prerequisite: Satisfactory score on HCC’s Reading Placement Exam; authorization for criminal background check (required by Illinois law); physical exam, including TB test (required by Illinois law); uniform purchase. The course prepares individuals to function as nursing assistants in nursing homes, hospitals and private homes. Basic nursing knowledge and skills required to care for individuals in a manner that respects their dignity. The course contains a variety of skills which require fine-motor coordination. Students must also be physically able to lift and transfer patients safely and correctly. NURS 110 meets federal and state guidelines for nursing assistant training and students who successfully complete this course will be eligible to take the competency evaluation required for nursing assistants. The 8-week course format meets 11 hours for 8 hours credit. (Lec 5 Lab 3) (FA, SP)

NURS 112
Introduction to Nursing 1 HR
Prerequisite: Acceptance into the nursing program. This course focuses on the development of the individual as a nursing student and the conceptual and theoretical aspects of nursing practice and health care using Orem’s self-care model. The student will explore the evolution of professional nursing and the foundation of the science and art of nursing. A basic understanding of moral problems and a variety of resolutions, as well as gaining insight to health care delivery issues, understanding the legal parameters of nursing care and exploring the influences of nursing politics will be developed. (SU, FA)

NURS 113
Medication Principles for Nurses 1 HR
Prerequisite: Enrollment in the nursing program or department approval. This course is designed to provide nursing students with a systematic review of medications and various methods of calculating dosages. Students will develop an understanding of basic pharmacology principles and calculation methods to safely administer medications. Topics include basic pharmacology, systems of measurement to safely calculate dosages and basic medication administration principles. Critical thinking applied to safe administration of medications will be emphasized throughout the course. This course does not fulfill the general education mathematics requirement(s) for either the A.A. degree or the A.S. degree. (FA)

NURS 114
Fundamentals of Nursing I for CNA’s 2 HRS
Prerequisite: Acceptance into the nursing program and concurrent enrollment in, or prior completion of, BIOL 181, NURS 112, NURS 113, and PSY 101. This is an introductory course in nursing, focusing on scientific principles, communication skills, cultural concepts related to self-care and basic teaching/learning modalities. Orem’s self-care model will be utilized by the student to begin to develop critical thinking pathways. Students cannot receive credit for both NURS 114 and NURS 115. (Lec 2 Lab 2) (FA)

NURS 115
Fundamentals of Nursing I 4 HRS
Prerequisite: Acceptance into the nursing program and concurrent enrollment in, or prior successful completion of, BIOL 181, NURS 112, NURS 113, and PSY 101. This is an introductory course in nursing focusing on scientific principles, communication skills, cultural concepts related to self-care and basic teaching/learning modalities. Orem’s self-care model will be utilized by the student to begin to develop critical thinking pathways. Basic clinical skills necessary for implementing Orem’s self-care model will be evaluated in the campus laboratory to provide opportunities for the student to develop dexterity & a degree of proficiency in performing nursing procedures. Through planned, faculty-supervised experiences in the long-term care facilities, the student is given the opportunity to provide nursing care to the adult client. This is an 8-week course which meets 12 hours for 4 hours credit. (Lec 2 Lab 2) (FA)

NURS 116
Fundamentals of Nursing II 4 HRS
Prerequisite: NURS 114 or 115; concurrent enrollment in, or prior successful completion of, BIOL 181, NURS 112, NURS 113, and PSY 101. This course in nursing fundamentals builds upon expanded knowledge and skills acquired in Fundamentals of Nursing I. Orem’s self-care model will be utilized by the student to develop and begin using critical thinking pathways. Scientific principles and clinical skills increase in complexity. Campus laboratory experience focuses on continued development of dexterity and proficiency of psychomotor skills. Planned faculty-supervised experiences in the clinical area provide students with the opportunity to implement their knowledge and skill in the provision of direct client care. This is an 8-week course which meets 12 hours for 4 hours credit. (Lec 2 Lab 2) (FA)

NURS 122
Community-Based Nursing 1 HR
Prerequisite: Concurrent enrollment in, or completion of, NURS 112. This course introduces the student to the practice of community health nursing using Orem’s self-care model. The focus is on foundational knowledge required to practice in community settings, including communication, teaching and learning, health promotion and disease prevention. Quality management and use of power, politics and public policy will be explored in creating and maintaining new health care delivery systems in the community. (SP, SU)

NURS 134
Nursing Individuals with Chronic Illness 5 HRS
Prerequisite: NURS 112, NURS 113, NURS 116, NURS 122 and PSY 101 and concurrent enrollment in, or successful completion of, BIOL 182 and ENGL 101. The focus of this course is on the nursing care of clients with the most commonly experienced alterations of perfusion, oxygenation, nutrition, elimination, regulatory processes and integumentary problems. Orem’s self-care model will be utilized by the student to apply critical thinking pathways to the individual with chronic health problems. Clinical skills, based on scientific principles, increase in
complexity. Campus laboratory experience focuses on continued development of dexterity and proficiency of psychomotor skills. Planned faculty-supervised experiences in the clinical area will afford students the opportunity to implement their accrued knowledge and skill in providing nursing care. This is an 8-week course which meets 15 hours for 5 hours credit. (Lec 2.5 Lab 2.5) (SP)

NURS 135
Nursing Childbearing/Rearing Families 5 HRS
Prerequisite: NURS 134 and PSY 101 and concurrent enrollment in, or successful completion of, BIOL 182, ENGL 101, and NURS 122. This course of obstetrical and pediatric nursing focuses on the family utilizing Orem’s self-care model. A beginning application of critical thinking pathways will be developed in this specialized content area. The campus laboratory experiences focus on the assessment of the pregnant individual, the newborn and application of growth and development principles. Planned faculty-supervised experiences in the clinical area, as well as the community, provide students with the opportunity to implement their knowledge and skills. This is an 8-week course which meets 15 hours for 5 hours credit. (Lec 2.5 Lab 2.5) (SP)

NURS 136
Practical Nursing 6 HRS
Prerequisite: NURS 122, NURS 135, BIOL 182, ENGL 101 and PSY 101. The focus of this course is the provision of nursing care to adult clients with acute and chronic health problems of the most commonly experienced alterations in sexuality, immunologic responses, mobility, sensori-neural processes and mental health. Orem’s self-care model will be used as a foundation for nursing practice. Students are provided a faculty-supervised opportunity to utilize the nursing process, nursing skills and theoretical knowledge in an acute care setting. The standards of practical nursing as set forth by the state of Illinois are presented. After successful completion of NURS 136, the student will be able to proceed to NCLEX-PN examination. This is an 8-week course which meets 18 hours for 6 hours credit. (Lec 3 Lab 3) (SU)

NURS 165
IV Therapy for LPN’s 2 HRS
Prerequisite: State of Illinois Licensed Practical Nurse. The course is designed to provide LPNs with the knowledge and skills necessary to safely administer intravenous therapy under the direction of a registered nurse, physician or dentist. Content to be covered includes basic anatomy and physiology, use of equipment, the processes of venipuncture, maintenance and discontinuance of intravenous flow, as well as the legal aspects of intravenous therapy. The course includes faculty-supervised laboratory application of selected skills in an acute care setting. This course meets 2.5 hours for 2 hours credit. (Lec 1.5 Lab .5)

NURS 232
Leadership & Management in Nursing 1 HR
Prerequisite: NURS 122, NURS 135, BIOL 182, ENGL 101 and PSY 101; concurrent enrollment in, or successful completion of, NURS 240, NURS 241, BIOL 191 and ENGL 102. The need for awareness of economic, political and regulatory forces that impact the delivery of care will be considered in light of the nursing role in the management of care. Students will examine systems and mechanisms of case management, effective delegation, teamwork strategies and evaluation of allied personnel. They will explore change theory as a means to develop personal strategies to facilitate and support changes in health care delivery that will result in quality outcomes for clients. (FA)

NURS 240
Mental Health Nursing 4 HRS
Prerequisite: NURS 122, NURS 135, BIOL 182, ENGL 101 and PSY 101; concurrent enrollment in, or successful completion of, NURS 232, BIOL 191 and ENGL 102. The focus of this course is provision of nursing care to children and adults with alterations in mental health. Orem’s self-care model will be used to apply critical thinking pathways to the individual with acute and chronic mental health problems. Case studies and audiovisuals will be used in the campus laboratory to enhance student learning. Planned faculty-supervised clinical experiences in a variety of community settings in addition to observational experiences will provide students with the opportunity to implement their accrued knowledge and skills with individuals of varying problems and age groups. This is an 8-week course which meets 12 hours for 4 hours credit. (Lec 2 Lab 2) (FA)

NURS 241
Nursing Care of Individuals with Acute Health Problems I 4 HRS
Prerequisite: NURS 122, NURS 240, BIOL 182, ENGL 101 and PSY 101; concurrent enrollment in, or successful completion of, NURS 232, BIOL 191 and ENGL 102. This course in medical-surgical nursing focuses on clients with alterations in mobility, regulatory processes, sensori-neural processes and sensory deprivation. Orem’s self-care model will be utilized by the student to apply critical thinking pathways to the individual with acute health problems. Scientific principles and clinical skills increase in complexity. Campus laboratory experiences enhance the development of increased dexterity and proficiency of techniques. Planned faculty-supervised experiences in acute care facilities provide students with the opportunity to implement their accrued knowledge & skill in providing nursing care. Clinical experiences are completed by observational experiences in specialty areas. This is an 8-week course which meets 12 hours for 4 hours credit. (Lec 2 Lab 2) (FA)

NURS 242
Contemporary Nursing 1 HR
Prerequisite: NURS 232, NURS 241, BIOL 191, and ENGL 102; concurrent enrollment in, or successful completion of, NURS 245, COMM 101, and SOC 101. This course is designed to reinforce previously learned concepts and introduce new concepts that are essential for entry into the practice of professional nursing. There will be an emphasis on the characteristics of health care delivery worldwide. Student development will be a continuing focus as students evaluate strategies to secure positions in nursing that are compatible with personal capabilities. Legal requirements for entry into practice will be reviewed. Elements of role transition will be examined as well as techniques of professional collegial relationships, networking skills and lifelong learning. (SP)
Course Descriptions

NURS 245  
Nursing Care of Individuals with Acute Health Problems II  5 HRS  
Prerequisite: NURS 232, NURS 241, BIOL 182, BIOL 191, ENGL 102, and PSY 101 and concurrent enrollment in, or successful completion of, COMM 101, NURS 242, and SOC 101. This course in medical-surgical nursing focuses on clients with acute alterations in oxygenation, perfusion, nutrition and sexuality. Critical thinking pathways will be applied holistically utilizing Orem’s self-care model when caring for individuals with acute health problems. Campus laboratory experiences allow the student to practice more complex psychomotor skills. Planned faculty-supervised experiences in acute care facilities provide the student the opportunity to implement a more sophisticated knowledge base & skill level. The students also plan and deliver a supervised group health teaching project in the community. Clinical experiences are complemented by observational experiences in specialty areas. This is an 8-week course which meets 15 hours for 5 hours credit. (Lec 2.5 Lab 2.5) (SP)

NURS 246  
Nursing Care of the Individual with Complex Health Problems  5 HRS  
Prerequisite: NURS 232, NURS 245, BIOL 182, BIOL 191, ENGL 102, and PSY 101 and concurrent enrollment in, or successful completion of, COMM 101, NURS 242, and SOC 101. This course in medical-surgical nursing focuses on clients with complex alterations in nutrition, regulatory processes and immunological functioning. Critical thinking pathways will be chosen using Orem’s self-care model when caring for individuals and families with complex health problems. Faculty-supervised campus laboratory & clinical experiences will provide an opportunity for students to analyze the depth and breadth of the nursing role in complex situations in health care. Planned faculty-supervised experiences in acute care facilities provide students with the opportunity to implement leadership and management concepts with their peers, as well as providing care to individuals with complex health problems. This is an 8-week course which meets 15 hours for 5 hours credit. (Lec 2.5 Lab 2.5) (SP)

NURS 250  
Adult Health Assessment  2 HRS  
Prerequisite: State of Illinois RN or LPN license or NURS 241. A course in the health assessment of the adult client using a systems approach, while providing a foundation for assessment & diagnosis utilizing the nursing process. Campus laboratory experiences with partners will provide students the opportunity to implement their knowledge and skills in assessing the adult client. This course meets 3 hours for 2 hours credit. (Lec 1 Lab 1)

OFFICE TECHNOLOGY

OTEC 103  
Keyboarding & Document Formatting  2 HRS  
An introductory course in office technology designed to develop basic data input and word processing skills. The course provides instruction in keyboard and machine control techniques. Emphasis is placed on correct skill-building and on efficient use of the MS Word software package. Credit will not be awarded for students who have previously taken OTEC 101 and/or OTEC 102. (FA, SP, SU)

OTEC 112  
Records Management  3 HRS  
This course involves the organization and management of records systems, including storage, retention, transfer and disposition of records. Manual, mechanical and electronic methods of records management will be studied. (FA, SP)

OTEC 118  
Machine Transcription and Proofreading  3 HRS  
Prerequisite: OTEC 102 or OTEC 103. This course assists the student in developing the necessary skills on a transcribing machine to produce business correspondence with speed and accuracy. In addition, students will learn proofreading techniques and skill in locating errors. (FA, SP)

OTEC 120  
Medical Transcription  3 HRS  
Prerequisites: OTEC 118, completion of, or concurrent enrollment in, HLTH 111, 135 and 209. This course assists the student in developing the necessary skills in interpreting oral dictation of health records to written or electronic form. Students will practice skills in medical transcription by transcribing simulated recordings representing a variety of situations.

OTEC 140  
Office Procedures  3 HRS  
Prerequisite: ACSM 153 or 155, BUSN 115 or ENGL 106, OTEC 102 and OTEC 103. A capstone course for the office technology certificate program. Topics include presentation of business communication, travel arrangements, preparations for meetings and conferences, human relations, telecommunications, processing mail and working with customers and clients. (SP)

OTEC 296  
Topics in Office Technology  1-6 HRS  
This course will offer students an opportunity to study a special topic or current issue which is unique & infrequently offered as part of their program. The course is intended to familiarize students with some of the latest trends in office technology. The topic will be announced in the schedule book. Because topics studied will change each semester, OTEC 296 may be repeated up to a total of 6 credit hours.

PHILOSOPHY

PHIL 101  
Introduction to Philosophy  3 HRS  
An introduction to philosophical questioning and to the rudiments of philosophical ways of reasoning. This course will examine some key notions of the history of philosophy, especially in the areas of metaphysics, epistemology, ethics and social/political philosophy. (GECC H4 900) (FA, SP, SU)
PHIL 105
Introduction to Non-Western Philosophy 3 HRS
An introduction to non-Western philosophical questioning and to the rudiments of non-Western philosophical ways of reasoning. This course will examine some key notions of the history of non-Western philosophy, especially in the areas of metaphysics, epistemology, ethics and social/political philosophy, in particular the traditions found in Africa, India, Eastern Asia and the Mideast. (GECC H4 903N) (FA, SP, SU)

PHIL 111
Logic 3 HRS
An introduction to the forms of inductive and deductive reasoning including modern symbolic logic. (GECC H4 906) (FA, SP)

PHIL 114
Ethics 3 HRS
An introduction to the study of moral philosophy. This course will provide an introductory historical survey of the major ethical systems and will consider their application to contemporary moral problems. (GECC H4 904) (FA, SP, SU)

PHIL 201
History of Philosophy I 3 HRS
An introduction to the history of philosophy from the ancient Greeks to the end of the medieval era. This course will examine key ideas of various major philosophers from the Western tradition including the philosophers of Athens (the Pre-Socratics, Socrates, the Sophists, Plato and Aristotle), the Hellenistic philosophers (the Epicureans, Stoics and Skeptics) and the medieval religious philosophers (Augustine, Anselm and Aquinas). (GECC H4 901) (FA)

PHIL 202
History of Philosophy II 3 HRS
An introduction to the history of philosophy from the beginning of the seventeenth century to the present. This course will examine key ideas of various major philosophers from the Western tradition including the philosophers of the early modern period (Hobbes, Descartes, Locke, Berkeley, Hume and Kant), of the nineteenth century (Hegel, Marx, Kierkegaard, Nietzsche and the utilitarians) and various movements in twentieth-century philosophy (pragmatism, logical atomism, logical positivism, ordinary language philosophy and phenomenology). (GECC H4 902) (SP)

PHIL 214
Healthcare Ethics 3 HRS
An introduction to important theories in moral philosophy and important issues in healthcare ethics. Students will learn to use ethical theories and philosophical concepts to evaluate various perspectives on issues such as professional conduct, patients’ rights, privacy, genetic engineering, death and dying, euthanasia and abortion.

PHIL 296
Studies in Philosophy 3 HRS
An introductory philosophy course with variable content that focuses on an area of philosophy such as philosophy of religion, feminist philosophy, non-Western philosophy, or existentialism. Students will critically interpret and analyze philosophical texts that are representative of a particular sub-field of philosophy. Because the subjects and texts will vary each semester, PHIL 296 may be repeated for a total of six credit hours.

PHYSICS

PHYS 110
Physics in Everyday Life 3 HRS
Prerequisite: MATH 087 with a “C” or higher. This is an elementary course that emphasizes principles and applications of mechanics, heat, sound and electricity. The course is presented with an emphasis on observations and descriptions being used to illustrate basic problem-solving principles and laws, with students learning to solve problems applying these principles and laws. (GECC P1 901)

PHYS 161
College Physics I 5 HRS
Prerequisite: MATH 109 or MATH 127 with a grade of “C” or higher or assessment with a grade of “C” or higher. The second semester of a year-long general physics course, based on mathematics through algebra and trigonometry, but not including calculus. Topics include electricity, magnetism, optics and modern physics. Laboratory activities stress development of measurement, observational and analytical skills and are based on lecture topics. (IAI Major Code BIO 904) (SP)

PHYS 171
Mechanics 4 HRS
Prerequisite: MATH 161 and credit, or concurrent enrollment, in MATH 162. First course in a calculus-based physics sequence for students in engineering, mathematics, physics and chemistry. Topics include Newton’s Laws, work and energy, oscillations, transverse waves, systems of particles and rotations. Laboratory activities stress development of measurement, observational and analytical skills and are based on lecture topics. Students may not receive credit for both PHYS 171 and PHYS 161. (GECC P2 900L, IAI Majors Codes EGR 911, MTH 921) (SP)

PHYS 172
Electricity & Magnetism 4 HRS
Prerequisite: PHYS 171 and credit, or concurrent enrollment, in MATH 163. This is the second course in a calculus-based physics sequence for students in engineering, mathematics, physics and chemistry. Topics include Coulomb’s Law, electric fields, Gauss’ Law, electric potential, capacitance, circuits, magnetic forces and fields, Ampere’s law, induction, electromagnetic waves, polarization and geometrical optics. Laboratory activities stress development of measurement, observational and analytical skills and are based on lecture topics. Students may not receive credit for both PHYS 172 and PHYS 162. (IAI Major Code EGR 912) (FA)
Course Descriptions

PHYS 173  
**Fluids & Thermal Physics**  2 HRS  
*Prerequisite: PHYS 171, and credit or concurrent enrollment in MATH 163.* This is the third course in a calculus-based physics sequence for students in engineering, mathematics, physics, and chemistry. Topics include fluid motion, propagation of heat, and sound, temperature and kinetic theory of gases, heat capacity and latent heat, first law of thermodynamics, heat engines and the second law and introduction to statistical mechanics. Laboratory activities stress development of measurement, observational and analytical skills and are based on lecture topics. Students may not receive credit for both PHYS 173 and PHYS 162. (IAI Major Code EGR 913) (SP)

PHYS 174  
**Quantum Physics**  2 HRS  
*Prerequisite: PHYS 172, and credit or concurrent enrollment in MATH 163.* This is the fourth course in a calculus-based physics sequence for students in engineering, mathematics, physics, and chemistry. Topics include interference and diffraction, photons and matter waves, the Bohr atom, uncertainty principle and wave mechanics. Laboratory activities stress development of measurement, observational and analytical skills and are based on lecture topics. Students will not receive credit for both PHYS 174 and PHYS 162. (IAI Major Code EGR 914) (SP)

PHYS 297  
**Independent Study in Physics**  1-3 HRS  
*Prerequisite: ENGL 101 and permission of the instructor.* Intensive work in a physics subject of special interest to the student. Each individual project is to culminate in a comprehensive written report.

**POLITICAL SCIENCE**

POS 090  
**Constitution**  1 HR  
This class will provide a background on the history, purpose, meaning and content of the United States and Illinois Constitution. The Declaration of Independence and flag are also covered. Students may fulfill their constitution requirement by taking this class and successfully passing the constitution exam.

POS 101  
**American Government and Politics**  3 HRS  
A study of the structure and processes of American government and politics. Topics studied include the Constitution, the presidency, Congress, the federal court system, political parties and elections, foreign policy formulation and current controversial issues. Special focus on the dynamics of government will also include discussions on the role of the media in politics, civil rights and economics. (GECC SS 900, IAI Major Code PLS 911) (FA, SP, SU)

POS 124  
**State and Local Politics**  3 HRS  
A study of sub-units of government in America. This study includes state and local systems and their interrelationships with the American federal system of government. Topics covered in this course include: the governors, the legislature, the state judiciary, finance, urban government, political participation and federalism. Successful completion of this course certifies the student has met the state requirements concerning the Illinois and federal Constitutions. (GECC SS 902, IAI Major Code PLS 915) (FA)

POS 145  
**Politics of Mid East, Central/South America, Asia**  3 HRS  
The Middle East, Central and South America and Asia from the standpoint of the politics of international relations, social/economic change, internal factionalism, revolution, warfare and religion. (GECC SS 906N) (FA)

POS 151  
**International Relations**  3 HRS  
International Relations is an introductory study of the basic principles of politics among nations, encompassing both the dynamics and organizational dimensions of the subject. It includes examination of U.S. foreign policy and the foreign policies of other world powers, plus a survey of important issues and disputes relevant to the balance of power. (GECC SS 904N, IAI Major Code PLS 912) (SP)

POS 220  
**Comparative Governments**  3 HRS  
An examination of the structure, function and political processes of selected world governments. The course demonstrates political differences that distinguish one nation’s political institutions from another. (GECC SS 905)

**PHYSICAL SCIENCE**

PSCI 110  
**Physical Science**  4 HRS  
*Prerequisite: MATH 096 or MATH 099 or equivalent or assessment.* A study of the fundamental principles of physics, chemistry and astronomy for the non-science major. Special attention is given to methods of scientific inquiry and the philosophical importance of scientific discoveries. Three hours of lecture and two hours of laboratory per week. (GECC P9 900L)

**PSYCHOLOGY**

PSY 101  
**Introduction to Psychology**  3 HRS  
The study of psychology as a science and the determinants of human personality and functioning. This course also focuses on how we may use the principles of physical and emotional/cognitive growth, learning, personality functioning and coping and social interactions in our everyday lives. (GECC S6 900, IAI Major Code SPE 912) (FA, SP, SU)
PSY 203
Abnormal Psychology  3 HRS
Prerequisite: PSY 101. The examination of the major types of psychological disturbance, terminology in use today, the diagnostic categories & criteria, as well as a general introduction to treatment methods. (IAI Major Code PSY 905) (FA, SP)

PSY 207
Introduction to Child Psychology  3 HRS
Prerequisite: PSY 101. Child psychology is the study of human development from birth to puberty. The course will examine the series of stages which occur in development prior to adolescence, define these stages and identify characteristics, resources, behaviors and problems during this developmental period. The contributions of a variety of individuals and schools of thought will be drawn from in order to provide a balanced perspective representing modern psychological understandings. (GECC S6 903, IAI Majors Codes EED 902, PSY 901) (FA, SP)

PSY 209
Human Growth & Development  3 HRS
Prerequisite: PSY 101. Study of human development from conception to death. Includes research methods and developmental theories. Addresses all the major areas of development (physical, social, emotional and cognitive) and the interaction among these areas. (GECC S6 902, IAI Majors Codes EDU 902, EED 903, SED 903, SPE 913) (FA, SP, SU)

PSY 210
Social Psychology  3 HRS
Prerequisite: PSY 101. Social Psychology is the study of feelings, motivations, perceptions and behaviors of individuals in social situations. It includes study of our personal perceptions and attitudes towards others, interpersonal dynamics, and the broader social and cultural context in which social behavior occurs. Knowledge of interpersonal understanding, effective communication and group dynamics are emphasized. Includes specific study of the social psychology of politics, business and law. (GECC S8 900, IAI Major Code PSY 908) (FA, SP)

PSY 215
Introduction to Child & Adolescent Psychology  3 HRS
Prerequisite: PSY 101. The study of human development from birth through adolescence. The course will examine the series of stages which occur in development through adolescence, define these stages and identify characteristic resources, behaviors and problems during this developmental period. The contributions of a variety of individuals and schools of thought will be drawn from in order to provide a balanced perspective representing modern psychological understandings. (GECC S6 904)

PSY 216
Adolescent Psychology  3 HRS
Prerequisite: PSY 101. A study of human growth and development during adolescence. Social, physical, intellectual, emotional and personality growth patterns will be covered. Emphasis will be placed on theories of development, contemporary research and current issues. (GECC S6 904, IAI Major Code PSY 902) (FA, SP)

PSY 217
Adult Development and Aging  3 HRS
Prerequisite: PSY 101. This course will serve as an introduction to the changes that occur from early adulthood through old age. Topics may include: career choice and development, mate selection and marriage, conventional and non-conventional families, theories of adult personality development, mid- and late-life transitions, aging, and dying, death and bereavement. (GECC S6 903)

PSY 218
Psychology of Parenting  3 HRS
Prerequisite: PSY 101. This course provides an overview of psychological issues relevant to parenting. Key theories and relevant research findings that directly apply to effective and ineffective parenting throughout the lifespan are presented. Topics include historical and theoretical influences, cultural influences, parenting from birth to adulthood, grandparenthood, special challenges in parent-child relationships, loss and grief and parenting strategies and techniques.

PSY 220
Personality  3 HRS
Prerequisite: PSY 101. A study of contemporary theories of personality. An examination of the origins, development, assumptions, implications and current issues surrounding each theory will be emphasized. (IAI Major Code PSY 907) (FA, SP)

PSY 223
Human Sexuality  3 HRS
Prerequisite: PSY 101. A study of the social and psychological aspects of human sexuality. Topics include sexual development, cultural influences, gender identity, sexual dysfunction, love and relationships. Emphasis will be placed on the mental and emotional aspects of human sexuality as well as current issues. (IAI Major Code SW 912) (FA, SP)

READING
READ 070
Basic Reading  3 HRS
Prerequisite: Placement by assessment. Basic Reading is a foundational course in reading and vocabulary development that emphasizes literal comprehension of narrative texts for pleasure reading tasks. Students are provided with instruction and practice in essential strategies designed to help improve the attitudes and skills that will enable them to become members of a “reading community.” (FA, SP)

READ 090
Reading Improvement I  3 HRS
Prerequisite: Placement by assessment, completion of READ 070 with a grade of “C” or better, or equivalent. Reading Improvement I is an intermediate course in reading and vocabulary development that emphasizes literal and interpretive comprehension of a range of texts for pleasure and academic reading tasks. Students are provided with instruction and practice in essential strategies intended to help strengthen the skills and confidence that will prepare them to successfully complete the briefest types of readings often utilized in entry-level college courses. (FA, SP)
Course Descriptions

READ 091
Reading Improvement II 3 HRS
Prerequisite: Placement by assessment, completion of READ 090 with a grade of "C" or better, or equivalent. Reading Improvement II is an advanced course in reading and vocabulary development that emphasizes interpretive and applied comprehension of college textbooks for academic reading tasks. Students are provided with instruction and practice in essential strategies that will prepare them to successfully meet the full range of reading demands typical of entry-level college courses. (FA, SP, SU)

RELI 150
Understanding Religion 3 HRS
Prerequisite: Completion of ENGL 101 with a grade of "C" or higher, or concurrent enrollment, is recommended. Understanding Religion is an introduction to the concept and phenomenon of religion, religious study and the role that religion plays within society and culture. It also introduces the nature, origin, beliefs, major expressions and practices of religion.

RELI 215
Major World Religions 3 HRS
An introduction to comparative religious study. This course will examine the basic tenets, beliefs and practices of major world religions, including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, Islam and some forms of tribal religion, using historical, psychological, sociological, phenomenological and structuralist approaches. (GECC HS 904N) (FA, SP, SU)

RELI 220
History of Christianity 3 HRS
A history of the Christian church from apostolic times to the present, with an emphasis upon doctrinal and institutional development.

RELI 230
Religion in American Society 3 HRS
A survey of the various religions found in America and the different roles which religion has played in helping to shape American culture. Examines the contributions of religion to American culture, the development of religious freedom, civil religion, Native American religions, African-American religions and the emergence of new forms of belief and practice, as well as variety of religious issues confronting American society today. (GECC HS 905) (FA)

RELI 260
Literature of the Bible 3 HRS
Prerequisite: Completion of, or concurrent enrollment in, ENGL 101 is strongly recommended. Discussion and analysis of selected texts from the Old and New Testaments, with special attention to the sources and styles of biblical literary techniques. (GECC HS 901) (SP)

RELI 296
Special Topics in Religious Studies 1-3 HRS
Prerequisite: Completion of ENGL 101 with a grade of "C" or higher. This is an advanced course in religious studies that, depending on the particular topic of the course, introduces students to the structures, meanings, intentions, historical frameworks, cultural dynamics, psychological factors, literary expressions, aesthetic presentations and interpretations and philosophical formulations, as well as the personal, communal and universal dimensions of religion as found in such aspects as myth, symbol, ritual, ethics, community, sacred writings, religious experience (mysticism), religious thought and contemplation. Because topics and research studied will change each semester, RELI 296 may be repeated for a total of six credits.

SCIENCE INTERNSHIP
SCI 299
Internship in Science 1-3 HRS
Prerequisite: Completion of 12 semester hours including one college level course in math/science and faculty/advisor approval. Students will work with faculty to select an area of specialization in their math/science-related program. Students gain practical work experience in this selected field. Students must complete 75 work hours for each credit hour. Each candidate for the Internship in Science will be reviewed and selection will be based on (1) previous experience, (2) courses completed and (3) aptitude/ability match with internship site needs. Students may receive up to 6 internship credits toward graduation.

SOCIOLOGY
SOC 101
Sociology 3 HRS
This course provides an introduction to the scientific study of society. Topics include power and inequality, change, deviance, education, occupations, organizations, family, gender, religion and racial/ethnic groups. Students will develop a critical understanding of social forces. (GECC S7 900) (FA, SP, SU)

SOC 102
Social Problems 3 HRS
A study of the structural sources of social problems and the role of the U.S. in global social problems. The course examines such issues as global inequality, threats to the environment, urban problems, poverty, crime & health care delivery. (GECC S7 901) (FA, SP)

SOC 110
Sociology of Gender 3 HRS
This course will examine various theories of gender role development and persistence in society. Topics include the impact of socialization of females and males, gender roles in the labor market, politics, marriage and family, feminism and masculinism. (AI Major Code SOC 914) (SU)
SOC 135
**Sociology of Marriage and Family** 3 HRS
The sociological investigation of marriage and family, with particular attention to the impact of social institutions on marriage and family structure, various marriage and family arrangements and their consequences, interactions within marriage and family, abuse, divorce and widowhood. (GECC S7 902) (FA, SP, SU)

SOC 220
**Social Stratification** 3 HRS
An exploration of differences in the economic, political and social power of groups and a study of how power differences explain various social inequalities. Class, sex, race/ethnicity, age, occupational, educational and global inequalities are among the subjects discussed.

SOC 222
**Sociology of Death and Dying** 3 HRS
Sociological aspects of death and dying. Includes historical changes in attitudes toward and causes of death, cultural diversity in the meanings and rituals surrounding death, coping with dying and grief, age differences in dealing with death, suicide, funerals and legal issues regarding death. (FA, SP)

SOC 225
**Organizations and Occupations** 3 HRS
Study of the social sources of occupational rewards, prestige, decision-making, hiring, worker control, leadership, organizational culture and related topics. The course focuses on work in bureaucratic organizations and the professions. Also treated are other types of work settings, such as trades, skilled labor, unpaid labor (e.g. housework) and illegal work.

SOC 263
**Sociology of Deviant Behavior** 3 HRS
*Prerequisite: SOC 101.* Examines the sociological study of the origins, causes and control of deviance and deviant behavior. Considers deviance through various theoretical perspectives. Emphasis is placed on individual and group deviance, resulting from societal norms and values. Areas to be covered include drug use, sexual deviance, criminal behavior, marginal deviance and career deviance. (IAL Major Code SOC 915)

SOC 296
**Special Topics in Sociology** 1-4 HRS
Course will provide an in-depth study of selected topics in sociology. The content and structure of the course will vary according to the topic and instructor(s). May be repeated up to three times with a different topic, for a total of 6 credit hours. Specific topic title will be stated on student’s transcript.

**SPANISH**

SPAN 101
**Spanish I** 4 HRS
A beginning course in Spanish, with emphasis on the development of basic listening, speaking, reading and writing skills. Basic vocabulary, essentials of Spanish grammar and syntax, correct pronunciation and intonation and the use of actual speech patterns are covered. Students with two or more years of high school Spanish should not enroll in SPAN 101. (FA, SP, SU)

SPAN 102
**Spanish II** 4 HRS
*Prerequisite: SPAN 101 or equivalent.* A continuation of SPAN 101, with emphasis on expanding the basic conversational vocabulary and more detailed study of grammatical principles and syntactic patterns. (FA, SP, SU)

SPAN 201
**Spanish III** 4 HRS
*Prerequisite: SPAN 101 and SPAN 102 or equivalent.* Intensive practice in conversation and composition, combined with a review of grammatical and syntactic principles to improve speaking skills, oral composition and the reading and writing of Spanish. (FA, SP, SU)

SPAN 202
**Spanish IV** 4 HRS
*Prerequisite: SPAN 201 or proficiency equivalent as determined by the instructor.* An advanced intermediate level extension of Spanish 201, Spanish 202 emphasizes mastery communications skills: reading, writing, speaking and listening. These skills are applied to written discourse and oral discussion of selected advanced intermediate level readings from the world of Peninsular Spanish and Spanish American literature. Since comprehensibility of oral and written expression is tested, the student is expected to independently research grammar and syntax based on the foundation of concepts presented in previous coursework as well as information available in the suggested companion grammar reference text. In each Spanish communications skill area, the student is guided, encouraged and tested to acquire oral/aural and literary memory. To that end, it is expected that the student is willing to venture learning risks into the newly explored territories. (GECC H1 900) (FA, SP)

SPAN 296
**Special Topics in Spanish** 1-3 HRS
*Prerequisite: SPAN 102 with a “C” or better or 4 years of high school Spanish or consent of the instructor.* This is an intermediate course in Spanish. This course is intended to prepare the students who desire fluency in Spanish. The students will gain confidence if they are willing to try some guided risk-taking. SPAN 296 is structured to offer the framework for conversing in Spanish in a natural manner. The course will stress vocabulary building, listening, speaking and writing. It will foster authentic language using native-speakers who converse and dialogue in authentic Spanish. Because topics and research studied will change each semester, SPAN 296 may be repeated for a total of 6 credits toward graduation.
Course Descriptions

SOCIAL SCIENCE INTERNSHIP

SSI 299
**Internship in the Social and Behavioral Sciences**  1-6 HRS
This course provides supervised field experiences in a variety of settings that are related to the social and behavioral sciences. Such settings include educational institutions, governmental organizations, businesses and health care agencies. Students work at least five hours a week (a total of 75 hours a semester equals one internship credit hour), gaining practical skills and experiences in a setting which will utilize social and behavioral science concepts and theories.

SOCIAL WORK

SWK 170
**Intro to Social Work**  3 HRS
*Prerequisite: Placement in ENGL 101.* This course will explore the social welfare system including social problems and policy responses of society. Topics to be explored include the major social problems, political ideology influencing these problems, program and policy initiatives, philosophies of social welfare programs and professional ethics and standards.

TECHNOLOGY

TECH 110
**Blueprint Reading for Construction**  2 HRS
The course is an introductory course in the basics of construction blueprint reading. All persons involved in the planning, supplying and/or building of structures should be able to read construction blueprints. Topics include types of drawings, nomenclature and applications of technical drawings. While no formal prerequisite is required for this course, it is suggested that students have a familiarity with basic mathematical concepts of fractions and linear measurements before enrolling in this course.

TECH 114
**Introduction to Technical Graphics**  3 HRS
The course is an introductory course in the basics of industrial blueprint reading and standard drafting practices through sketching and manual drafting techniques. The course emphasizes understanding and interpreting single part and assembly prints used in common industrial applications. Topics include types of drawings, nomenclature and applications of technical drawings. While no formal prerequisite is required for this course, it is suggested that students have familiarity with basic mathematical concepts of metric conversion, fraction to decimal conversion and measurement before enrolling in this course.

TECH 296
**Special Topics in Technology**  1-4 HRS
*Prerequisite: Faculty approval.* Course will offer students an opportunity to study a topic which is (1) unique and infrequently offered as a part of their program curriculum or (2) of special interest to industry. Each student wishing to enroll in Special Topics in Technology will be reviewed based on (1) previous experience, (2) courses completed and (3) aptitude/ability match with selected topic.

TECH 297
**Independent Study in Technology**  1-4 HRS
*Prerequisite: Successful completion of one college level technology-related course with a grade of “C” or better, or permission of instructor.* Students will work with faculty to select an area of specialization in their technology-related program. Students gain practical work experience in this selected field. Students must complete 75 work hours for each credit hour. Each candidate for the Internship in Technology will be reviewed and selection will be based on (1) previous experience, (2) courses completed and (3) aptitude/ability match with internship site needs. Students may receive up to 6 internship credits toward graduation.

THEATRE

THEA 101
**Introduction to Theatre**  3 HRS
An introductory course in theatre/drama as a performing art form. Includes study and analysis of historical, social, cultural, aesthetic and technical aspects of rational and contemporary theatrical/dramatic expression. (GECC F1 907) (FA, SP, SU)

THEA 104
**Acting I**  3 HRS
Fundamentals of acting: concentration, observation, playing action and other basics are introduced through acting exercises, improvisations and scene study. Major acting approaches, such as Cohen, Meisner, Stanislavski and Shurtleff, will be used as the basis for helping the actor acquire craft in order to create believable characters. This course meets 5 hours for 3 hours credit. (IAI Major Code TA 914) (FA, SP)
THEA 108
Technical Theatre Production 3 HRS
Primarily a laboratory course dedicated to defining the process of support the technical theatre lends to the performance of plays. The areas to be investigated include design and implementation of plans for scenery, properties, lighting, sound, make up and costuming. (AI Major Code TA 911) (FA, SP)

THEA 204
Acting II 3 HRS
Prerequisite: THEA 104. Designed to offer the student advanced training in the art of acting with regard to play analysis, believable character creation, implementation of acting skills as applied to a variety of texts and styles and the practice of the three elements of acting (body, voice and mind). This course meets 5 hours for 3 hours credit. (FA, SP)

TECHNICAL MATH

TMAT 103
Technical Math I 4 HRS
Prerequisite: MATH 087 with a grade “C” or higher, or assessment. This is a first course in technical mathematics. Topics include scientific notation, number systems, algebra (equations and formulas, factoring and systems), geometry and trigonometry. An emphasis is placed on application and computation. Some work will require a scientific calculator. (FA, SP)

TMAT 105
Technical Math II 4 HRS
Prerequisite: TMAT 103 with a grade “C” or higher, or assessment. This is a second course in technical mathematics. Topics include trigonometry, vector operations, exponents (including logarithmic form), radicals, systems of linear equations, factoring algebraic expressions, complex numbers, quadratic equations, exponential functions (including logarithmic form), matrices and statistics. An emphasis is placed on application and computation. Some work will require a scientific calculator. (SP)

TECHNICAL PHYSICS

TPHY 103
Technical Physics I 4 HRS
Prerequisite: TMAT 103 or MATH 099, or proficiency. This is a first course in technical physics. Topics include statics, motion, Newton’s Laws, forces, simple machines, properties of materials, thermodynamics and electricity. A two-hour laboratory exercise per week will reinforce the lecture material. (FA)

TPHY 105
Technical Physics II 4 HRS
Prerequisite: TPHY 103 or equivalent with a grade of “C” or better. This is a continuation of the first semester in technical physics. Topics include magnetism, induction, AC circuits, electronics, momentum, rotational motion, waves, sound, fluids, light, mirrors and lens, vision, nuclear energy and solar energy. A two hour laboratory exercise per week will reinforce the lecture material. (IAI Major Code MTM 902L) (SP)

VOLUNTEERISM

VOL 101
Introduction to Volunteerism 1 HR
This course is designed to provide theoretical background to volunteerism and service learning. It will provide an historical overview of volunteerism in the United States. Students will explore service learning opportunities in a variety of service agencies in the community. NOTE: This class is for members of the Community Scholars Program only.

VOL 299
Service Learning 1 HR
Prerequisite: Successful completion of VOL 101, Community Scholar in good standing. As part of a service-learning experience, students volunteer at local non-profits for five hours each week, for a total of 70 hours a semester. Students may select volunteer sites/assignments based on their personal or career interests. Volunteer sites/assignments must meet program criteria and be approved prior to volunteering. Students are expected to volunteer as arranged and complete assigned work at the volunteer site and with the course. Students meet weekly in support of the volunteer experience. One absence a semester is permitted. May be repeated three times with different non-profits and/or volunteer assignments.

WELDING

WELD 110
Maintenance Welding 3 HRS
This course examines general welding practices and their application to maintenance procedures within an industrial facility. Topics include such welding practices as: cutting, soldering, brazing, SMAW, GMAW and TIG. Safety instruction is included. (FA, SP, SU)

WELD 115
Welding Processes 2 HRS
This course introduces students to a variety of welding and cutting processes used in industry. Students will gain basic welding knowledge and skills, while following proper safety guidelines and procedures.

WELD 116
Shielded Metal Arc Welding I 3 HRS
Prerequisite: WELD 110 or instructor approval. This course is the study of the SMAW welding techniques and procedures. Entry-level ability will be developed in meeting industrial requirements. The course involves welding a variety of metals in the flat and horizontal positions using approved electrodes. It is designed to prepare the student for the AWS welder qualification test for unlimited thickness metals. Safety instruction is included. (FA)
**Course Descriptions**

**WELD 217**  
**Shielded Metal Arc Welding II**  
3 HRS  
Prerequisite: WELD 116 or instructor approval. Advanced levels of ability will be developed in meeting industrial requirements. The course involves welding a variety of metals in all positions using approved electrode and designed to prepare students for the AWS welder qualification test for unlimited thickness metals. Safety instruction related to industry and the process are included. (SP)

**WELD 218**  
**Gas Metal Arc Welding**  
3 HRS  
Prerequisite: WELD 217 or instructor approval. This course is the study of the GMAW (also called MIG) welding techniques and procedures. Advanced levels of ability will be developed in meeting industrial requirements. The course involves welding a variety of metals in all positions using approved electrode wire & designed to prepare the student for the AWS welder qualification test for unlimited thickness metals. Additionally, FCAW processes using shielded and non-shielded electrode wire will be covered. Safety instruction related to industry is included. (SP)

**WELD 219**  
**Gas Tungsten Arc Welding**  
3 HRS  
Prerequisite: WELD 217 or instructor approval. This course is the study of the GTAW (also called TIG) welding techniques and procedures. Advanced levels of ability will be developed in meeting industrial requirements. The course includes welding of a variety of metals using the GTAW process. It is designed to prepare the student for the AWS welder qualification test for ferrous and non-ferrous metals. Safety instruction related to industry is included.

**WOMEN'S STUDIES**

**WST 201**  
**Introduction to Women's Studies**  
3 HRS  
Prerequisite: ENGL 101 or equivalent with a grade of “C” or better. An intensive and critical examination of the nature and function of women in society from an interdisciplinary perspective. The course may concentrate on specific disciplinary approaches to issues critical to women. Areas such as historical examination of the construction of women in society, feminist political philosophy, women in the arts, literature, science, law, medicine and the family may be covered.
Continuing Education
Adult Education
Community Education
Corporate Education
CONTINUING EDUCATION

Adult Education

The Adult Education Program at Heartland Community College includes both GED preparation and English as a Second Language (ESL) courses. These programs are designed for students who...

- did not complete high school and would like to prepare to take the GED examination.
- need to improve their basic skills in reading, writing and/or math.
- are preparing for entry-level employment or career training.
- are non-native speakers of English and would like to improve their reading, writing and/or conversational skills.

GED courses include instruction in reading, writing, math, social studies and science. ESL courses include instruction in reading, writing, speaking and listening. The program works with local agencies to assist students in completing their educational and employment goals. Since the program is supported by federal and state funding, classes and materials are provided at no cost to eligible students. Upon enrolling, each student is assessed to determine his or her individual courses of study. Students may begin the program at convenient times during the semester.

GED and ESL classes are offered in Bloomington/Normal, Lincoln and Pontiac. As the college grows, additional classes, locations and class formats are expected to be added to the Adult Education Program. For more information, please contact the Director of Adult Education.
Community Education

Community Education is your path to lifelong learning! It offers a broad range of educational opportunities for district residents. These courses are designed for the individual who wants to continue learning but is not necessarily interested in earning college credit or pursuing a degree. Course offerings vary in length, cost and content, but all tend to be more informal than a traditional college class. Community Education’s fall schedule booklet is available in August; spring schedule booklet is available in January and summer schedule booklet is available in late April. You can also visit the Web site at www.heartland.edu/communityEd to see the current schedule.

Community Education offerings include courses in these areas:
- Computer Skills
- Continuing Professional Education
- Online Classes
- Business Management
- Personal Finance
- Language & Communications
- Personal Enrichment
- Youth Enrichment Program
- College Prep
- Active Retirement
- Health & Wellness
- Recreation & Leisure
- Home & Garden
- Creative Arts

Youth Enrichment Programs (YEP) provide exciting learning opportunities for young people, allowing them to experience new areas of interest. Courses are offered throughout the school year, after school and on Saturdays. An extensive schedule of classes is offered each summer. Summer YEP course catalogs are available in late March.

Online courses offered through Community Education are fun and highly interactive. Opportunities are endless…from Accounting Fundamentals to Creating Web Pages to Genealogy Basics, there are a variety of online course topics to meet your needs and suit your interests.

For questions about Community Education programs, contact their office at 309-268-8160.

Corporate Education

The Corporate Education Department provides the connection for employers seeking continuing education and training resources from the College.

Our mission is to assist and support business, industry, non-profit and government organizations. We respond to these important segments of the community with customized training solutions to meet their particular, and typically unique, training and development needs.

Our services, which are available virtually anytime either on campus or at the client’s facilities, include: consultation, assessment, program development, training, evaluation and follow up. We also serve as an information center to link the community to a wide variety of training topics and resources such as local, regional and national trainers, consultants and faculty.

Our primary service categories include, but are not limited to:

**Information Services & Technology:** Microsoft certification, desktop, web development, project management, network and security  
**Workforce Development & Retention:** workplace, compute and language basics  
**Business Improvement Skills & Tools:** leadership, supervision and professional development  
**Industrial Development:** manufacturing and maintenance, quality control, OSHA safety, Hazwoper, etc.  
**Language & Literacy:** business writing, presenting, telephone skills, grammar, English as a Second Language (ESL), Spanish for specific industries  
**Business Services:** legal issues and financial services

Our resources at Heartland are state-of-the-art, substantial and expanding. The Heartland Community College Workforce Development Center, currently under construction, will add another 100,000 square feet of facilities for career and technical education services.

The Corporate Education Department is a customer-driven, customer solutions organization. Call us at 309-268-8440 to discuss your needs (visit our Web site at www.heartland.edu/corporateEd).
Special Other Programs

Joint Admission/Educational Alliance
Franklin University
Educational Alliance with Franklin University

Heartland has formed an educational alliance with Franklin University. Students who receive an associate’s degree from Heartland can choose to continue their education at Franklin University to complete a bachelor’s degree online while still having access to Heartland advising, library and computer lab services. Visit www.alliance.franklin.edu for more information or pick up information in the Student Services Center.

Joint Admission Agreements

Joint admission agreements are in place for students intending to transfer to Eureka College or University of Illinois at Springfield. See an Academic Advisor for details on these agreements.
Working full-time and going to school isn’t easy, but Vicki knows how to make the most of her time. As a Product Media Technician for Electrolux, her job was mostly paper-based, but Vickie saw emerging opportunities with the advance of technology. Six months after starting Heartland’s Web Media Designer certificate program, her company created a new position. Now, she’s happily working as Electrolux’s Internet Content Coordinator.
Mission of Student Services

It is the mission of the Student Services area to provide the resources and the service support to ensure that Heartland Community College attains its stated goals and fulfills its mission in terms of serving students.

Academic Amnesty

This policy provides students with a one-time opportunity to achieve an educational objective without the demoting effects of previous failing grades. To be eligible for consideration of this policy, the following criteria must be met:

1. A post-secondary educational institution has not been attended the previous three calendar years.
2. A change is being made in the program of study.
3. A minimum of 12 semester hours must be completed with a grade point average of 2.0 or better upon returning to HCC.

Academic Integrity

A fundamental principle of college life at Heartland is academic integrity. It is essential to the credibility of the College's educational programs. Because grading may be competitive, students who misrepresent their academic work violate the rights of their fellow students. Therefore, the College views any act of academic dishonesty as a serious offense. Consequences of such offenses require disciplinary measures including course failure, suspension and even expulsion from the College. In addition, an act of academic dishonesty may have unforeseen effects beyond officially imposed penalties.

Definitions of violations of academic integrity include, but are not limited to the following:

Cheating: Any unauthorized use of notes, study aids or information from another's class work or examination; surreptitiously obtaining test information prior to taking that exam; altering graded work and then resubmitting it for a grade; altering or destroying grade records; allowing another to do one's work and then submitting it under one's own name; allowing another person to take an exam in one's place or submitting identical or similar papers for credit in more than one course without obtaining prior permission from the course instructors involved.

Aiding or Suborning Cheating or Other Acts of Academic Dishonesty: Providing material or information to another student with the knowledge that it will be used improperly.

Plagiarism: Presenting within the contents of one's own work the ideas, representations or words of another person without customary and proper acknowledgment of that authorship. Consult the English Composition Course Guide for a more comprehensive definition of plagiarism. Any real or pretended ignorance of this term will not excuse a student from the penalties of such conduct.

Misrepresentation of Data: Fabricating data or deliberately presenting in an assignment data that was not obtained in accordance of assigned guidelines for data collection or generation or providing an inaccurate account of the method used in collecting/gathering data.

Falsification of Academic Records or Documents: Altering without proper authorization any documents affecting academic records; forging signatures of authorization; falsifying information on an official academic document such as a grade report, ID card, letter of permission or any other document pertaining to academic requirements.
Unauthorized Access to Computerized Academic or Administrative Records or Systems: Viewing or altering the College’s computer records without authorization; copying or modifying the College’s computer programs or systems without authorization; releasing or dispensing information gained through unauthorized access; interfering with the use or availability of computer systems or information. Also, at locations where college-sponsored activities are held, the unauthorized use, viewing, copying or altering of other institutions’ computer records, systems or programs is in violation of academic integrity.

Penalties for violation of academic integrity vary from individual course sanctions up to expulsion from the College. See Student Disciplinary Procedures (page 175) and Student Appeals Procedures (page 179).

Academic Probation/Dismissal

A student may be placed on academic probation for failure to achieve the minimum cumulative grade point average required for good standing as shown below:

<table>
<thead>
<tr>
<th>Semester Hours Attempted</th>
<th>Minimum Cumulative GPA Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-16</td>
<td>1.50</td>
</tr>
<tr>
<td>17-32</td>
<td>1.70</td>
</tr>
<tr>
<td>33-48</td>
<td>1.85</td>
</tr>
<tr>
<td>49+</td>
<td>2.00</td>
</tr>
</tbody>
</table>

A student on academic probation must develop a contract with an Academic Advisor before registering for the next semester. The student must meet the terms of the probation contract, including a 2.00 grade point average during the following semester and/or meet the minimum cumulative GPA for good standing.

Failure to meet the terms of probation will result in academic dismissal. An appeals procedure is available for extenuating circumstances through the Dean of Student Services. Appeals should be started with an Academic Advisor in the Student Services Center.

Academic Dismissal

Students who, during a probationary term, do not raise their cumulative grade point average to the requirement above will be placed on academic dismissal for one semester (excluding summer). A student on academic dismissal who attends during the summer term will have those grades factored into the cumulative grade point average. Students who re-enroll after academic dismissal are on academic probation until their grade point average reaches the required level.

Academic Support

This division provides programs and services through the Academic Support Center (ASC) to help Heartland students achieve their personal goals through higher education. Programs included in this area are: general studies, instructional television, online courses, open learning courses and reading. Services provided by the ASC include: the library, open computing lab, testing, tutoring, assessment, instructional design, instructional technology and faculty support. General information and operation schedules are available online at www.heartland.edu/asc. Contact numbers at the ASC in Normal, Lincoln and Pontiac:

- **Main Campus** (309) 268-8291
- **Pontiac Center** (815) 842-6777
- **Lincoln Center** (217) 735-1731

ASC Testing Center

The Testing Center serves Heartland Community College faculty and students by providing proctoring of exams for online courses and make-up tests at the request of instructors who choose to utilize the service. Students must adhere to hours and policies of the Testing Center.

Alternative Learning

Alternative learning courses provide students with varied learning options, but these options require maturity, independence and computing skills. All alternative learning courses require greater effort and responsibility for learning by both students and faculty members.

Combined Distance Learning (CDL)

CDL courses take place in the ITV (interactive television) classrooms in Normal, Pontiac &/or Lincoln. Faculty teach on a rotating basis. CDL classes require students to use online software. Students can use WebCT for email, to view assignments, to post discussions &/or to complete quizzes or exams.

Hybrid Courses

In hybrid courses, students and faculty meet once a week for class (required) and then utilize online software for weekly coursework. Students can use WebCT for email, to view assignments, to post discussions and/or to complete quizzes or exams.

Interactive Television (ITV)

ITV courses take place in two or three classrooms linked by live audio and video. This format enables students to attend classes in Pontiac, Lincoln or Normal. Faculty may teach from any of the three sites. Many ITV classes are incorporating WebCT software to supplement the lectures, discussions & multimedia presentations with online assignments and testing.

Online Courses

Online courses require the greatest effort by students. Students use WebCT for e-mail, to view and post assignments, to post discussions and to complete quizzes and/or exams.

Each HCC online course requires that students log in the first day of the semester and then complete work each week as the class moves through the course unit by unit. Most of our online instructors require proctored testing for exams. Thus, you may be required to come to campus or an alternate site to complete part of your online work. Heartland online courses are NOT self-paced courses.

For more information visit the WebCT link at www.heartland.edu.
Campus Security

Heartland considers the safety and well-being of its students, visitors and staff vital. Security monitoring of campus and parking areas takes place 24 hours a day – 7 days a week.

Health emergencies should always be handled by dialing 911 on the nearest telephone.

HCC’s Safety and Security Services encourages students and employees to be aware of ways they can take responsibility for protecting themselves and their property for their own safety and the safety of others. Some campus safety measures available include:

1. Code blue emergency call stations in each parking area that provide audio and visual contact with security staff
2. A 24-hour-a-day escort service by campus security personnel, available by request at the main campus
3. In-house campus phones to provide quick access to the Safety and Security Services desk (ext. 8300)
4. Parking and traffic control enforcement and assistance with accidents
5. Jumper cables and local locksmith contact information to unlock vehicles (the College cannot unlock vehicles.)

HCC complies with provisions of the Campus Security Act. Information and statistics regarding crimes and law enforcement on campus are available online at www.heartland.edu/about/statistics.html.

Class Cancellations

The College reserves the right to cancel a class because of low enrollment or instructor availability. Generally, cancellations are made at least a week before the start of the class. Every attempt is made to notify students by phone and mail and to assist in placing them in another section of the same course. Full refunds are granted for classes canceled by the institution.

Commencement

A graduation ceremony is conducted once a year, at the end of the spring semester. Fall and summer graduates are encouraged to return to participate in the commencement exercise. Students who intend to participate in commencement should indicate their intent on the application to graduate.

Disability Support Services

The College offers services for students with documented sensory, physical, learning and other disabilities. The impact of the disability is individually reviewed, and accommodations that will provide equal access to the classes and programs at the college are determined. Students with documented disabilities may benefit from the following accommodations: note taking, testing accommodations (e.g., extended time, readers and writers) and sign language interpreters.

If you believe you are eligible for disability services, please see the office of Disability Support Services located in the Student Services Center.

Class Schedule Changes

To change a class schedule, students must complete an add/drop form available in the Student Services Center or complete the transaction online. Deadlines for schedule adjustments are published in the class schedule.
Code of Conduct

Heartland Community College recognizes its students as both citizens and members of the academic community. As citizens, students have freedom of speech, assembly, association and press and the rights of petition and due process as guaranteed by the state and federal constitutions. As members of the academic community, students have the right and responsibility to participate in formulating and reviewing all College regulations and policies directly affecting them.

Upon enrolling at HCC, each student assumes an obligation to act in accordance with generally acceptable standards of responsible adult behavior, which include respect of other students and other members of the College community. If this obligation is neglected or ignored, the College must take appropriate disciplinary action in order to function effectively.

Upon committing or attempting to commit any act of misconduct on the College campus, whether in class, at an activity, function or event sponsored or supervised by the College, or elsewhere with a direct relationship between such act and the College, a student may be subject to disciplinary action.

Acts of misconduct include, but are not limited to:

1. Academic dishonesty, such as cheating, plagiarism, etc.;
2. Knowingly furnishing false information to the College;
3. Forgery, alteration or any misuse of College documents and records;
4. Conduct which significantly interferes with the College’s teaching, administration or other responsibilities;
5. Conduct which endangers the health, safety or well-being of members of the College community or visitors to the campus, including but not limited to, unauthorized and/or illegal possession, use or distribution of controlled substances, look-alike drugs, alcohol or unauthorized/illegal use or possession of firearms or any other weapon;
6. Violation of specific College rules and regulations, including those regarding campus parking, equipment, facilities and telecommunications/Internet;
7. Failure to comply with directions of College officials acting within the scope of their duties;
8. Any conduct which constitutes a violation of a federal, state or local law. College officials will cooperate with federal, state and local authorities in any investigation of such violations.

Students remain subject to federal, state and local laws; violation of these laws may lead to prosecution by agencies or persons, in addition to disciplinary action of the College.

Employment Services

Off campus employment services are coordinated through Workforce Services, located in the Student Services Center. Students can receive assistance in developing an efficient job-search strategy. Students are assisted with job-search techniques, research methods for finding career descriptions & projected opportunities both locally and nationally. Additional assistance is provided with resume writing and interviewing skills and job vacancy information. Visit Heartland’s online job board at www.collegecentral.com/heartland. (This information is also available under Workforce Services on page 182.)

Student employment opportunities for enrolled HCC students are available on campus. Applications for a variety of campus positions such as clerical office, computer lab support, tutors, readers/scribes for students with disabilities and other positions are available. Contact the Financial Aid Office located in the Student Services Center.

Disciplinary Procedures

Students may be disciplined up to, and including, temporary or permanent removal from the College for acts of gross misconduct or disobedience, violation of the Student Code of Conduct, the Academic Integrity Policy or for any and all other actions or unlawful conduct that would interfere with the educational process, disrupt the normal activities of the College or infringe upon the rights of others.

Any such violations may result in disciplinary action being taken against the student. Students will be notified by the Dean of Student Services of any disciplinary charges. The Dean of Student Services may require the student to discuss the charges in a private meeting. Should the charges not be resolved in this meeting, either the student or the Dean of Student Services may request a hearing before the Student Appeals Committee.

The student may have a representative of his/her choice present at the hearing. After consideration of all facts presented, the Student Appeals Committee will render a decision regarding disciplinary measures. The Dean of Student Services will inform the student of the committee’s decision. The student may appeal the committee’s decision to the college President.

Final Exam Policy

If a student has three or more final examinations scheduled for the same day, the student is required to take two exams that are scheduled for that day and to make arrangements with the other instructor(s) to reschedule the other final examination(s). The student must notify the instructor(s) about such conflicts by the withdrawal deadline of the affected class(es).
Grade Point Average

Grade point averages (GPA) are used to determine the academic standing of a student, as well as to award honors. The number of grade points earned in a given course is calculated by multiplying the number of points assigned to the specific letter grade received in the class by the number of semester hours the course carries. Thus, a grade of B (3.00 grade points) in a course which carries 4 semester credit hours would earn a student 12 (3 x 4) grade points.

A student’s GPA for a semester is computed by dividing the total number of semester hours attempted into the total number of grade points earned. The division is carried out three places to the right of the decimal point and rounded off to two places.

GPAs are calculated at the conclusion of each semester. Courses with grades I, W, U, R, CR, NC, #, NR and X are not considered part of the total hours attempted for purposes of determining a student’s GPA, but these grades are recorded on the student’s academic record.

GPAs only average the grades given for Heartland Community College courses numbered 100 level or above. A semester GPA represents the average for one semester; a cumulative GPA reflects the average of courses taken throughout a student’s academic career at HCC.

Philosophy of Grades

The Heartland Community College grading philosophy grows out of our vision of educational excellence. This common philosophy provides a framework for each academic division and instructor as they establish their own individual course grading system, evaluation methods and course policies using the shared general rubrics for letter grades given below.

Letter grades serve as a vehicle to promote meaningful evaluation of student achievement, to inform students of academic progress, and, as necessary, to improve student performance, habits, and practices. Using a letter grade as a prerequisite for subsequent courses means we believe that the grade was assigned through a conscious judgment about a student’s readiness to proceed to more advanced study.

At Heartland, students’ academic achievement is measured by their mastery of course objectives and content. We challenge students to meet these recognized standards of achievement and we assign grades based on their success in doing so. Simply stated, we believe that the responsibility for academic achievement rests with the student and that holding students responsible for their learning promotes their academic growth.

Letter Grade Rubrics

A (4.0) This grade represents consistently outstanding performance that demonstrates superior understanding and skillful use of important course concepts. Performance at this level signifies that the student is extremely well prepared to continue with more advanced study of the subject.

B (3.0) This grade represents performance significantly beyond the level necessary to achieve the course objectives. Work is of high quality but not consistently at an outstanding level. Performance at this level signifies that the student is well prepared to continue with more advanced study of the subject.

C (2.0) This grade represents an acceptable achievement of the course objectives. Performance at this level signifies that the student is reasonably well prepared to continue with more advanced study of the subject.

D (1.0) This grade represents less than adequate performance. It signifies questionable readiness to proceed with more advanced study of the subject.

F (0.0) This grade reflects unacceptable performance. The student is not yet ready to proceed with more advanced study of the subject, and must repeat the course successfully to receive credit.
Graduation Application

Students expecting to complete a degree or certificate must file an application to graduate and pay the $10 graduation fee no later than March 1 for spring and or summer and October 1 for fall. Applications are only available from an Academic Advisor in the Student Services Center. Students are encouraged to complete a credit evaluation with an advisor prior to expected completion.

Incompletes

An incomplete grade may be given to a student who, by the withdrawal date, can reasonably be expected to pass the course. Incompletes may be granted only when justified by extreme circumstances (e.g., serious illness, accident, death or serious illness in the immediate family). Incomplete grades are not given for such reasons as unjustified failure to appear for the final examination. A written agreement, outlining requirements to be met, must be signed by the instructor & the student. The agreed-upon requirements must be completed no later than the end of the following semester (spring semester for incompletes granted during the fall, and the following fall for incompletes granted during the spring and summer semesters). By the agreed-upon date, the instructor will assign a grade or the incomplete will be changed to an “F” if the requirements are not completed.

Internships

The goal of the internship program is to partner with area employers to ensure a quality workforce while providing students with the highest quality learning experience. By combining actual work experience with classroom knowledge, students become more qualified as employees in their career fields.

To participate in an internship, a student must have attended HCC for a minimum of one semester, have a minimum 2.0 GPA, have completed a minimum of 12 semester credit hours and have faculty approval. Specific internship courses may have additional prerequisites. Contact the Coordinator of Workforce Services in Student Services for additional information.

Library

The HCC Library provides access to books, videos, DVDs, magazines, journal articles and credible, free and fast information to help students succeed. The library contains a great collection of books, both fiction and non-fiction, an excellent collection of videos/DVDs on cultural and research topics, including feature films, magazines and journals in print and on the Internet. In addition, the HCC library card is accepted at 64 academic libraries across the state and their items can be requested online for delivery to the HCC library. Librarians are always accessible to help you find the information you need by phone, in person or via email.

Check out [www.heartland.edu/library](http://www.heartland.edu/library) or call 309-268-8292 for more details.

Honors

At the end of each fall and spring semester, a Dean’s List is published naming those full-time students who, during the preceding semester, earned at least a 3.5 GPA in at least 12 semester hours for the semester. Part-time students will be placed on the Dean’s List after they have completed a total of 12, 24, 36, 48 or 60-plus credits with a cumulative grade point of 3.5 or better.

New Student Orientation

All students are invited to New Student Orientation in the fall. Faculty, advisors and administrators make presentations on support services, faculty expectations in the classroom and tips on becoming a successful college student.

Online Resources For Students

The HCC Web site is [www.heartland.edu](http://www.heartland.edu).

On the HCC Web site, students may view the current and upcoming schedule of classes and can access information on programs of study for each academic department at the College. Thousands of full-text articles are available through the library’s Web site, [www.heartland.edu/library](http://www.heartland.edu/library). In addition, the IRIS online registration system will allow current HCC students to enroll, to access their class schedule, view grades, view an unofficial transcript and verify the mailing address that is on file.

Self360 provides information on a variety of student health issues and can be found at [self360.heartland.edu](http://self360.heartland.edu).

The HCC Workforce Services Career Resource Center offers students, alumni and members of the Heartland district an online job board at [www.collegecentral.com/heartland](http://www.collegecentral.com/heartland).

Open Computing

The Academic Computing Centers (ASC) at Bloomington-Normal, Lincoln and Pontiac are equipped with computer laboratories for word-processing, accessing course-required software, multi-media computer applications (CD-ROMs) and library research. Each ASC maintains the software packages required for the classes at that site. These packages may include the following: PageMaker, AutoCAD, Converge, Daedalus, Derive, Excel, Lotus 1-2-3, Microsoft Windows, Minitab, MS-Word and Peachtree. Use of ASC computers is free of charge to all Heartland students, faculty and staff and to members of the community. Trained staff at the main campus are available to assist students and other users.
Perkins Services

To qualify for Perkins Services, students must meet certain criteria with regard to their academic record or financial situation. In addition, students with a physical or learning disability, those with limited English proficiency or those enrolled in a program dominated by the opposite gender may benefit from the services of the Coordinator of Career/Technical Student Support Services. Programming and special instructional materials are among the available resources for qualified students.

Personal Development

Personal problems sometimes become obstacles in pursuing a satisfying, productive college experience. The Coordinator of Personal Development in Student Services is a trained counselor prepared to assist you and make referrals to local human services agencies when needed. Discussions are absolutely confidential.

SELF 360 is an online resource accessible from the HCC Web site for students. It provides up-to-date information related to personal development & mental health. (See online resources for students, page 177)

Phi Theta Kappa – Alpha Omega Xi Chapter

Phi Theta Kappa is the international honor society for two-year college students. To be nominated to Heartland’s Alpha Omega Xi Chapter of this society, a student must have completed at least 12 credit hours with a grade point average of 3.5 or better and be recommended by faculty members. Members take part in social, community and fund-raising activities and have opportunities to take part in national events.

Privacy of Student Educational Records

Student records are maintained in a manner that protects the privacy of students and provides eligible students access to the information recorded. The Family Educational Rights and Privacy Act (PL 93-380) provides that educational institutions allow students to suppress certain information regarded as public directory information. Heartland defines public directory information as:

1. Name, addresses & telephone numbers
2. Major field of study
3. Dates of attendance
4. Enrollment status (part-time, full-time)
5. Degrees, honors and certificates received or anticipated
6. Participation in activities
7. Institutions previously attended
8. Student login name

To suppress the above public information, a student must submit a letter to the Dean of Student Services prior to the end of the second week of class.

Project RISE/Student Support Services Program

Project RISE (Resources to Increase Student Excellence) is a component of the federally funded TRIO-Student Support Services Program (SSSP). Project RISE is designed to improve the persistence, graduation and transfer rate by assisting first-generation and limited-income college students to overcome barriers. Project RISE provides program participants with several opportunities to increase college success.

As participants in learning communities, students receive resources to improve grades in math, English and other general education classes. Participants can attend a variety of workshops and seminars to improve or enhance college success skills. Project RISE students have access to financial aid including supplemental grant aid awards. Project RISE peer mentors serve as positive role models who assist participants in the achievement of personal and academic goals. An array of cultural events and activities are available to students including visits to four-year college campuses. For more information about becoming a participant in Project RISE, call (309) 268-8404 or visit SCB, Room 2300.
Repeating a Course

A student may repeat any course, if the grade received was below “C”, one time. In programs with selective admission, students must be readmitted to the program to repeat specialty courses. When a course is repeated, credit will be granted only once (except those courses with variable credit as noted in the course description of the catalog or schedule), and only the higher grade received will be calculated into the grade point average on the official transcript. The lower grade will be recorded as an “R” on the official transcript.

Responsibilities of Advisors

Academic Advisors should assist each student to realize the educational benefits available to them. As such, they are responsible to:

1. Meet with students on a drop-in basis and by appointment.
2. Have a thorough understanding of the curriculum, institutional requirements, course sequences and degree requirements.
3. Acquaint students with college requirements, policies, services and opportunities.
4. Help students understand their past educational achievements and how these are related to the students' present educational goals.
5. Help students plan each semester’s program of courses, educational plan and life plan.
6. Assist students when they are not achieving in accordance with their abilities, and help them plan activities to correct their difficulties.
7. Refer students as needed to inside and outside resources.
8. Be aware of students’ progress in their various academic pursuits by sufficient contact and keeping of accurate records.
9. Be an advocate for the student in all matters.

Responsibilities of Students

Students have a responsibility in the advising system and should take the initiative in seeking advisement and developing close relationships with their advisors. In order to do this effectively, students should:

1. Learn office hours and availability of advisement services early in the semester. Full-time and degree seeking students are required to make appointments for advisement.
2. Secure a copy of the current course schedule and have an idea of courses they plan to take and be able to discuss their interests and goals with the advisor.
3. Become familiar with general education requirements, graduation requirements and program requirements.
4. Consult with an advisor concerning changes in their approved schedule.
5. Consult with an advisor when they are in academic difficulty.
6. Meet with an advisor twice during each semester.

As citizens, students remain subject to federal, state and local laws. Accordingly, violation of these laws may lead to prosecution by agencies or persons in addition to the College.

Student Appeals Procedure

Students, faculty and staff are always encouraged to make every attempt to resolve problems/concerns at the point of origin. However, if resolution cannot be achieved in this manner, a formal appeal should be filed.

Appeals may be initiated by either students or faculty/staff for any of the following reasons:

1) Grade challenges
2) Resolving differences between students and faculty/staff
3) An exception to a college policy
4) Academic dismissal
5) An exception to a graduation requirement
6) Academic integrity violations

(There are specific procedures relating to cases of sexual harassment, financial aid appeals and disciplinary action. These are outlined in this publication as well as in information available in Student Services.)

A. Procedures for Appealing Grades and Resolving Differences Between Students and Faculty/Staff Members

The following steps are designed to resolve differences between a student and faculty/staff members at the lowest level possible. The student may be assisted by the Vice Chair of the Curriculum and Academic Standards Committee (or a designated alternative) throughout the appeals process:

1. Discussions regarding the concern are encouraged first between the student and the faculty/staff member.
2. If the result of these discussions is not satisfactory to either party, another discussion should be held with the faculty/staff member’s supervisor, who will then make a decision based on the discussions.
3. If the results of Step 2 are unsatisfactory still, either party may appeal to the Student Appeals Committee via a written request to the Dean of Student Services. The Dean will convene a meeting, at which the committee will hear the appeal and render a decision based on the evidence presented. Grade appeals must be initiated in writing no later than the end of the following semester. A spring semester appeal would be initiated for the previous fall semester; a fall semester appeal would be initiated for an earlier spring or summer semester.
4. If either party is not satisfied with the decision of the Student Appeals Committee, either may initiate a written appeal to the Vice President of Instruction within ten working days of the Student Appeal Committee's decision. The Vice President of Instruction will make a decision based on the evidence presented.
5. If either party is not satisfied with the
B. Procedures for Exceptions to College Policies and Academic Dismissals

The following are steps to appeal an existing College policy or academic dismissal:

1. Students should first discuss the specific situation and appropriate college policy with an academic advisor.

2. If the student is not satisfied following the discussion in Step 1, the student may appeal to the Student Appeals Committee by sending a written request to the Dean of Student Services. As chair of the Student Appeals Committee, the Dean will convene a meeting, at which time the Committee will hear the appeal and render a decision based on the evidence presented.

3. If the student is not satisfied with the Committee’s decision, a written appeal to the President of the College may be made. This appeal must be initiated within ten working days of the Student Appeals Committee’s decision. The decision of the President will be final.

C. Procedures for Exceptions to Graduation Requirements

The following are steps to appeal an exception to a graduation requirement:

1. Students should discuss the specific situation and appropriate College policy with an academic advisor.

2. If the student is not satisfied following the discussion with the academic advisor, the student may appeal his/her request by sending a written request to the Vice President of Instruction. The decision of the Vice President of Instruction will be final.

Midterm and final grades will be available to students online at www.hc.edu through IRIS (Internet Registration, Information & Services) which is listed under the Current Students button. For their initial HCC login ID and password, students should refer to their current class schedule. Once in IRIS, the student should click on the following links to view midterm and final grades:

Click to Start > Learner Services > Academics > View My Grades.

The student should click on the hyperlink for the desired semester and career. An example would be to click on the hyperlink for Summer 2006 Undergraduate. If a student does not have Internet access, a copy of the grade report may be obtained in person by visiting the Student Services Center in Normal, Lincoln or Pontiac. Grade reports will be mailed only to the student’s address on file if requested over the phone.

Student Senate

The purpose of the Heartland Community College (HCC) Student Senate is to:

1. Represent the opinions, rights, interests and concerns of the student body
2. Establish productive and sound communication and cooperation with HCC staff
3. Promote student awareness of the benefits & positive aspects of HCC
4. Promote social and cultural benefits of HCC
5. Provide pertinent informative seminars/lectures to benefit the well-being of the student body
6. Recommend approval of clubs, organizations and publications to appropriate HCC administration.

Further information is available from the Director of Student Life located in the Student Services Center.
Student ID Card

Students are issued identification cards when tuition is paid. ID cards are required for use of the Heartland library and for entry into HCC computer labs.

Student Life

HCC has developed a program of Student Life to provide students with opportunities for involvement with the College beyond the classroom. Student life consists of a broad array of activities and organizations described below.

Athletics

Beginning in Fall 2007, HCC will participate in inter-collegiate athletics. For information, contact the HCC Athletic Director.

Intramural competition in basketball, roller hockey, softball and volleyball is available as student interest warrants. Stop by Student Services for further information about any organization.

Clubs and Organizations

Student activities at Heartland are oriented toward recreational, intellectual and cultural interests of students. The current list of student organizations offered at Heartland can be viewed at www.heartland.edu/studentActivities.

Students interested in establishing an organization should submit a constitution with clearly stated aims and objectives to the student government. An organization proposal should also include a proposed structure for the group, a faculty/staff sponsor and activities which must be in compliance with the rules and regulations of Heartland Community College.

Student Development

HCC offers a range of student development activities designed to broaden the college experience and encourage individual participation and growth. For details and additional information on student development activities, contact Dr. Kathleen Collins, Dean of Student Services and Academic Support.

Student Right-to-Know Disclosure

As an institution participating in Title IV Higher Education Act programs, Heartland Community College is required by federal law to disclose graduation and transfer-out information in compliance with the Student Right-to-Know Act. Information on program completion and transfer to other institutions by Heartland students is available under Student Right to Know Act at www.heartland.edu/AtoZ.jsp.

Student Trustee

The Student Trustee serves on both the Board of Trustees and as a Student Government general member. The Student Trustee is responsible for relaying the views, concerns and goals of the student body to the Board and providing pertinent information on issues covered by the Board of Trustees. The Student Trustee is an appointed position.

Study Abroad Programs

Many study abroad opportunities are available to qualified students. Semester and summer programs are currently available in England, Austria and Costa Rica. For further details & additional program sites, contact the Coordinator of Special Programs or log on to www.heartland.edu/international.

Transcripts

Official transcripts must be requested in writing. Students may stop by the Student Records desk in the Student Services Center or in Lincoln or Pontiac to complete the form. The form may also be obtained online at www.heartland.edu/transcripts. Once completed, the form may be mailed or faxed to the Records Office. Be sure to include the complete mailing address of the recipient(s).

An unofficial transcript may be obtained at the Records Office during regular business hours or online at www.heartland.edu through IRIS (Internet Registration, Information and Services) listed under the Current Students button.

Transfer to Other Colleges and Universities

Students who intend to transfer to a four-year institution should plan their first two years at HCC with an Academic Advisor in order to assure the smoothest transfer possible. Since graduation requirements vary among senior colleges and universities, students are encouraged to discuss their transfer plans early to ensure appropriate course selection.

It is the student’s responsibility to follow the recommendations of the institution to which he/she intends to transfer upon completion of study at HCC.

Students preparing to transfer are advised to refer directly to the official catalog of the college or university they plan to attend and meet that institution’s requirements and recommendations for a selected area of concentration.

Check out the IAI Web site at www.iTransfer.org.

Tutoring

Comprehensive tutoring services are available to all HCC students in a variety of formats - all are free of charge. Individuals and small groups may access tutoring in specific courses or programs (e.g. MATH 087, nursing, ENGL 101), basic skill areas (e.g. reading, writing, math), study skills and open learning courses. In all areas, the goal of tutoring is to help students become active, independent learners. Tutors are scheduled at a variety of convenient times throughout the week at the Academic Support Center in Bloomington/Normal and at the Lincoln and Pontiac Centers.

Tutoring by Appointment: Small groups or individual students may schedule regular, weekly appointments with a tutor.

Note: Appointment tutoring is limited. Students need to schedule appointments in person at HCC locations or call in their request.
Student Services

Drop-In Tutoring: Drop-in tutors are available during regularly scheduled tutoring hours or for students needing answers to specific questions or clarification of particular concepts.

Study Groups: A study group facilitator may assist groups of three or more students enrolled in a particular section of a course. A study group request form should be completed and submitted as requested, and a weekly meeting time identified. Some study groups for math are pre-arranged for students at the start of the semester.

In-class Tutors: Certain courses are attended by in-class tutors (e.g., ENGL 094, ASCM 163) to assist students with the support they need to succeed. In-class tutors are also available during specially designated drop hours at the ASC to assist students attending these courses.

Faculty Referrals for Tutoring: Students may request tutoring on their own, but faculty may also refer students for tutoring. Instructors may request out-of-class assistance for their students by completing a faculty referral for tutoring form available at the ASC reception desk.

Withdrawals

Student Initiated
It is the student’s responsibility to officially withdraw in writing from a course or from the College. A student may withdraw at any time until the end of the 12th week of the semester or until the published withdrawal date for a class meeting less than 16 weeks. Withdrawal forms may be obtained from the Student Services Center. If circumstances prevent the student from coming to the College, withdrawal may be completed by mail. Withdrawal requests made by telephone will not be accepted.

No refunds will be authorized for withdrawals after the 10th day of the semester. Stopping payment on a tuition check will NOT automatically cancel a registration.

Students are responsible for understanding that withdrawal may result in loss of financial aid and that failing to properly withdraw from a class may result in receiving a failing grade of “F” for that class.

Faculty/Administrative Initiated
At midterm, the instructor is required to certify students’ attendance according to the requirements of the Illinois Community College Board. At midterm, or at any other time during the semester until the close of business on the last day to withdraw, an instructor may administratively withdraw a student whose pattern of absence causes the instructor to seriously question the intent of the student to further pursue the course or to complete the course with a passing grade.

A student also may be withdrawn from a class by administrative action as a result of emergency or disciplinary procedures under the provisions of Board policy on Students’ Rights and Responsibilities.

Students have the right to appeal either a faculty or administrative withdrawal through the student appeals procedures.

Workforce Services

Resources and services are available to assist students to develop an efficient job search strategy and career plan. Information is available on specific employment opportunities, both locally and nationally. Assistance in researching potential careers, labor market information, writing a resume and cover letter, and developing successful interviewing skills is also offered. (Information also available under Employment Services on page 175.)
Nicole knows discipline. The military school graduate is a full-time Heartland student and works at a popular Mexican restaurant. Completing military basic training during a summer break will help her pay to transfer to the University of Illinois-Chicago where she plans to major in journalism. One day, she hopes you’ll be able to read her byline in a magazine.
COLLEGE EXPENSES

Tuition & Fees

Tuition for residents of District 540 is **$67 per credit hour**.

Persons who own property in District 540 and pay taxes to HCC will pay the in-district rate of $67 per credit hour.

Individuals attending another institution of higher learning within the district will pay the in-district rate of $67 per credit hour.

Persons who reside outside the district, but work full-time within the district will pay the in-district rate of $67 per credit hour. This includes dependents of full-time employees.

The out-of-district rate is $134 per semester hour and out-of-state rate is $201 per semester hour.

All international students with an F visa will pay the out-of-state rate of $201 per credit hour.

Tuition is subject to change without notice. Payment of tuition can be made using cash, check, Visa, MasterCard, Discover or FACTS payment plan. If a student uses the online FACTS payment plan, they may pay their tuition and fees balance in full or opt for one of the installment payment plans. FACTS accepts payments via a checking or savings account, MasterCard, Discover or American Express. To learn more visit [www.heartland.edu/pay](http://www.heartland.edu/pay).

A **student life fee of $3 per credit hour** will also be assessed on all courses.

Students enrolling in certain courses will be assessed a course or lab fee in addition to tuition. These courses and fees are indicated in the class schedule.

Other fees include the following:

- **Graduation Fee:** $10
- **Returned Check Fee:** $15

Accelerated College Enrollment (A.C.E.) Grants For High School Students Taking College Courses

Accelerated College Enrollment (A.C.E.) grant funds are available to help pay tuition for college-level courses while students are still enrolled in, and attending, high school. A.C.E. funds are available for fall and spring classes only (not summer). Tuition is paid at the time of enrollment. At midterm, records are checked to make sure progress is being made toward completion of the course(s) - that means earning a “C” or better. Upon verification, reimbursement of $50.00 for each course is made up to a maximum of $150.00 per term. A.C.E. funds are subject to state funding.

Chargeback Policy

District 540 residents enrolling in programs not offered by HCC are eligible to receive chargebacks to other community colleges offering those programs. Students must complete a chargeback application at Heartland Community College at least 30 days prior to the start of the semester for which the chargeback is sought. Chargeback applications may be obtained at any of the College locations.

Cashier/Business Office

A cashier is located in the Student Services Center to accept payments of tuition and fees. Cash (Normal campus only), check, debit and/or VISA, MasterCard and Discover cards are accepted. Payment by phone is also accepted with a credit card number. See the schedule of classes for information on payment plans.

The Business Office is located on the second floor of the Community Commons Building, CCB 2100.

Lincoln and Pontiac sites accept payment of tuition only in the form of checks or VISA, MasterCard and Discover.
Payment Policy

Deadlines for the payment of tuition and fees are published in the class schedule. Failure to submit payment by the deadline may result in the cancellation of course enrollments. It is the student’s responsibility to officially withdraw from courses if he/she does not plan to attend to avoid financial obligation to the college.

Tuition is payable by cash (Normal only), check, bank debit card, and/or use of Visa, MasterCard, Discover or FACTS payment plan.

Refund Policy

100% refunds are made to students who officially withdraw from courses during the first 10 days of class for a full semester course. For eight-week courses, the full refund period is the first five days of class. See the class schedule for published deadlines. Official withdrawals require the student’s signature. No telephone withdrawals will be accepted. If the student is unable to come to the college, a letter may be submitted requesting withdrawal from classes. The postmark on the letter will be used to determine eligibility for a refund.

A student may be considered for a full refund of tuition if a licensed physician documents that a major medical situation has occurred which supports the student’s withdrawal from his/her classes. Withdrawal must be complete, not a reduced load. To be considered for a medical withdrawal, a letter must be written in a timely manner, including medical documentation, to the Dean of Student Services.

Reservists called to active duty while enrolled at Heartland Community College shall receive a full refund or credit against future enrollment.

If a class is canceled because of insufficient enrollment or for another reason, students will receive full reimbursement of tuition and fees.

Tuition Waivers

For Senior Citizens

District 540 residents who are 65 years of age or older are eligible for a waiver of tuition. Verification of age is required by presenting an Illinois Driver’s License or other appropriate documentation at the time of enrollment. This waiver does not apply to the student life fee, lab fees or the purchase of textbooks or supplies.

Financial Aid

Students attending HCC are eligible to participate in several financial aid programs. The major sources are the Federal Pell Grant, Federal Work-Study, Federal Supplemental Educational Opportunity Grant (FSEOG) and the Illinois Monetary Award Program. Students are encouraged to complete the Free Application for Federal Student Aid (FAFSA) electronically at www.fafsa.ed.gov or by completing a paper application by June 1 to obtain assistance for the following academic year. The HCC college code, 030838, should be entered in step six on the FAFSA. Applications are available at the Heartland Community College Financial Aid Office and all area high schools.

To be eligible to receive financial aid at Heartland, a student must meet the following requirements:

1. Have a high school diploma or GED
2. Be enrolled as a regular student pursuing a degree or certificate
3. Be enrolled at least half-time, six credit hours (exceptions are possible for some Pell Grant recipients)
4. Be a U.S. citizen or eligible non-citizen
5. Make satisfactory academic progress
6. May receive only one award that is designated to specifically pay for tuition

The amount of financial aid and/or benefits received from the various programs is based on the credit hours of enrollment. Enrollment status is defined as follows:

- 0-5 credit hours less than half-time
- 6-8 credit hours half-time
- 9-11 credit hours three-quarter time
- 12 + credit hours full-time

Federal Pell Grant

The Federal Pell Grant is the largest source of financial assistance for HCC students. The grants usually range from $200 to $4,050 for the academic year, depending on federal funding, financial need and hours of enrollment. After completing the FAFSA, a Student Aid Report (SAR) will be forwarded to the student from the processing agency which indicates the expected family contribution (EFC). The HCC Financial Aid Office will also receive the data electronically.

Federal Work Study

A limited number of student employment positions are available on campus to students who qualify for the Federal Work-Study Program. Students normally work between 10 to 20 hours per week in various departments. Applications for these positions are available in the Financial Aid Office.

Federal Supplemental Educational Opportunity Grant (FSEOG)

Supplemental grants are awarded to students to supplement Pell Grant funds received. Students will be notified by the Financial Aid Office if they are eligible. Grants usually range from $250 - $1000 and priority is given to those students submitting the FAFSA by June 1.

Illinois Student Assistance Commission (ISAC) Monetary Award Program (MAP)

All residents of Illinois automatically apply for the MAP grant by submitting the FAFSA. MAP is a need-based program and students receive notification of eligibility from HCC. Eligible students will receive grants designated to pay tuition costs, contingent on state funding. Students can only receive MAP for a maximum of 75 paid credit hours at HCC.
COLLEGE EXPENSES

Illinois Veteran Grant (IVG)
Students who entered the military from the state of Illinois, served at least one year of honorable active duty and returned to Illinois within six months of separation, qualify for the Illinois Veteran Grant.

The Illinois Veteran Grant pays tuition and certain fees at state-supported institutions for 120 credit hours of enrollment. The grant is not based on financial need, but students must maintain satisfactory academic progress. Applications for the IVG are available in the Financial Aid Office.

Illinois National Guard Scholarship
Members of the Illinois National Guard or the Illinois Naval Militia who have served at least one year and are concurrently in the Guard or Militia may apply for this scholarship. The scholarship will pay tuition and certain fees for 120 credit hours of enrollment at any state-supported institution. Applications are available in the Financial Aid Office and must be submitted for each academic year of enrollment.

Repayment of Federal Pell and FSEOG Funds
Any student receiving Federal Pell or FSEOG funds who completely withdraws from all classes prior to the completion of 60% of the enrollment period may be required to repay a portion of the funds received. Please contact the Financial Aid Office if you must withdraw from classes.

Federal Financial Aid for Veterans
The Financial Aid Office will provide assistance and enrollment certification for veterans who wish to use their benefits at HCC. Eligible programs include, but are not limited to, the following:
- Montgomery G.I. Bill (Chapter 30)
- Selected Reserve Educational Assistance Program (Chapter 106)
- Veterans Educational Assistance Program (Chapter 32)
- Vocational Rehabilitation (Chapter 31)
- Survivors and Dependents Educational Assistance (Chapter 35)

Applicants must complete VA forms and submit proof of their military service record and official transcripts for all previous college work. In addition, proof of birth, marriage and divorce certificates are required for certain veterans programs.

Financial Aid Cooperative Agreement with Illinois State University
Heartland Community College and Illinois State University (ISU) have entered a consortium agreement to maximize financial aid eligibility for students concurrently enrolled at both institutions. Under the agreement, the hours of enrollment at each institution can be combined for financial aid purposes. To be eligible, a student must be enrolled for at least six credit hours at the home institution and the hours must be transferable to the student’s major course of study. It is the student’s responsibility to contact both ISU and Heartland Financial Aid Offices prior to the enrollment period to complete a consortium contract.

College Zone
Heartland has been designated by the Illinois Student Assistance Commission (ISAC) as a College Zone outreach center. College Zone provides students and families with on-site computer access to year-round assistance for FAFSA completion as well as providing information on planning and paying for college. To access, go to www.collegezone.com.
**Financial Aid Tuition Payment Extension**
An extension of the tuition payment may be given to students receiving outside grant or scholarship assistance. For a Pell Grant extension, a complete application must be on file with the Financial Aid Office. For an Illinois Veterans’ Grant/National Guard Scholarship or assistance from outside agencies, an award letter or voucher from the agency must be presented to the Financial Aid Office. Funds sent directly to the student cannot be used for a tuition payment extension.

**Satisfactory Academic Progress Policy For Financial Aid**
The College is required to establish satisfactory progress standards for federal and state financial aid recipients in accordance with the U.S. Department of Education regulations. These standards insure that only those recipients demonstrating satisfactory progress toward the completion of their education continue to receive financial aid.

**Evaluation of Satisfactory Academic Progress**
Each financial aid recipient’s satisfactory progress is evaluated annually. It will be determined if the student is in good standing or will be denied financial assistance for future enrollment periods.

The student must meet all three progress requirements:
1. Completion rate
2. Grade point average and
3. Maximum time frame to remain in good standing

Students will be notified by the Financial Aid Office if they are placed on denial status for financial aid.

**Denial Status for Financial Aid**
Denial status will prevent the student from receiving any Title IV financial assistance until satisfactory academic progress is achieved.

**Criteria for Satisfactory Academic Progress**

1. **Completion Rate**
   A student must have earned hours equal to at least 67% of the total hours attempted for the enrollment period to remain in good standing.
   Students not earning 67% of the hours attempted will be placed on immediate denial status for future financial aid consideration.
   Attempted hours are defined as the hours for which the student is enrolled and charged tuition (10th day of the semester). Earned hours are defined as the sum of hours for which a student has earned a grade of A, B, C or D. Withdrawals, incompletes, audits, no-credit, repeats and failures are not earned hours.

2. **Grade Point Average Requirements**
   Financial aid recipients must maintain the following cumulative hours attempted and grade point average (GPA) in order to meet satisfactory progress requirements:
   - **Cumulative Hours Attempted**
   - **Minimum Cumulative GPA**
   - 1-16 1.50
   - 17-32 1.70
   - 33-48 1.85
   - 49 + 2.00

3. **Maximum Time Limit Requirements**
   A student’s eligibility for financial aid will be terminated at the point where 96 credit hours have been attempted for the associate degree and, for a certificate, when 150% of the total hours required, as stated in the College Catalog, have been attempted.
   Hours attempted is the sum of all Heartland Community College credit hours (10th day enrollment) whether or not financial aid was received.

**Appeal and Reinstatement**
The student may appeal their denial status by submitting a written request to the Financial Aid Appeals Committee explaining the exceptional circumstances as to why the Satisfactory Academic Progress standards were not met. Appropriate documentation to support the exceptional circumstances expressed in the appeal must also be submitted. Medical problems, serious illness, death of a family member, relocation or employment changes may be considered as “exceptional circumstances”. The committee will review the appeal and provide a written explanation of the decision to the student. If this decision is not satisfactory, the student may appeal to the Dean of Student Services for further review. If the decision is still not satisfactory, the student may appeal this decision to the Office of the President. The President’s decision on the appeal will be final.

The policy does not preclude a student from enrolling in subsequent semesters and having financial aid reinstated by the Financial Aid Office once all progress standards are met.

**Repeat Credit Hours**
Financial aid will cover the cost of tuition for a maximum of one repeat attempt of any given course. Tuition and fee costs for repeat attempts of two or more must be paid for by the student.

**Developmental Courses**
Financial aid will cover the cost of tuition for a maximum of 30 hours of developmental course work. Developmental is defined as any sub 100 level course.
Heartland Community College Scholarship Opportunities

The Heartland Community College Foundation administers a variety of scholarships designed to reward student achievement, encourage student leadership and provide financial assistance. Scholarships are supported through the generosity of individuals, businesses and organizations. All awards are based on the availability of funds.

The following scholarship information is current as of June 2006. Students are encouraged to visit www.hccfoundation.org/scholarships.html, the Foundation Office or the Financial Aid Office for the scholarship guide and application forms and the most current and complete information on available scholarships, application procedures and deadlines. Applications are also available from the Pontiac and Lincoln Centers, Towanda Plaza facility and high school guidance counselors.

April 1 is the application deadline unless an alternate deadline is listed in the scholarship description. Prospective and current, full- & part-time students who meet the eligibility requirements are encouraged to apply.

Scholarship selection is competitive. Scholarships are awarded according to criteria established by the sponsor. Eligibility criteria may be updated without notice.

Universal Requirements for all Foundation Scholarships
The following are minimum requirements that apply to all Heartland Community College Foundation scholarships, unless otherwise noted:

- Applicants must meet District 540 residency requirements at the time of application.
- Foundation scholarships are for HCC degree or certificate seeking students only. They may not be used for dual enrollment and are non-transferable.
- Unless other GPA requirements are listed, current HCC students must at least meet College academic requirements for good standing (see Academic Probation/Dismissal Policy - page 173).

- Students applying for scholarships requiring evidence of financial need must complete the Free Application for Federal Student Aid (FAFSA). All applicants are encouraged to complete the FAFSA to maximize their eligibility. Results must be available by the application deadline. Apply early. Please visit www.fafsa.ed.gov or the Financial Aid Office for more information.

Trustee Scholarship
Award: Tuition and fees for 12-18 credit hours per semester
Requirements:
- Valedictorian or salutatorian of a District 540 high school recognized by the Illinois State Board of Education (see the list of high schools on page 9 or at hccfoundation.org/scholarships.html).
- Full-time enrollment at HCC for fall semester immediately following high school graduation

NOTES:
- This scholarship is guaranteed to eligible students.
- Eligible students must submit completed Trustee Scholarship Application available from the HCC Financial Aid Office, online at www.hccfoundation.org or from high school guidance counselors by June 30.

Presidential Scholarship
Award: Tuition and fees for 12-18 credit hours per semester – up to 4 semesters
Requirements:
- Cumulative high school GPA of at least 3.5/4.0 or cumulative HCC GPA of at least 3.0 with 30 or more credit hours completed at time of application
- Full-time enrollment - minimum of 12 credit hours per semester
- At least one-third of these scholarships will be awarded to students with evidence of financial need. The remainder have no financial need requirement.
Dean's Scholarship
Award: Tuition and fees for 6-11 credit hours per semester – up to 4 semesters
Requirements:
- Cumulative HCC GPA of at least 3.0 with minimum of 6 credit hours completed at time of application
- Part-time enrollment only - minimum of 6 and maximum of 11 credit hours per semester
- At least one-third of these scholarships will be awarded to students with evidence of financial need. The remainder have no financial need requirement.

American Association for Women in Community Colleges Heartland Chapter Scholarship
Award: $250 per semester for tuition, fees, educational expenses – up to 6 semesters
Requirements:
- Must be female, preferably at least 25 years of age
- Evidence of financial need
- Preference for applicants ineligible for PELL or ISAC MAP grants
- Current HCC students - cumulative GPA of at least 2.5
- Full- or part-time enrollment - minimum of 6 credit hours per semester

Art Adams Scholarship
Award: $500 per semester for tuition, fees, educational expenses – up to 2 semesters
Requirements:
- Strong record of volunteer service - broadly defined to include community, family and church
- Evidence of financial need
- Full- or part-time enrollment - minimum of 6 credit hours per semester

Bloomington Rotary Club Scholarship
Award: Fall semester award of $500 for tuition, fees, educational expenses
Requirements:
- Strong record of community service
- Evidence of financial need
- Full- or part-time enrollment - minimum of 6 credit hours per semester

Community Scholars
Award: Tuition and fees for a maximum of four semesters of full-time enrollment (12 - 19 credit hours) and two summer sessions (maximum of 8 credit hours) plus $200 book stipend for 3rd and 4th semester
Requirements:
- Recent high school graduate
- Competitive selection based on involvement in community and/or high school
- Must participate in a community service internship each semester
Note: This scholarship requires a special application that is available from your high school guidance counselor or the HCC Financial Aid Office.

Marilyn Casey Scholarship
Award: $500 per semester for tuition, fees, educational expenses – up to 4 semesters
Requirements:
- Enrollment in HCC Associate Degree Nursing program
- Full- or part-time enrollment - minimum of 9 credit hours in nursing courses per semester
- Cumulative high school or college GPA of at least 3.0
- Must show evidence of financial need
See scholarship guide or nursing advisor for additional application requirements and alternate application deadline.

COUNTRY Insurance and Financial Services Scholarship
Award: Maximum of $500 per semester for tuition and fees only – up to 2 semesters
Requirements:
- Reserved for minority student
- Full- or part-time enrollment - minimum of 6 credit hours per semester

The Electrolux Home Care Products Scholarship
Award: Maximum of $500 per semester for tuition and fees only – up to 2 semesters
Requirements:
- Full- or part-time enrollment - minimum of 6 credit hours per semester
- Reserved for female or minority student

Heartland Faculty Association Scholarship
Award: $500 for tuition, fees, course required materials
Requirements:
- Must be union member or financially dependent child or spouse of a union member and provide proof of current membership with application
- Evidence of financial need
- Preference given to students who do not receive more than $1,000 of assistance from other sources including, but not limited to, ISAC MAP, PELL grants and scholarships
- Full- or part-time enrollment - minimum of 9 credit hours per semester

Illinois Health Improvement Association Scholarship
Award: Variable amount for tuition, fees, educational expenses
Requirements:
- Enrollment in the HCC Associate Degree Nursing or Practical Nursing Program
- Cumulative high school or college GPA of at least 3.0
- Full- or part-time enrollment - minimum of 9 credit hours in nursing courses per semester
- Commitment to providing direct medical care within the State of Illinois
- Evidence of financial need
See scholarship guide or nursing advisor for additional application requirements and alternate application deadline.

Raymond A. Johnson Memorial Scholarship
Award: Fall semester award of $500 for tuition, fees, educational expenses
Requirements:
- Enrollment in information technology, computer networking or digital media communication degree or certificate program
- Cumulative HCC GPA of at least 3.0 with minimum of 9 credit hours completed at time of application
- Part-time enrollment only - minimum of 3 and maximum of 11 credit hours per semester
- Male at least 25 years of age
- Preference given to displaced workers and re-entering students
**Dr. Richard L. Kelly Scholarship**  
Award: Fall semester award of $500 for tuition and fees only  
Requirements:  
- Preference for students pursuing degree in business or related field  
- Evidence of financial need  
- Full-time enrollment - minimum of 12 credit hours per semester

**John P. Messinger Scholarship**  
Award: Equivalent of tuition for 6 credit hours per semester may be used for tuition, fees, educational expenses  
Requirements:  
- Must be graduate of HCC’s GED Program  
- Evidence of financial need  
- Full- or part-time enrollment - minimum of 3 credit hours per semester  
- Preference for non-traditional students and parent/students  
See scholarship guide for additional application requirements and alternate application deadline.

**Poulton/Mitchell Family Scholarship**  
Award: Fall semester award of $500 for tuition, fees, educational expenses  
Requirements:  
- Enrollment in HCC childcare or early childhood education degree or certificate program  
- Evidence of financial need  
- Must have completed at least 6 credit hours at HCC and meet College academic standards for good standing  
- Full- or part-time enrollment - minimum of 3 credit hours per semester  
- Must be at least 29 years of age

**Prairie Scholarship**  
Award: $500 per semester for tuition, fees, educational expenses – up to 2 semesters  
Requirements:  
- Must demonstrate motivation to learn and succeed  
- Evidence of financial need  
- Full- or part-time enrollment - minimum of 6 credit hours per semester

**Gary Riepe Memorial Scholarship**  
Award: Fall semester award of $500 for tuition, fees, educational expenses  
Requirements:  
- Current enrollment in an HCC English course  
- Preference given to non-traditional students  
- Full- or part-time enrollment - minimum of 6 credit hours per semester  
See scholarship guide for additional application requirements.

**John N. Stevens Memorial Scholarship**  
Award: Tuition for 12 credit hours per semester – up to 4 semesters  
Requirements:  
- Strong record of community service and extra-curricular involvement  
- Current enrollment in high school or college  
- History of successful employment in full- or part-time summer, seasonal or work-study position to demonstrate work ethic  
- No minimum high school or college GPA requirement but applicant must have demonstrated ability to complete required coursework.  
- Full-time enrollment - minimum of 12 credit hours per semester during term of award

**Joe Talkington / Star Uniforms Scholarship**  
Award: Fall semester award of $500 for tuition, fees, educational expenses  
Requirements:  
- Enrollment in HCC nursing program  
- Evidence of financial need  
- Full- or part-time enrollment - minimum of 6 credit hours per semester

**Shelly Weidenbenner Scholarship**  
Award: Two awards of up to $500 for tuition and fees  
Requirements:  
- Must be a graduate of Bloomington High School, preferably of most recent graduating class  
- Full-time enrollment - minimum of 12 credit hours per semester.
Masa has to think carefully what time it is before he calls home. Given the 14-hour time difference between here and his home city of Nagoya, Japan, a simple phone call to his family takes a bit more planning. Masa is an example of one of many international ties Heartland has to communities around the globe.
Alumni

The Heartland Community College Alumni Program works to keep graduates connected to the College and with each other. Graduates and community members can reach the Alumni Program by calling (309) 268-8168 or online at www.heartland.edu/alumni. Graduates who maintain a current address with the Alumni Office may receive an alumni newsletter.

ATM

An automated teller machine is located in the Student Commons Building, first floor at the main campus.

Attendance Policy

Since satisfactory progress is important to college success, all students are expected to attend classes regularly and promptly. The specific attendance policy of any course is determined by the individual instructor of that course as outlined in the syllabus. Specific attendance requirements may exist in certain courses or programs, or for students receiving special services.

Students who are absent from a class or laboratory period are held responsible for material and work they may have missed by their absence or tardiness. Instructors are not required to accept late work or allow make-up testing. If accepted, such work may receive a lower grade.

Bookstore

Textbooks are available for purchase at the Heartland Community College Bookstore located on the first floor of the Student Commons Building, on the main campus. The telephone number is (309) 452-9007. Textbooks may be ordered online either through the HCC Web site or www.heartland.bkstr.com. Pontiac and Lincoln students should contact the Centers for available book sale dates at these sites.

Bulletin Boards

Posters, announcements, fliers etc. must be submitted to the Student Services Center for approval prior to posting. Unapproved posters and materials placed in unauthorized locations will be removed.

Bus Service

The Bloomington-Normal Public Transit System services HCC’s main campus on Raab Road in Normal with bus service at 10 minutes and 40 minutes after each hour. Buses with a code of “Green A” provide handicapped-accessible service to HCC. Pick-up /drop off is located in front of the Student Commons Building on Community College Drive.

Detailed information on bus schedules throughout Bloomington-Normal may be accessed at www.b-npts.com.

Campus Café

Food service for meals from breakfast through dinner (depending on posted schedules) are available in the Student Commons Building, first floor of the main campus.

Campus Demonstrations

The students of Heartland Community College are free to express their views and beliefs through demonstrations on campus. However, such demonstrations must not interfere with the business and operation of the College, nor with another student’s right to pursue an education at Heartland. Thus, so that the College may maintain peace and order on campus, the College has reasonable rules regulating demonstrations to accommodate the needs of the College and the rights of its students.
Child Care
Heartland’s Child Care Center is a demonstration laboratory school that provides high quality care and education to the children of HCC students, faculty and staff. The Center is licensed by The Department of Children and Family Services and has four classrooms, serving children from 6 weeks to 6 years old.

The Center operates Monday through Friday 7:30 a.m. to 5:00 p.m. Drop-off parking for the Child Care Center is available in Lot A, near the Center, in the Student Commons Building at the main campus.

Due to limited enrollment, an application process is required. Applications are available at the Center or the Student Services Center.

Chronic Communicable Disease Policy
Students with a chronic communicable disease may attend the College whenever, through reasonable accommodation, they do not constitute a direct threat to the health or safety of themselves or other individuals.

Attendance decisions will be made by the College President in consultation with the Dean of Student Services using this standard in conjunction with current available public health department guidelines concerning the particular disease in question. Individual cases will not be prejudged; rather, decisions will be made based upon the facts of the particular case.

The College shall respect the right to privacy of any student who has a chronic communicable disease. The student’s medical condition shall be disclosed only to the extent necessary to avoid a health and safety threat to the student and others.

Persons deemed to have “a direct need to know” will be provided, subject to applicable law, with the appropriate information; however, these persons may not further disclose such information. Persons deemed to have “a direct need to know” may include:
1. College President and Dean of Student Services
2. Appropriate faculty or administrator

Closing and Cancellation Announcements
On occasions when the College cancels classes and closes offices due to weather conditions or other causes, students should check local radio/TV stations for announcements rather than phone the College campuses. Every attempt will be made to ensure closing information is available by 6:00 a.m. for day classes and 4:00 p.m. for evening classes. Check the HCC Web site (www.heartland.edu) for information on closing due to inclement weather.

Copy Machines
Students may use the coin-operated copy machines located in the library and in various locations in the Student Commons and Instructional Commons Buildings.

Diversity
Diverse perspectives give our “global village” much of its vitality; while true democracy can be achieved only if our society is celebrated as an inclusive, pluralistic and multicultural community.

A social organization that is just will treat all people with “dignity and worth” and provide equal opportunities both to participate and to succeed in our shared democracy. Such organizations include people of different cultures, ethnicities, genders, social classes, ages, religions and sexual orientations and differing physical and learning abilities.

To enhance the potential and increase the freedom of such peoples, as well as to represent more accurately the diversity within our culture, Heartland Community College resolves to infuse awareness and appreciation of diversity and global perspectives into its curriculum and institutional environment.

A diversity event is scheduled each fall and spring semester for the students, employees and members of the community. Watch the information resources for the dates of these activities.
General Information

Drug Free Workplace

In compliance with the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226), the Drug Free Workplace Act of 1988 (Public Law 100-690), the Illinois Drug Free Workplace Act of 1986 (PA 86-1459) and Heartland Community College Board of Trustees Policy 6.1 (Drug Free Workplace), the following procedures & programs exist to prevent the illicit use of drugs and the unlawful use and abuse of alcohol by students & employees.

Standards of Conduct

HCC prohibits the unlawful possession, use, distribution, dispensing and manufacture of illicit drugs and alcohol by students and employees on its property, at college-sponsored activities, in College vehicles, in transit to or from College activities or business or in any workplace for purposes of the Drug Free Workplace Act of 1988.

Penalties for Violation of Policy

Students who violate this policy will be governed by the college’s Student Code of Conduct and subject to disciplinary action up to and including suspension, expulsion and referral for prosecution. Employees who violate this policy will be subject to sanctions, consistent with law and Board policy which shall include appropriate personnel action up to and including termination or a requirement that the employee satisfactorily participate in a drug abuse assistance or rehabilitation program. Visitors determined to have violated this policy are subject to eviction from the College premises and are subject to legal action initiated by the College.

Legal Sanctions for Unlawful Possession, Use or Distribution of Illicit Drugs and Alcohol

Legal sanctions that apply to the unlawful possession, use, distribution, dispensing and manufacture of illicit drugs and alcohol are consistent with local, state and federal laws in reference to the Cannabis Control Act, the Controlled Substance Act and the Liquor Control Act. Students and employees are reminded that these laws provide for a variety of legal sanctions and penalties which include, but are not limited to, incarceration and monetary fines.

Notice of Convictions

Any Heartland Community College employee who is convicted of violating any federal or state criminal drug statute in the workplace must notify the President within five (5) days of such conviction and the President shall notify any federal granting agency required to be notified in the Drug Free Workplace Act of 1988 within ten (10) days after receiving notice of the conviction from an employee. Failure to inform the College of such conviction subjects the employee to disciplinary action.

Health Risks Associated with the Use of Illicit Drugs and the Abuse of Alcohol

The consumption of alcohol and drugs has serious risks to one’s health. For a comprehensive list and more information, consult your physician or your local library.

Drugs and Alcohol Information Sessions and Counseling, Treatment or Rehabilitation or Re-Entry Programs

HCC periodically sponsors information sessions and provides informational materials dealing with the dangers of illicit drug usage and alcohol abuse. Students and employees are encouraged to attend these sessions and read the information publications. In addition, students and employees are encouraged to contact PATH Information and Referral at (309) 827-4005 for information and assistance.

Emergency Procedures

If the fire alarm sounds, you must leave the building. Emergency evacuation instructions are posted inside each room. These instructions are to be followed in case of fire or other emergency.

Health emergencies should be handled by dialing 911.
Equal Opportunity Statement

Heartland Community College (HCC) is an equal opportunity institution. No person, on the basis of race, color, religion, sex, sexual orientation, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service or veteran’s status shall be discriminated against in employment, in educational programs and activities or in admissions. HCC complies with applicable federal and state laws prohibiting discrimination, including the Civil Rights Act of 1964, the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Americans with Disabilities Act, the Age Discrimination in Employment Act and the Illinois Human Rights Act, all as amended from time to time.

First Aid

First aid kits are mounted on the wall in many locations at HCC sites.

Foundation

The Heartland Community College Foundation is a nonprofit 501 (c)(3) corporation dedicated to the enhancement and support of student learning and success at HCC. The Foundation receives and administers gifts in many forms, including monetary donations, bequests and real estate. The Foundation organizes a variety of fundraising events to support scholarship opportunities for Heartland students and further strengthen its bonds with the community. Gifts to the Foundation provide scholarships, special equipment purchases, campus enhancements and other projects.

Harassment Policy

Heartland Community College is committed to maintaining a working and learning environment that is free from all forms of harassment including, but not limited to, sexual harassment and harassment based on gender, sexual orientation, religion, race, ethnicity, national origin, age or disability. The College prohibits any form of harassment in the classroom, in the workplace, in an academic setting at the College and at all College-sponsored events and activities.

This policy applies to all employees and all students at the College as well as any individual representing the College in an official manner, whether paid or unpaid by the College. Under certain circumstances, this harassment policy also applies to third parties such as subcontractors, sales representatives, repair persons or vendors of the College.

Every student, employee and official College representative has the responsibility to refrain from any type of harassment in the College environment as well as the right to work and learn in an environment free from harassment. Any student, employee or official representative who harasses a College student, employee or official representative will be held liable for his or her individual conduct and will be subject to disciplinary action up and including expulsion or discharge.

All complaints will be investigated, with confidentiality maintained to the extent possible.

A complete explanation of the Heartland Community College harassment policies and procedures is available from the Human Resources Office. For additional information on the College’s complete harassment policy, please contact the Director of Human Resources, CCB 2100 Main campus, Normal (309) 268-8148.

Housing

HCC does not provide housing accommodations. Students needing housing accommodations should check the local newspapers for assistance.

Informed Consent Policy

A student gives written permission on the appropriate consent form and acknowledges by that action that the student’s written assignments or projects in Heartland Community College courses may be used by faculty members for teaching and/or for research purposes. Such use might consist of, but is not limited to, inclusion of the student’s work, in whole or in part, in research studies which are published, either in print or electronic media, for an academic audience, or distribution to other classes, again either in print or electronically, for use in class discussion or as models to illustrate possible approaches to course topics. When reproducing student work, the College will preserve the student’s anonymity.

Guidelines on Preparing an Informed Consent

The informed consent should include the following information:

1. A description of the research project and the expected duration
2. Information regarding the conditions of the subject’s participation in the study
3. A description of the proposed research procedures
4. A statement concerning the expected benefits of the study
5. A statement describing any possible risks and discomforts the subject may experience
6. A description of how confidentiality will be maintained
7. Contact information about the researcher
8. Participant signature
GENERAL INFORMATION

Lost/Found

Lost and found is located at Safety and Security Services in the lobby of the Student Commons Building on the main campus. Items will be kept for 30 days before being discarded.

Office Hours

Campus office hours are posted outside each office. To be accessible to students, expanded hours are offered by Student Services, Business Office, computer labs and the Academic Support Center.

Parking

Free parking is available at all Heartland facilities. At HCC sites located near businesses, students should only park in spots designated by HCC. There is no ticket system for enforcement of parking regulations; violators will be towed at the owner's expenses. Handicapped parking is available only to those with physical disabilities requiring close access to buildings. A valid handicapped parking permit is required for parking in these designated spots. Bicycle racks are also available at HCC sites.

Public Display Monitors

Monitors are located in all buildings of the main campus. They provide information on important dates, student club news, registration, financial aid/scholarship information and other items of interest to students.

Safety/Security

HCC's Safety and Security Services encourage students and employees to be involved in protecting themselves and their property and take responsibility for their own safety and the safety of others.

On campus security measures include:
- Emergency blue call stations located in each parking area at the main campus that provide direct audio and video contact with security personnel
- 24/7 escort service by campus safety personnel - available on request at the main campus
- In-house campus phones at main campus site to provide quick access to the Safety and Security Services desk (ext. 8300).
- Assistance with accidents and parking and traffic control enforcement
- Security can provide jumper cables and contact locksmith companies to unlock cars in which keys have been left. (The College cannot unlock vehicles due to liability.)

Sales/Solicitations

The College permits controlled sales campaigns and solicitations only by recognized student organizations. Such organizations are encouraged to raise funds to support their activities; fund-raising efforts must have prior authorization from the Dean of Student Services. Sales campaigns and collections are restricted to specific locations and times as approved by the Dean of Student Services. Office-to-office selling of any kind is prohibited on campus.

All non-club solicitation activities must be approved by the Dean of Student Services and must adhere to specific locations and times as approved.
Scheduling Rooms

Meetings may be scheduled in classrooms/labs and other meeting rooms by requests processed with the Program Assistant for Course and Facilities Scheduling in the Student Services Center. Call (309) 268-8016 for assistance.

School Colors

The official school colors for HCC are silver and blue.

Smoke Free Environment

Smoking is prohibited inside all HCC facilities as well as in front of all buildings. Smoking is permitted in designated exterior smoking areas.

Student Feedback

As part of the Continuous Quality Improvement (CQI) program at Heartland, students are encouraged to comment on the College’s activities, programs and services. Opportunities for feedback include student evaluations of faculty & services and suggestion boxes located throughout all facilities.

Telephones

Pay telephones are located at various locations at the main campus.

Textbooks

See “Bookstore” on page 192.

TDD

Students with hearing impairments have several options for accessing campus programs and offices. Students may call 309-268-8030 for a direct connection to another TDD, call 711 for access via the Illinois Relay Service or use an Internet relay service, such as www.sprintrelayonline.com.

Vending Machines

Vending machines are located at all HCC campuses.

Voter Registration

In compliance with Public Act 94-0492, Heartland Community College provides voter registration information on its website at www.heartland.edu. Heartland sponsors a series of activities to build awareness and provides students the opportunity to register to vote on campus. Please refer to the website to locate information on these activities or to locate a deputy registrar on campus.
Matthew W. Abraham
Academic Advisor II
MS-Illinois State University, Counselor Education

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BA-Western Illinois University, Communications

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BA-Central Christian College of the Bible, Practical Social Ministries

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BS-Saint Joseph’s College, Psychology

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Web Programmer
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BS-West Indies University, Computer Systems and Communications

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President
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Science Lab Supervisor
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AA-Heartland Community College

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Accounts Payable Clerk

Dana O. Berry
Electrician

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AA-Heartland Community College

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AS-Heartland Community College

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BS-Illinois State University, Business Administration  
AA-Illinois Valley Community College

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BS-Saint Louis University, Nursing

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BS-University of Illinois at Urbana-Champaign, Psychology

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PhD-Illinois State University, Educational Administration  
MS-Saginaw Valley State University, Criminal Justice/Political Science  
BS-Ferris State University, Criminal Justice

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ITS Technician

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BS-University of Evansville, External Studies

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Division Secretary - Development

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Financial Aid Advisor  
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BS-Western Illinois University, Psychology

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Accounting Assistant

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PhD-Saint Louis University, English  
MA-Southeastern Louisiana University, English  
BS-University of Missouri at St. Louis, English/Education

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BS-Illinois State University, Applied Computer Science  
AS-Heartland Community College

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Secretary - Corporate Education

Mary Pat Campbell  
Division Secretary - Social and Business Sciences

Ruifang Cao  
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PhD-Illinois State University, Educational Administration

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Child Development Specialist  
MS-Illinois State University, Family and Consumer Sciences  
BS-Illinois State University, Family and Consumer Sciences

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Professor of History  
MA-University of Illinois at Urbana-Champaign, History  
BA-University of Illinois at Urbana-Champaign, History

Angela D. Castleman  
Payroll Assistant

Donald J. Cavallini  
Director of Outreach  
DA-Illinois State University, Recent United States History  
MA-Illinois State University, History  
BA-Illinois Wesleyan University, History and English

Amita Chakravarty  
Coordinator of Career/Technical Student Support Services  
MSED-Illinois State University, Educational Administration  
BS-Illinois State University, Social Work

Jane S. Chapman  
Instructor of Biology  
PhD-Marquette University, Biology  
MS-Illinois State University, Biology  
BS-Eastern Illinois University, Zoology

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MA-Tennessee Technological University, English  
BA-Purdue University, Criminology

Debra A. Chiaventone  
Division Secretary - Humanities & Fine Arts

Stacie R. Chismark  
Professor of Biology  
MS-Illinois State University, Biological Sciences  
BS-Illinois State University, Biology  
AAS-Illinois Central College

Michele K. Clark  
Division Secretary - Student Services  
AA-Lincoln College, Associate in Arts

Thomas E. Clemens  
Division Chair for Humanities and Fine Arts  
PhD-Purdue University, English  
MA-University of North Dakota, English  
BA-Jamestown College, English

Lydia A.R. Cochran  
Program Assistant for Information Technology  
MS-Illinois State University, Psychology  
BS-Illinois State University, Psychology
# Personnel

<table>
<thead>
<tr>
<th>Name</th>
<th>Position / Title</th>
<th>Education / Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathleen I. Collins</td>
<td>Dean of Student Services and Academic Support</td>
<td>PhD-University of Illinois at Chicago, Public Policy Analysis - Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MED-Tuskegee University, Guidance and Counseling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BS-Tuskegee University, Secondary Education</td>
</tr>
<tr>
<td>Lori S. Cordis</td>
<td>Assistant Professor of Computer Technology</td>
<td>BS-Bradley University, Computer Information Systems</td>
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<tr>
<td>Angela M. Coughlin</td>
<td>Program Manager for Community Education</td>
<td>BA-Eastern Illinois University, English</td>
</tr>
<tr>
<td>Valerie A. Crawford</td>
<td>Director of Administrative Services</td>
<td>BS-Illinois State University, Art</td>
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<tr>
<td>Joan M. Crowley</td>
<td>Data Entry Assistant - Student Services</td>
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<tr>
<td>Johnna C. Darragh</td>
<td>Professor of Early Child Care and Education</td>
<td>PhD-University of Illinois at Urbana-Champaign, Human and Community Development</td>
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<td></td>
<td></td>
<td>MS-Northern Illinois University, Child and Family Studies</td>
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<td>BS-Illinois State University, Psychology</td>
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<tr>
<td>Robert L. Dennison</td>
<td>Assistant Professor of Earth Science</td>
<td>MS-University of Southern Mississippi, Geography</td>
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<td>BS-Eastern Illinois University, Geography</td>
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<tr>
<td>Laura J. Diel-Hunt</td>
<td>Program Manager for Community Education</td>
<td>MA-Ball State University, Student Personnel Administration</td>
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<tr>
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<td>BS-University of Wisconsin, Psychology</td>
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<tr>
<td>John C. Dotta</td>
<td>Instructor of Art</td>
<td>MFA-San Jose State University, Photography</td>
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<td>MA-Prescott College, Photography</td>
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<td></td>
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<td>BA-San Francisco State University, Physics</td>
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<tr>
<td>William Doug Dowell</td>
<td>Associate Professor of Sociology and Social Work</td>
<td>MS-Illinois State University, Sociology</td>
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<td>BA-Millikin University, Sociology</td>
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<tr>
<td>Laura L. Duvall</td>
<td>Professor of Psychology</td>
<td>MA-California State University, Psychology</td>
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<td>BA-University of California at Santa Barbara, Psychology</td>
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<tr>
<td>Michael C. Edwards</td>
<td>Network Administrator</td>
<td>BS-University of Illinois at Urbana-Champaign, Computer</td>
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<td>Science/Accounting &amp; Finance</td>
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<tr>
<td>Kathie D. Eichelberger</td>
<td>Division Secretary - Technology</td>
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<tr>
<td>Linda A. Ellerman</td>
<td>Coordinator of Academic and Retention Services</td>
<td>MSED-Illinois State University, Educational Administration</td>
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<td>BA-Milliken University, Music Education</td>
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<tr>
<td>Rebecca L. Emery</td>
<td>Records Assistant – Adult Education</td>
<td>BS-Illinois State University, Corrections</td>
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<tr>
<td>Anjanel M. Folkens</td>
<td>Assistant Graphic Designer</td>
<td>BS-Illinois State University, Art-Graphic Design</td>
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<tr>
<td>Matthew R. Felumlee</td>
<td>Associate Professor of English</td>
<td>MS-Illinois State University, English</td>
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<td>BA-Illinois State University, English</td>
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<tr>
<td>Mark E. Finley</td>
<td>Professor of Earth Science</td>
<td>MS-Iowa State University, Geology</td>
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<td>BS-University of Illinois, Geology</td>
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<tr>
<td>Richard A. Foley</td>
<td>Assistant Professor of Industrial Technology</td>
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<tr>
<td>Paul J. Folger</td>
<td>Director of the Instructional Development Center and Instructional Assessment</td>
<td>MA-University of Illinois at Urbana-Champaign, Political Science</td>
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<tr>
<td></td>
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<td>BA-State University of New York at Plattsburgh, Political Science</td>
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<tr>
<td>John M. Ernst</td>
<td>Professor of Communication &amp; Film Studies</td>
<td>PhD-University of Massachusetts at Amherst, Communication</td>
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<tr>
<td></td>
<td></td>
<td>MA-Northern Illinois University, English and Film</td>
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<td>BA-Northern Illinois University, English</td>
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<tr>
<td>Nancy D. Evans</td>
<td>Professor of Business</td>
<td>PhD-Illinois State University, Educational Administration</td>
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<td>MS-Illinois State University, Education</td>
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<td>BA-Illinois State University, French</td>
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<tr>
<td>Faye Y. Freeman-Smith</td>
<td>Director of Student Support Services</td>
<td>MS-Northern Illinois University, Community Mental Health</td>
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<tr>
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<td></td>
<td>BA-Norfolk State College, Psychology</td>
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<tr>
<td>Linda E. Fritz</td>
<td>Child Development Specialist</td>
<td>MS-Illinois State University, Special Education</td>
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<tr>
<td></td>
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<td>BS-Illinois State University, Special Education</td>
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<td>John M. Ernst</td>
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<td>BS-Illinois State University, English</td>
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<td>BA-Northern Illinois University, English</td>
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</tbody>
</table>

HEARTLAND COMMUNITY COLLEGE 202
Bodo Fritzen  
Professor of Foreign Languages  
PhD-University of Nebraska, Modern Languages and Literatures (German)  
MA-University of Nebraska, German and Slavic Languages  
BA-Utah State University, German

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AS-Illinois Central College

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Certified Public Accountant  
Certified Internal Auditor

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Secretary - Lincoln Center

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AAS-Heartland Community College

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BS-Troy State University, Management

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BA-University of Illinois at Urbana-Champaign, English

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It’s hard to keep up with Katie. Between classes, her job and making time to hang with her friends, she is always on the move. Katie loves that her flexible Heartland class schedule allows her to fit all this in and still have time for a daily workout. Find out how easy it is to work Heartland classes into your schedule.
## Future Planning

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IMPORTANT PHONE NUMBERS

(309) 268-8000 Main Campus, 1500 W. Raab Rd., Normal
(309) 268-8033 Academic Advising CCB-1000
(309) 268-8200 Academic Support Center SCB-1200
(309) 452-9007 Bookstore SCB-1601
(309) 268-8140 Business Office/Cashier
(309) 268-8210 Child Care Center SCB-1000
(309) 268-8029 Disability Support CCB-1000
(309) 268-8100 Executive Office CCB-2000
(309) 268-8020 Financial Aid CCB-1106
(309) 268-8205 Heartland Campus Café SCB-1602
(309) 268-8291 Library SCB-1200
(309) 268-8293 Library Reference
(217) 735-1731 Lincoln Center, 620 Broadway, Lincoln
(815) 842-6777 Pontiac Center, 211 E. Madison, Pontiac
(309) 268-8300 Safety & Security Services - Raab Rd. SCB-1101
(309) 268-8881 Safety & Security Services - Towanda Plaza,
1226 Towanda Plaza, Bloomington
(309) 268-8041 Student Activities CCB-1000
(309) 268-8010 Student Services CCB-1012
(309) 268-8030 TDD Line CCB-1000
(309) 268-8231 Tutoring and Testing Center SCB-1300
(309) 268-8034 Workforce Services CCB-1000

Academic Division Offices
(309) 268-8410 Academic Support CCB-2300
(309) 268-8180 Adult Education (GED, ESL)
(309) 268-8160 Community Education
(309) 268-8440 Corporate Education
(309) 268-8740 Health and Human Services ICB-2800
(309) 268-8620 Humanities and Fine Arts ICB-2000
(309) 268-8640 Math and Science ICB-2400
(309) 268-8750 Nursing ICB-2800
(309) 268-8590 Social and Business Sciences ICB-2100
(309) 268-8860 Technology, 1226 Towanda Plaza, Bloomington