CATALOG
2005-2006

IVY TECH
COMMUNITY
COLLEGE

Notice

This catalog is intended to supply accurate information to the reader. From time to time, certain information may be changed.

The College may revise any matter described in this catalog at any time without publishing a revised edition of this catalog. Courses, programs, curricula and program requirements may be changed or discontinued at any time. Information that appears to apply to a particular student should be verified with the Office of Student Affairs at your local campus. Local campus information is found on page 8. The publication and its provisions are not in any way a contract between the student and Ivy Tech Community College.

Ivy Tech is an accredited, equal opportunity, affirmative action state college.

A copy of the most recent annual financial statement can be obtained upon request from the Office of the Treasurer.

Message from the President

On behalf of the faculty and staff, let me welcome you to Ivy Tech Community College.

The decision to continue your education is an important one that has positive implications for you for the rest of your life. In many ways, education is an investment. Better-educated people earn more money, have greater job security, and better access to higher paying and professional jobs. We are very pleased that you have selected Ivy Tech as your investment vehicle.

Ivy Tech currently serves more than 100,000 students annually, and is part of a national trend in higher education. You are in good company here. Community colleges have taken the country by storm. Of all the undergraduate students in the United States, 45 percent are enrolled at community colleges. Of all the first-time, fulltime college students, 54 percent are enrolled at community colleges. As a community college system, Ivy Tech is expanding opportunities for you to participate in student life as well as providing an environment that makes it possible for you to concentrate on learning.

Today's job market is highly competitive. Only those with a solid educational background and finely honed skills will succeed. At Ivy Tech, we prepare you to advance in that environment.

You have chosen a college known for instructional excellence. Out programs are challenging and keep pace with evolving technology. Our faculty and staff care about your success as a student.

Whether you plan to transfer to a four-year institution, obtain employment, add to your training, or update your skills, Ivy Tech gives you the knowledge and the tools to meet the challenges of the future.

I wish you every success on your journey of learning.

Sincerely,

Gerald I. Lamkin

Gerald I. Lamkin, President

Ivy Tech Community College

Table of Contents

General Information

How to Use this Catalog

THIS CATALOG IS EASY TO USE.

Just take a minute to flip through it. You'll see right away that it isn't too hard to find what you're looking for. When in doubt, use the **table of contents** in the front or the **index** in the back.

IT HAS FIVE SECTIONS.

General Information and College Services

This section has basic information about the College and its campuses. It includes College history, campus addresses, and other important information such as financial aid, student rights, grading systems, and so on. Get to know this section well.

Degree Programs and Requirements

Use this section to find out which classes to take to earn the degree or certificate you want. It's organized by "program" (such as business administration or manufacturing and industrial technology), and then by "specialty" (such as marketing or welding). You also use this section to find out what degrees are offered in a certain field and how many course credits you need to complete them. It also tells how many credits you'll earn for each course.

Course Descriptions

After you look up the classes you need in section 2, you'll probably want to know what they're all about. Go to this easy-to-use section for that. Simply find the course number (see next page) in section 2 and then look it up in this section. Everything in section 3 is in alphabetical order.

Program Availability

Ivy Tech offers many educational programs and degrees, but not all programs and degrees are offered at all 23 campuses. This section is designed to help you quickly find which programs are available at the Ivy Tech campus that interests you.

Faculty List and Accreditations

This section is simply a list of full-time faculty and their educational backgrounds. It also shows which organizations and agencies accredit Ivy Tech Community College, its campuses, and programs.

WATCH FOR SYMBOLS AND TERMS.

A degree or certificate program requires different types of courses. There are four terms that describe course types: "General Education," "Professional/Technical," "Specialty," and "Locally Determined." Most degrees or certificates require some courses of each type. Other terms you'll see are:

Elective — The term "elective" means you can choose the class you want from those offered on your campus. These are marked with a "*".

Capstone Course — This type of course includes a component that assesses certain skills that will be expected of you as a graduate in the workforce. The assessment typically involves a written assignment. These are marked with a "^".

Locally Determined — This means your campus decides which classes you must take to complete the degree. In cases where you see courses marked with the symbol "**", it means that one of two courses is required and your campus decides which. In other cases, your campus determines which courses are required to fulfill the degree, based primarily on needs of local business and industry. Your academic advisor can tell you which classes are required.

THE IVY TECH
Navigator

This tells the name of the educational program.

This is the type of degree.

This describes the course types and how many credit hours in each you need to earn the degree.

Visual Communications

Associate of Applied Science

To earn this degree, you must have 66 credits in the following areas:

General Education Core	18
Technical Core	18
Specialty Core	21
Locally Determined Courses	9

This tells how many credits you need to earn the degree.

You Must Have

	Required Courses	Credit Hours
GENERAL EDUCATION		
ARH 101	Survey of Art and Culture I	3
ARH 102	Survey of Art and Culture II	3
*COM 101	Fundamentals of Public Speaking	3
	OR	
*COM 102	Interpersonal Communications	3
ENG 111	English Composition	3
*MAT XXX	Math Elective	3
*XXX XXX	Life/Physical Science Elective	3
TECHNICAL		
VIS 101	Fundamentals of Design	3
VIS 102	Fundamentals of Imaging	3
VIS 115	Computer Graphics	3
VIS 201	Electronic Imaging	3
^VIS 205	Business Practices for Visual Artists	3
VIS 207	Portfolio Preparation	3

Choose One of the Following Specialties

GRAPHIC DESIGN SPECIALTY		
ART 111	Drawing for Visualization	3
ART 114	Graphic Design	3
ART 115	Typography	3
ART 116	Electronic Illustration	3
ART 217	Graphic Design II	3
ART 218	Digital Production	3
ART 219	Graphic Design III	3

This tells how many credits a course is worth.

This is the course name.

This is the specialty within the degree program.

This is the course number.

College Profile

In just over 40 years, Ivy Tech Community College of Indiana — more popularly known as Ivy Tech — has grown from a mere idea to a thriving post-secondary institution.

In 1963, the Indiana General Assembly established Indiana Vocational Technical College as Indiana's first statewide vocational technical college and appropriated $50,000 for its development. Following the appointment of a state board of trustees, a president was named and the first training program was established in 1965. The General Assembly later authorized Ivy Tech's present structure of 14 regions to provide accessible technical educational opportunities to all Indiana citizens. Between 1966 and 1969, 13 of the 14 regions were chartered and their boards of trustees appointed. (Region 14 was approved in 2000.) Later, Ivy Tech was given authority to grant diplomas and certificates, including one-year technical certificates and two-year associate degrees, and to offer general education courses needed for its technical education programs.

Ivy Tech's growth in its relatively short history has been impressive. Enrollment reached 102,000 in 2003-04. The College had only 3,233 students in the fall of 1968. Within the statewide Ivy Tech system, more than 4,200 full- and part-time faculty members teach in program areas offered in six instructional divisions: Business, Health Sciences, Public Services, Technology, Arts and Design, and General Education.

The State Board of Trustees appointed Gerald I. Lamkin as the sixth president of Indiana Vocational Technical College in December 1982. In 1995, the Indiana General Assembly changed the name of the College to Ivy Tech Community College.

In May 2005, the Governor of Indiana signed a bill making Ivy Tech Indiana's community college system. Ivy Tech is now providing students with more opportunities by expanding transferable technical and professional offerings and liberal arts programs.

In keeping with the College's expanded mission, on July 1, 2005, Ivy Tech's official name changed from Ivy Tech Community College to Ivy Tech Community College of Indiana.

College Mission

As a statewide, open-access, community college, Ivy Tech Community College provides residents of Indiana with professional, technical, transfer, and lifelong education for successful careers, personal development, and citizenship. Through its affordable, quality educational programs and services, the College strengthens Indiana's economy and enhances its cultural development.

College Goals

Ivy Tech Community College strives to accomplish its mission placing strategic emphasis on --

Professional and technical education to prepare students with the knowledge, comprehension, and skills to achieve their goals, meet the needs of Indiana's employers, and be contributing members of the Indiana economy.

General education to develop students' understanding and appreciation of our society, of social, political, civic, and environmental responsibilities. These provide students with awareness and understanding of knowledge and facts, and abilities to make sound, ethical judgments, to pursue critical and reflective thinking, and to engage in creative applications.

Transfer education to enable students to acquire knowledge and skills in general, technical, and professional areas and apply them to a baccalaureate degree at a four-year institution.

Developmental education to prepare students with knowledge, skills, and competencies in language arts, mathematics, computing, and college life skills. Courses are designed to enable students to be successful in their postsecondary education studies as well as to function productively in society.

Student development and services for recreational, social, wellness, and personal interest activities, involvement in community activities, and leadership activities. These also include career and

academic counseling, advising, job placement, transfer services, tutoring, and accommodating students with unique needs.

Continuing education for licensing renewal, re-certification requirements, and other employment-related interests or requirements. These opportunities may include courses for the General Equivalency Diploma, and courses, workshops, and seminars for personal interest, self-improvement, and enjoyment.

Workforce education and training in credit, noncredit, and contract credit courses, certifications, custom designed courses, and consultative and evaluative services offered to businesses and industries to enable the State's employers to be effective, productive, and competitive globally.

Community service that connects the resources of the College to the cultural, recreational, and civic aspects of our communities by making College resources available through volunteerism and community involvement.

Diversity that reflects the communities we serve and their diverse needs. Diversity is sought in the student body, faculty, staff, and services, and in providing accessible, inclusive, and caring learning environments.

Continuous improvement of all instruction and services offered to students, employers, and the community, including increasing compensation and numbers of full-time faculty, part-time faculty, and student support staff. Continuous improvement also encompasses seeking program accreditations, increasing graduation rates, upgrading libraries and instructional equipment, increasing use of technology in instructional and administrative activities, improving the condition and amount of space, and acquiring new types of space for student activities, continuing education, and community services.

IVY TECH FOUNDATION, INC.

Ivy Tech Foundation, Inc. is an Indiana nonprofit corporation established in 1969 to raise funds to serve the needs of Ivy Tech Community College and its students.

The primary areas of the foundation's service are:

- Scholarships and grants-in-aid that allow students to enter the college and complete their studies.

- Loans for students who need temporary assistance until other sources of financial assistance can be obtained.

- Equipment purchases to increase the level of instructional quality in laboratories and classrooms.

- Funding for faculty enhancement opportunities and awards for excellence.

- Seed money for innovative educational programs of exceptional merit.

Ivy Tech Foundation, Inc. is exempt from federal income taxation under Section 501(c)(3) of the Internal Revenue Code. All gifts to the foundation qualify as charitable contributions for federal income tax purposes. In addition, these gifts qualify for a special Indiana state income tax credit.

COLLEGE CALENDAR

Ivy Tech is on a semester schedule. Fall and spring semesters are 16 weeks long. Summer terms are of varying lengths. Certain dates on the college calendar may vary by campus. Specific start and end dates for the fall and spring semesters are listed in the calendar in this publication; summer start and end dates can be obtained by calling one of the campuses listed on page 8.

Non-Discrimination and Equal Opportunity Policy

Ivy Tech Community College of Indiana provides open admission, degree credit programs, courses and community service offerings, and student support services for all persons regardless of race, color, creed, national origin, religion, gender, sexual orientation, physical or mental disability, age or veteran status. The College also provides opportunities to students on the same non-discriminatory opportunity basis. Persons who believe they may have been discriminated against should contact the campus affirmative action officer, Human Resources Administrator, or Dean of Student Affairs.

Ivy Tech Community College of Indiana is an accredited, equal opportunity/affirmative action institution.

Regional Accreditation Statement

Ivy Tech Community College is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools, 30 N. LaSalle Street, Chicago, IL 60602, (800) 621-7440.

2005-2006 CALENDAR

Fall 2005:

Classes begin	August 22, 2005
Labor Day Holiday*	September 5
Thanksgiving Holiday/Fall Break*	November 24-25
Classes end	December 17

Spring 2006:

Classes begin	January 9, 2006
Martin Luther King, Jr. Holiday	January 16
Spring Break	varies; check with your campus
Classes end	May 6
Graduation	varies; check with your campus

Summer 2006:

Classes begin	varies; check with your campus
Independence Day Holiday	July 4
Classes end	varies; check with your campus

2006-2007 CALENDAR

Fall 2006:

Classes begin	August 21, 2006
Labor Day Holiday*	September 4
Thanksgiving Holiday/Fall Break*	November 23-24
Classes end	December 16

Spring 2007:

Classes begin	January 8, 2007
Martin Luther King, Jr. Holiday	January 15
Spring Break	varies; check with your campus
Classes end	May 5
Graduation	varies; check with your campus

Summer 2007:

Classes begin	varies; check with your campus
Independence Day Holiday	July 4
Classes end	varies; check with your campus

*Some regions/campuses may have additional vacation days;
check with your campus for your specific calendar.*

CAMPUSES

Ivy Tech serves Indiana through a network of 23 campuses. In addition, courses are offered in communities and workplaces across the state.

ANDERSON (Region 6)
104 West 53rd Street
Anderson, IN 46013-1502
Phone: (765) 643-7133
        1-800-644-4882

BLOOMINGTON (Region 14)
200 Daniels Way
Bloomington, IN 47404-9272
Phone: (812) 332-1559
        1-866-447-0700

COLUMBUS (Region 10)
4475 Central Avenue
Columbus, IN 47203-1868
Phone: (812) 372-9925
        1-800-922-4838

EAST CHICAGO (Region 1)
410 E. Columbus Drive
East Chicago, IN 46312-2714
Phone: (219) 392-3600
        1-800-843-4882

ELKHART (Region 2)
2521 Industrial Parkway
Elkhart, IN 46516-5430
Phone: (574) 293-4657

EVANSVILLE (Region 12)
3501 First Avenue
Evansville, IN 47710-3398
Phone: (812) 426-2865

FORT WAYNE (Region 3)
3800 North Anthony Boulevard
Fort Wayne, IN 46805-1489
Phone: (260) 482-9171
        1-800-859-4882

GARY (Region 1)
1440 East 35th Avenue
Gary, IN 46409-1499
Phone: (219) 981-1111
        1-800-843-4882

INDIANAPOLIS (Region 8)
One West 26th Street
Indianapolis, IN 46208-4777
Phone: (317) 921-4800
        1-800-732-1470

KOKOMO (Region 5)
1815 East Morgan Street
Kokomo, IN 46901-1373
Phone: (765) 459-0561
        1-800-459-0561

LAFAYETTE (Region 4)
3101 South Creasy Lane
P.O. Box 6299
Lafayette, IN 47903-6299
Phone: (765) 269-5000
        1-800-669-4882

LAWRENCEBURG (Region 11)
500 Industrial Drive
Lawrenceburg, IN 47025-2971
Phone (812) 537-4010
        1-800-715-1058

LOGANSPORT (Region 5)
2815 East Market Street
Logansport, IN 46947-2152
Phone: (574) 753-5101

MADISON (Region 11)
590 Ivy Tech Drive
Madison, IN 47250-1881
Phone: (812) 265-2580
        1-800-403-2190

MARION (Region 6)
1015 East Third Street
Marion, IN 46953-9370
Phone: (765) 662-9843
        1-800-554-1159

MICHIGAN CITY (Region 1)
3714 Franklin Street
Michigan City, IN 46360-7311
Phone: (219) 879-9137
        1-800-843-4882

MUNCIE (Region 6)
4301 South Cowan Road
Muncie, IN 47302-9448
Phone: (765) 289-2291
        1-800-589-8324

RICHMOND (Region 9)
2325 Chester Boulevard
Richmond, IN 47374-1298
Phone: (765) 966-2656
        1-800-659-4562

SELLERSBURG (Region 13)
8204 Highway 311
Sellersburg, IN 47172-1897
Phone: (812) 246-3301
        1-800-321-9021

SOUTH BEND (Region 2)
220 Dean Johnson Blvd.
South Bend, IN 46601-3415
Phone: (574) 289-7001
        1-888-489-5463

TERRE HAUTE (Region 7)
7999 U.S. Highway 41 South
Terre Haute, IN 47802-4898
Phone: (812) 299-1121
        1-800-377-4882

VALPARAISO (Region 1)
2401 Valley Drive
Valparaiso, IN 46383-2520
Phone: (219) 464-8514
        1-800-843-4882

WARSAW (Region 2)
3755 Lake City Highway
Warsaw, IN 46580-3901
Phone: (574) 267-5428

CENTRAL OFFICES
One West 26th Street
Indianapolis, IN 46208
Phone: (317) 921-4800

Toll-Free: 1-888-IVY-LINE
Web Site: www.ivytech.edu

College Services

ENTERING THE COLLEGE

ADMISSIONS FOR NON-DEGREE ENROLLMENT

Ivy Tech offers courses in many areas. Admission as a non-degree student can be achieved simply by filing a completed registration form in the Office of Student Affairs. High school students (age sixteen or greater) may take Ivy Tech courses with the written approval of the appropriate high school official. Non-degree students enrolling in general education courses or in courses with English or mathematics pre-requisites must take the ASSET or COMPASS course placement examination. Non-degree students taking other courses may also be required to take the assessment. Non-degree students are not eligible to receive federal or state financial aid.

ADMISSIONS FOR DEGREE ENROLLMENT

Ivy Tech is an open admissions college, accessible to all Indiana citizens past high school age. Some degree-granting programs have limited availability and have additional requirements prior to acceptance to those programs.

For admission as a student to one of Ivy Tech's programs leading to an associate degree or technical certificate, the standard requirements are a high school diploma or General Education Development (GED) certificate and an application for admission. Prospective students who are college graduates with an associate degree or higher from a regionally accredited institution may submit their college transcripts in lieu of the high school diploma. Prospective students who have some college credit may submit their college transcript if the college transcript shows the high school graduation date. The Office of Student Affairs will assist the student on request in obtaining a high school or college transcript or GED scores.

Course Placement Assessment

All degree-seeking students must participate in the ASSET/COMPASS assessment. The purpose of these assessments is to measure the student's achievement in mathematics, reading, and writing, and to assist the student in the selection of appropriate courses. If the assessments reveal skill deficiencies, the student will be advised to complete appropriate developmental courses. Students may be eligible for financial aid during this period.

When an assessment indicates that a student would be better served in an alternative educational setting, that individual may be referred to an appropriate community resource offering the needed assistance. The applicant may re-enter the admissions process at a later date, following completion of skills upgrading.

Granting substitution of the ASSET/COMPASS assessment is the responsibility of the academic officer or designee. Substitutions will be granted to students who meet one or more of the following conditions:

- Possess an associate degree or higher from a regionally accredited college with math skills at the MAT 050 level or higher and writing skills at the ENG 025 level or higher. The number of years since an associate or higher degree was earned is not relevant.

- Have completed comparable academic skills advancement or general education courses in writing or math with a grade of "C" or better from a regionally accredited college within the last ten years. For purpose of substituting the reading portion, the prospective student must have completed a basic skills reading course or college-level general education course.

- Have comparable assessment scores (earned within the last two years) from a regionally accredited institution that are deemed acceptable by an Ivy Tech campus for appropriate course placement.

- Have SAT/ACT scores earned within the last four years that are deemed acceptable by Ivy Tech for appropriate course placement into college-level courses.

The College reserves the right to guide the enrollment of students in particular programs or courses on the basis of past academic records, academic counseling and assessment.

Students seeking admission to certain health occupation programs may be requested to take part in specific pre-enrollment assessments and/or interviews to fulfill college or external agency requirements. Prerequisites may be required before enrolling in certain programs.

READMISSION FOLLOWING ENROLLMENT ABSENCE

Should a course of study at the College be interrupted more than two years, students must request readmission by contacting the Admissions Office. Information on eligibility for financial aid will be available to returning students.

LIMITED ADMISSIONS ENROLLMENT

Occasionally, the number of students admitted and enrolled in programs and/or courses may be limited by College resources or facilities—including available lab equipment and related support, or the number of available clinical work stations. The Office of Student Affairs should be contacted regarding programs which have limited access.

ADMISSION PROCEDURES AND SUPPORT DOCUMENTS—DEGREE OBJECTIVE

All prospective students pursuing an Associate of Arts, Associate of Fine Arts, Associate of Science, Associate of Applied Science, or a Technical Certificate are required to:

1. submit an Application for Admission

2. provide one of the following:

A. For high school graduates:

(1) if they are high school graduates from public schools, home schools, private schools or high school correspondence schools, provide an official high school transcript consisting of courses and grades received, graduation date, and official signature and/or seal. If the prospective student cannot provide an official transcript because the high school no longer exists and/or records are no longer available, the prospective student must provide written documentation to that effect.

An Indiana certificate of completion is not the same as a high school diploma. If students have a certificate of completion, they are considered non high school graduates for purposes of admission requirements, or

(2) if they possess an associate degree or higher, they may provide an official college transcript from a regionally accredited college indicating date of college graduation, or

(3) if they are less than associate degree college graduates or college transfers, they may provide an official college transcript from a regionally accredited college indicating the high school from which the student graduated (transcripts from non-accredited colleges are unacceptable).

B. For non high school graduates:

(1) they may submit on official GED report of passing test scores from the American Council on Education (ACE) or from a recognized state education body. If the prospective student cannot provide an official score report because records are no longer available, the prospective student must provide written documentation to that effect. High school equivalency exams provided by other organizations are not acceptable, or

(2) they may demonstrate the Ability to Benefit from postsecondary education by obtaining a passing grade on a test recognized for this purpose by the U. S. Department of Education.

Students admitted to Ivy Tech under Ability to Benefit guidelines must provide an official GED report of passing test scores or a high school diploma within one calendar year of their initial date of declaration as a degree-seeking student. Students admitted under this provision who do not meet these requirements will be switched to courses-only status after a calendar year and are no longer eligible for federal, state, or institutional financial aid. A student cannot graduate from Ivy Tech (technical certificate or associate degree) without proof of high school graduation or passing GED scores.

Students who do not meet B(1) or B(2) should be referred to the appropriate College or community services (Adult Basic Education).

As part of the matriculation process, students may also be required to:

1. submit financial aid forms

2. comply with international student requirements

3. submit other necessary program-specific data

4. participate in initial course placement evaluation (ASSET/COMPASS)

Applicants desiring admission to some programs may be required to meet special enrollment requirements including, but not limited to, satisfactory high school grades, evidence of potential for success in the field, and/or an enrollment interview. Once a program selection is made, certain prerequisites, including, but not limited to, health examinations, drug testing, and criminal background checks, may have to be met prior to enrollment in the particular program or course.

SECONDARY INITIATIVES

Dual Credit

Ivy Tech Community College of Indiana offers opportunities for high school juniors and seniors to enroll in dual credit programs that allow them to receive high school credit and advanced standing college credit at the same time. Each Ivy Tech campus has secured agreements with area high schools to offer dual credit in a variety of courses. Students should contact their school administration to learn what dual credit courses exist at their own high schools. Requirements to participate include admissions, readiness requirements for the course and course prerequisites. In order for a student to receive college credit, a grade of "B" or higher is required.

2+2+2 Program

An opportunity for junior and senior level students to achieve advanced standing while still in high school is the 2+2+2 Partnership between Ivy Tech and Indiana State University. The partnership is designed to attract high school students who are interested in pursuing a technical career toward an associate or baccalaureate degree in their fields of study. This partnership assists younger Hoosiers, their parents, and educators to view a career in technical education as a viable education option. Participation requirements are similar to dual credit programs.

The 2+2+2 Partnership links students in electronics, business administration, automotive technologies and design technology with the associate degree from Ivy Tech and the baccalaureate degree from Indiana State. The programs offer students with options to learn skills to go directly into the workforce and to move through an associate or a baccalaureate degree in a timely manner.

TRANSFERRING CREDIT TO THE COLLEGE

The College encourages students who have previously attended other accredited colleges and universities or adult education programs to forward transcripts to Ivy Tech by the midpoint of the first semester of enrollment or re-enrollment for consideration for transfer of credit and/or advanced placement. Only courses with grades of C- or higher are eligible for review for credit

transfer. Students are responsible for providing pertinent course descriptions and/or copies of the college catalog(s) if further documentation is needed to facilitate the review. The College will assist individuals with evaluation of prior educational experiences.

ADMISSION PROCEDURES AND SUPPORT DOCUMENTS –
INTERNATIONAL STUDENTS

International students must meet College admission standards and certain other requirements. International students should apply for admission to Ivy Tech at least 90 days prior to the beginning of the term they wish to attend. International students must provide a foreign transcript equivalency evaluation from an approved evaluator indicating that the student has attained the equivalent of a US high school graduation. The following are approved College evaluation agencies: World Education Services, Educational Credential Evaluators, Inc., and AACRAO – Foreign Educational Credential Service. The type of evaluation report required by Ivy Tech is the general report. Students whose first language is not English must also demonstrate English language proficiency. The Test of English as a Foreign Language (TOEFL) with a minimum score of 550 for the written exam or 213 for the computerized version is required and results must be sent directly from Educational Testing Services (ETS) to the College. Scores will be considered if they are less than two years old. A language proficiency test may be waived if an applicant is from an English-speaking country, has completed secondary school in the US with passing grades in non-ESOL English courses, or is a college transfer student who has completed standard freshman English, with a grade of C or higher, from a regionally accredited institution.

International students must provide proof of adequate financial support for College fees and living expenses for each year while attending Ivy Tech. International students should submit a letter from an appropriate sponsor, government official or bank official stating that sufficient funds are available to cover the cost of the student's education and that these funds will be available to the student while attending college in the United States. International students must purchase the College's insurance coverage for medical, accident and repatriation expenses. Degree-seeking students must also participate in initial course placement evaluation.

STUDENT ORIENTATION

All new degree students are encouraged to participate in a student success seminar/orientation program prior to or during the first week of classes. Orientation is designed to assist students in making the transition to a college environment. Topics include registration procedures, career and employment services, financial aid, business office services, instructional programs, tutoring services, college activities, and policies and procedures.

ADVANCED PLACEMENT CREDIT AND CREDIT FOR PRIOR LEARNING

Credit by the College is granted for acceptable test results under the following programs: College-Level Examination Program (CLEP), Advanced Placement (AP), DANTES, and tests given by Ivy Tech instructors as specific subject test-outs. Transfer credit is awarded for appropriate grades from courses taken at other regionally accredited institutions of higher learning. Advanced standing is given to students who have met the requirements for regionally determined dual and articulated secondary and post-secondary courses.

Credit is also awarded for properly documented prior learning experiences and workforce certifications. Ivy Tech acknowledges the prior learning experiences of students by awarding credit for appropriate prior learning. Such prior experience could include but is not limited to the following: workplace learning, military experiences and training, nationally recognized testing, certifications, and community service. The awarding of credit for prior learning experiences is limited to technical coursework. General education competencies must be validated through nationally recognized testing. If program accreditation or licensure issues in certain programs preclude the awarding of PLA credit, the College will not award PLA credit for coursework in that program. If you believe you have prior learning experiences that might help you earn

credit in your degree program, please contact the PLA Coordinator at the campus in which you are enrolled.

The following time limits exist for the application of credit to Ivy Tech:

CLEP and DANTES – five years after date of test

AP – one year after high school graduation

Transfer credit – ten years after course was taken

REGISTRATION

REGISTERING FOR COURSES

The registration process includes financial aid and program advising, selection of courses and payment of fees. Newly admitted students will be notified when to register for their first classes. Specific days are set aside for registration before the beginning of each semester. Students should seek assistance in course selection from faculty advisors or advisors in the Office of Student Affairs before registering for classes. The Office of Student Affairs can supply information concerning registration.

Note: Students are registered when fees have been paid or payment arrangements have been made.

OPEN/LATE REGISTRATION

Open registration is held before the beginning of the term. Registration after the first day of classes each term is considered late. Students may still register for classes during the late registration period, but a late registration fee may be assessed and course selection may be limited. After the first week of classes a student may register only with the permission of the instructor. For further information contact the Office of Student Affairs.

COURSE DROP AND ADD

Students may drop a course with no record on the transcript, or may add a course in the first week of the regular (16-week) semester. Students may be eligible for a full or partial refund of the assessed fees for courses dropped in the first four weeks of the semester (for a 16-week semester). Courses are not officially dropped until the necessary forms have been completed and returned to the Office of Student Affairs. After the first week of the regular semester students must receive the permission of the instructor to add a course.

STUDENT WITHDRAWAL

From the beginning of the second week to the end of the week marking the completion of 75 percent of the course, a student may withdraw from a course by filing a change of enrollment form at the Registrar's Office. (Students may be eligible for a full or partial refund of fees.) Records of students withdrawing from courses indicate a "W" status rather than a grade when the withdrawal process is completed. Withdrawal is complete when the necessary forms have been submitted to the Office of the Registrar. A student who ceases to attend class after the last day to withdraw will receive a grade commensurate with course requirements.

Note: Withdrawing from class may affect or cancel financial assistance. Students receiving financial assistance should check with the Financial Aid office before withdrawal from a course or courses.

COLLEGE FEES

The College seeks to provide quality education at the lowest possible cost. General fees are based on the number of credit hours for which the student has registered. Out-of-state students pay an additional fee per credit hour. Students or their families may be eligible for federal tuition tax credits in accordance with the Taxpayer Relief Act of 1997.

2005-2006 Fees

Tuition, per credit hour, in-state	$ 83.95
Tuition, per credit hour, out-of-state	$170.25
Tuition, per credit hour, Distance Education courses, non-Indiana residents	$109.50
Technology fee, per semester	$ 35.00
International student fee, per semester	$ 75.00
Copy of transcript, after first free copy	$ 5.00

2006-2007 Fees

Tuition, per credit hour, in-state	$ 87.75
Tuition, per credit hour, out-of-state	$178.50
Tuition, per credit hour, Distance Education courses, non-Indiana residents	$114.75
Technology fee, per semester	$ 40.00
International student fee, per semester	$ 75.00
Copy of transcript, after first free copy	$ 5.00

Fees are established by the State Board of Trustees and are subject to change.

Fees may be assessed for such items as consumable instructional supplies for certain classes. Additionally, students may incur costs for textbooks, tools, uniforms, other equipment, deferral/payment plans, and special examinations.

ADDITIONAL EXPENSES

The following additional expenses may apply, depending upon the program of study:

Books: All students are expected to purchase the textbooks for their respective programs. The cost of books varies by class.

Tools: The College furnishes major equipment items for instruction. However, in many programs or courses, students must furnish additional hand tools and equipment.

Uniforms and other special equipment: Several programs require students to furnish uniforms and special safety clothing.

Charges for consumable instructional materials: In some courses an additional charge for instructional materials may be required.

PAYMENT OF FEES

All enrolled students must make arrangements at the time of registration to pay all applicable fees. A student is officially registered and allowed to attend classes when all fees have been satisfied or arrangements for payment have been made.

Students choosing to drop a course or courses must notify the College in writing using the change of enrollment form. Students choosing to withdraw from all courses may begin the withdrawal process in writing or by contacting the office responsible for accepting official oral notification. The fee refund for voluntary withdrawal from a class, when applicable, will be processed only after the student files a change of enrollment form with the Registrar's Office.

The College will refund student fees, with the exception of the late registration fee, on the following schedule for a regular (16-week) semester:

From registration to end of first week of semester . . .100% refund

To end of second week of semester . . . . .75% refund

To end of third week of semester . . . . 50% refund

To end of fourth week of semester . . . . 25% refund

After fourth week of semester . . . . No refund

This schedule is based upon a 16-week semester calendar. Classes based on different calendars will have different refund schedules. The effective date for calculating the fee refund is the date of written notification on the change of enrollment form. Certain other fees may be refundable. Further details are available from the Office of Student Affairs. All refunds will be issued by check and mailed to the address shown on the student's registration form. Cancellation of credit courses by the College will result in a total refund of fees collected for those courses.

Federal regulations mandate the treatment of refunds for financial aid recipients. Financial aid funds must be returned to the government when College charges were paid by financial aid and a refund is given a student who fully withdraws from the College. Financial aid recipients may request more detailed information from the Financial Aid Office.

FINANCIAL AID

Ivy Tech participates in various types of federal and state financial aid programs that provide assistance to many students. Ivy Tech also provides financial assistance to students from its own resources. Students are encouraged to carefully explore all financial aid options at their campus.

Students must complete the Free Application for Federal Student Aid (FAFSA) to be considered for any form of financial aid. This form is available online at http://www.fafsa.ed.gov. Financial aid is available for both full- and part-time students regardless of age, race or sex. To qualify for financial aid all applicable requirements must be met. For federal and state financial aid programs students must:

- Be a regular student enrolled or accepted for enrollment in an eligible program;

- Not be enrolled in secondary school;

- Be a U.S. citizen or national or permanent resident;

- Maintain satisfactory academic progress in a course of study;

- Not owe a refund to a federal grant or loan program.

Students who have completed the FAFSA and submitted all required documentation will receive an award letter detailing the financial aid programs offered. Students will be notified of any additional documentation required for an award or instructions for receiving payment. Detailed information on all financial aid programs is available at your campus financial aid office.

The following are financial aid programs:

Federal Pell Grants

Federal Supplemental Education Opportunity Grants

Federal Work Study

Federal Stafford Loans

Federal Parent Loan for Undergraduate Students

Frank O'Bannon Awards

Child of Disabled Veteran Awards

Veteran's Benefits

Indiana National Guard Supplemental Grants

21st Century Scholar Awards

Ivy Tech Foundation Scholarships

The FAFSA must be received by the Federal processor after January 1 but on or before March 1 preceding enrollment for the following fall semester.

APPLICATION PROCEDURES FOR FINANCIAL AID

Application forms are available in the Financial Aid Office at all Ivy Tech campuses. Because application procedures, deadlines, eligibility regulations and refund policies vary with different types of student aid programs, interested students are encouraged to contact the Financial Aid Office at their earliest opportunity. Students should allow six to eight weeks for processing most financial aid applications. Students are encouraged to apply for assistance at any time. In general the fall semester marks the beginning of the financial aid award year.

Financial Aid Appeals

The following steps are recommended to students who feel they have received unfair treatment in the financial aid process:

1. Schedule a personal conference with the Director of Financial Aid to discuss and resolve the issue.

2. If Step 1 is unsatisfactory, schedule a consultation with the Dean of Student Affairs.

3. If Step 2 is unsatisfactory, schedule a conference with the Student Status Committee. This committee will make a recommendation to the Chief Administrative Officer to resolve the issue.

STUDENT RECORDS

Ivy Tech maintains an educational record for each student who is or has been enrolled at Ivy Tech. In accordance with the Family Educational Rights and Privacy Act of 1974, as amended, the following student rights are covered by the act and afforded to all students at Ivy Tech:

1. The right to inspect and review information contained in the student's educational records.

2. The right to challenge the contents of the student's educational records.

3. The right to a hearing if the outcome of the challenge is unsatisfactory.

4. The right to submit an explanatory statement for inclusion in the educational record if the outcome of the hearing is unsatisfactory.

5. The right to prevent disclosure, with certain exceptions, of personally identifiable information.

6. The right to secure a copy of the institutional policy.

7. The right to file complaints with the Department of Education concerning alleged failures by Ivy Tech to comply with the provisions of the act. The name and address of the office that administers FERPA is

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

Each of these rights, with any limitations or exceptions, is explained in the Student Affairs Policy and Procedures Manual, a copy of which may be obtained in the Office of Student Affairs or the library.

At the College's discretion directory information may be provided in accordance with the provisions of the act without the written consent of the student unless the student requests in writing that such information not be disclosed (see below). The items listed below are designated as directory information and may be released for any purpose at the discretion of Ivy Tech unless a request for non-disclosure is on file.

1. Name, address, e-mail address, telephone number, dates of attendance.

2. Previous institution(s) attended, major field of study, awards, honors, degree conferred.

3. Past and present participation in officially recognized activities, date and place of birth.

Students may request the withholding of directory information by notifying the Registrar's Office in writing, specifying the categories to be withheld, within ten (10) calendar days from the first scheduled day of the term. Ivy Tech will honor the request for one term only. Therefore the student must file the request on a term basis. The student should carefully consider the consequences of any decision to withhold any category of directory information. Regardless of the effect upon the student Ivy Tech assumes no liability for honoring a student's request that such information be withheld. Failure on the part of a student to request the withholding of specific categories of directory information indicates the student's approval of disclosure.

In addition, student records are held in security by the College. Transcripts on file with the College from high schools and other institutions of higher education cannot be released by Ivy Tech. A student needing a transcript from high school or another college should request it directly from that institution. The Registrar's Office will assist students wishing to see and review their academic records and student files. Any questions concerning the student's rights and responsibilities under the Family Educational Rights and Privacy Act should be referred to the Office of the Registrar.

Dependency Provision

Ivy Tech reserves the right, as allowed under the Federal Educational Rights and Privacy Act of 1974, to disclose educational records or components thereof without written consent to parents of dependent students as defined according to the Internal Revenue Code of 1954, Section 154 (as amended). A certified copy of the parent's most recent federal income tax form establishing the student's dependency status shall be required before any educational records or components thereof will be released to the parent of any student.

ACADEMIC GRADING

The academic grading system has both grades and status codes, both of which are explained in greater detail later in this section. Grades reflect the quality of performance and level of competency achieved by students who complete a course. Formal grades are assigned at the end of each enrollment period. Instructors determine and assign grades and status based on objective appraisal and evaluation of the student's performance. Semester grade reports are available on the web and by phone.

In all courses the quality of the student's work determines the grade earned. For some courses quantity of work, speed of work, or both also are considered in determining the grade. Class participation also may be considered by instructors in awarding grades. In certain instances a status code appears on the student's record in place of a grade. Status represents a condition to which no letter grade can be assigned.

GRADES

The quality of student performance or competency level, as determined by the instructor at the completion of a course, is indicated by a letter grade of A, B, C, D or F. Ivy Tech does not use pluses and minuses as a part of its grading system. Each designation has a numerical value per credit hour, referred to as "quality points." The meaning and quality point value per credit hour of each letter grade are shown in the table below:

Status		Quality Points Per Credit Hour
A	Excellent	4
B	Good	3
C	Average	2
D	Below Average	1
F	Failure	0

Academic skills advancement courses are assigned grading designations, but no quality points or quality hours are earned.

STATUS CODES

Status codes describe the state or condition of a course on the student's record for which a grade has not been awarded. Status code indications carry no quality points. The types of status codes and the symbols used to indicate them are shown below.

Status

I . . . . . . Incomplete

AU . . . . Audit

S . . . . . . Satisfactory

U . . . . . .Unsatisfactory

V . . . . . .Verified Competency

W . . . . . Withdrawal

These status codes are used for the following reasons:

I—Incomplete

"I" designations are received by students who have actively pursued a course and are doing passing work at the end of the course but who have not completed the final examination and/or other specific course assignments.

To remove an "I" designation, a student must meet with the instructor and make arrangements to complete course requirements in a specified period not to exceed 30 days beyond the start of the following term. The instructor must submit the grade within 31 calendar days of the beginning of the following term in which the student received the "I" designation.

AU—Audit

"AU" status indicates enrollment in a course for which no grade or credit is awarded. The fees for audited courses are the same as those for courses taken for credit. Audit status must be declared no later than the end of the first week of classes with approval of the instructor or program chairperson.

W—Withdrawal

A "W" status code will be used for student and academic withdrawals. Student withdrawal (W) is a status referring to voluntary student withdrawal beginning at the start of the third week of the course for a 16-week semester up to the end of the week marking the completion of 75 percent of the course. To be considered officially withdrawn from a course the student must file change of enrollment form with the Office of the Registrar. After 75 percent of the term has elapsed a student may withdraw (with the same result as indicated above) only if documented extenuating circumstances are submitted to and approved by the Chief Academic Officer or his/her designee.

S—Satisfactory

The "S" indicates satisfactory completion of course work in situations where either a status of satisfactory or unsatisfactory (pass/fail) has been arranged by prior agreement. Requests for this type of grading must be declared at time of registration. Courses graded with an "S" do not count toward graduation requirements.

U—Unsatisfactory

The "U" indicates unsatisfactory completion of course work in situations where either a status of satisfactory or unsatisfactory (pass/fail) has been arranged by prior agreement. Requests for this type of grading must be declared at time of registration. The "U" differs from an "F" in that quality points are not computed.

V—Verified Competency

The "V" indicates satisfactory completion of course work in situations such as test-out, credit for prior learning experience or training, College Level Examination Program (CLEP), etc. Credit gained through this method may be used to satisfy degree requirements. This status is approved by the Chief Academic Officer upon recommendation of a faculty advisor following completion of necessary verification and documentation of competency.

Credit Hours

Credit is described in semester hours (the number of credits taken per semester). The number of credits is determined by the demands of the course, course work and by the number of contact hours - the hours actually spent in the classroom or laboratory.

Credit Hours/Load

A credit hour represents one hour of lecture, two hours of laboratory, three hours of clinical/practicum/studio, or five hours of internship instruction per week for the semester. A three-credit-hour lecture course, for example, meets 48 hours during a 16-week semester (3 hours/week x 16 weeks). An average full-time semester class load in most Ivy Tech programs consists of 12-15 credit hours. A class load of more than 17 credit hours requires approval of the Chief Academic Officer or designee.

Enrollment Status

Enrollment status for the fall and spring semesters is determined by registered total semester credits:

Full-time student . . . . 12 or more credits per semester

3/4 time . . . . 9-11 credits per semester

1/2 time . . . . 6-8 credits per semester

Less than 1/2 time . . . . 1-5 credits per semester

A first-year student, by definition, is one who has completed 30 or fewer semester credit hours. A second-year student is one who has completed 31 or more semester credit hours.

For the summer period, enrollment status for Title IV financial aid and for all other purposes is as follows:

	Financial Aid	All other purposes
Full-time	12 credits	6 credits
3/4 time	9-11 credits	4-5 credits
1/2 time	6-8 credits	3 credits
Less than 1/2 time	1-5 credits	1-2 credits

Quality Points

Quality points are numerical values indicating the quality of student performance in credit courses: A=4; B=3; C=2; D=1; F=0. The quality points earned for a course equal the quality point value times the number of credits. A student who earns an "A" in a four-credit course earns 16 quality points: the quality point value (4) x the number of credits (4) = the total quality points (16).

Grade Point Averages

The grade point average (GPA) is a numerical indication of the student's performance in all courses in which quality points can be earned. The GPA is calculated by dividing the number of quality points earned by the number of credits earned. The term and cumulative GPA, calculated to three decimal places, will appear on the online grade report as well as on the transcript.

Under extenuating circumstances a student may petition the Chief Academic Officer to exclude coursework from the cumulative GPA calculation. Courses excluded from the cumulative GPA calculation as a result of a petition will not be counted as earned and cannot be used to satisfy program requirements for degree-seeking students. Grades for excluded courses will remain in the student's term GPA, and the courses will continue to appear on the transcript, however the cumulative GPA will reflect the exclusion of the coursework. Contact the Office of Student Affairs for additional information.

Improving a Grade

Students may attempt to improve grades by repeating courses (allowable once per course). Financial aid recipients, however, should review their situations carefully since payment for repeated courses can be disallowed. Student transcripts will contain a complete record of all activity. The student's grade point average will reflect the highest grade earned.

Dean's List

The Dean's List, prepared and published each term, gives recognition to degree-seeking students who achieve a minimum 3.50 grade point average in non-academic skills advancement courses with no Ds or Fs while earning six or more Ivy Tech credits during the semester and have earned at least a total of 12 non-academic skills advancement credits during their course of study.

Grade Reports

Grade reports are available on the web via Web for Students and by phone via STARS. A student may also request a copy of the academic transcript from the Office of the Registrar, which lists all coursework attempted at Ivy Tech.

Prior Coursework

Credits taken more than ten years prior must be reviewed by the Dean of Academic Affairs to be applied to a degree or certificate objective. This policy applies to credits accepted in transfer from another institution and to credits taken at Ivy Tech prior to declaring the new degree or certificate objective to which the credits may apply.

Attendance

Regular attendance is expected at scheduled class meetings or other activities assigned as part of a course of instruction. Attendance records are kept by instructors. When personal circumstances make it impossible to attend scheduled classes and activities, the College expects students to confer with instructors in advance. Instructors can offer students the option of making up the material missed.

Absences may be considered by instructors in awarding grades and considering involuntary withdrawal. Students who must interrupt their Ivy Tech education to fulfill Reserve and National Guard annual tour requirements should present official military orders to their instructors prior to departure for duty. Students are not excused from completion of the course work and should make arrangements with their instructors to complete all work.

STANDARDS OF PROGRESS

Students who have declared a certificate or degree objective and who have 15 or more cumulative quality credit hours attempted must maintain a 2.00 minimum cumulative grade point average (GPA) to remain in satisfactory academic standing. Students receiving financial aid must demonstrate satisfactory progress toward completion of a program within a specified time frame based on their enrollment status. Students also must successfully complete the minimum number of credit hours required for that status each semester. All students are expected to maintain a minimum of a 2.00 cumulative GPA to be eligible for graduation. Questions about standards of progress and academic standing should be addressed to the Office of Student Affairs.

The Office of Student Affairs is available to help with special problems, exceptional circumstances, and filing grievances (see Student Grievances). Special problems, exceptional circumstances, and grievances are ultimately the responsibility of the Chief Administrative Officer of the region, designated staff and committees.

ASSESSMENT

Assessment and evaluation at Ivy Tech lie at the heart of College teaching and learning as well as academic and student support systems. Assessment is a tool that supports the College mission to prepare individuals for employment and higher education. It is also a critical component of the College Plan for Institutional Improvement. A college-wide assessment and evaluation plan has been developed to measure student academic success. Because academic skills are one of the best measures of program success, the format of the plan reflects assessment and evaluation as students move through courses and programs.

The Assessment and Evaluation Plan is a reflection of the College's commitment to enhanced student learning from initial evaluation for course placement through outcomes assessment and subsequent institutional improvement that occurs as a result of these activities. The Assessment and Evaluation Plan follows students' experiences from entry-level placement through courses and degree or certificate programs. The plan also examines student-learning outcomes during course enrollments. In addition, it measures students' technical and general education skills near and/or after graduation.

GRADUATION

The Associate of Arts, Associate of Fine Arts, Associate of Science, Associate of Applied Science degrees and the Technical Certificate are awarded by the College to students who meet graduation requirements. Graduation ceremonies are held once a year. Graduating students may be charged a fee to cover the cost of the ceremonial cap and gown.

A student is considered eligible for graduation when requirements for graduation have been fulfilled. Each student entering the final semester prior to graduation must complete an application for graduation. The application will be certified by the student's program advisor and forwarded to the Registrar's Office where the appropriate diploma will be prepared.

Graduating students will participate in outcomes assessments. To graduate with an Associate of Arts degree, an Associate of Fine Arts degree, an Associate of Science degree, an Associate of Applied Science degree or a Technical Certificate, the student must:

1. Attain a minimum grade point average of 2.00 in the required technical and general education courses;

2. Earn 15 credits as a regular student of Ivy Tech rather than by test-out or other means of advanced placement;

3. Successfully complete the required number of credits;

4. Satisfy all financial obligations due the College; and

5. Satisfy program accreditation standards that may have additional requirements.

TRANSFERRING TO ANOTHER INSTITUTION

Ivy Tech has articulation agreements under which students may transfer individual courses or entire programs of study to a number of public and private institutions. A student, depending on his or her goals, may choose to transfer to another college or university and pursue a bachelor's degree after completion of a series of courses or completion of a two-year degree program at Ivy Tech. Some of these agreements are collegewide and some pertain to specific campuses of Ivy Tech.

The selection of an institution for transfer should be an individual decision based upon the extent to which credits will transfer, compatibility of degree programs, location, availability of programming, philosophy, and cost of attending the transfer school. Opportunities are available to Ivy Tech students to transfer and complete a baccalaureate program as a resident or commuting student. In addition opportunities are available to pursue a bachelor's degree using distance technologies which will allow a student to complete a degree program within the home community, even at an Ivy Tech campus.

Students are encouraged to review transfer options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Information about statewide program transfer is included with many programs in this catalog. Additional opportunities for course and program transfer with both public and independent colleges and universities are available. Students should contact the transfer office of their local Ivy Tech for further information.

STUDENT SUPPORT SERVICES

ACADEMIC SKILLS ADVANCEMENT PROGRAM SERVICES

To ensure that every student has the opportunity to be successful, Ivy Tech offers an Academic Skills Advancement program. This developmental program is designed for students enrolled in programs or courses at the College who are encountering academic difficulty or who have been identified as having encountered academic difficulty in the past. Services provided through the Academic Skills Advancement program include diagnostic testing and assessment, course placement services and instruction.

The need for these services may be identified at the time of admission. However, a student may use any or all services upon encountering academic difficulty during a course of study. Academic skills advancement instructors and laboratory technicians provide developmental instruction in the areas of math, communications, sciences, writing and study skills. Some campuses offer GED preparation and English to speakers of other languages (ESOL). Delivery of instruction may be in the form of an academic skills advancement course in a classroom setting, one-on-one tutorial assistance, computer-based instruction or a self-paced study in the academic skills center. For further information about the College's Academic Skills Advancement program contact the Office of Student Affairs or the academic skills center.

ACADEMIC ADVISING

Each campus provides advising to all students. Students may obtain individual advising and/or assessment to assist them in identifying their abilities or occupational interests. Counseling and assessments also are helpful in developing education and career plans. Students are encouraged to seek assistance in selecting an occupation and learning about educational requirements from the Office of Career and Employment Services.

Upon admission each degree-seeking student is assigned an advisor who will:

1. Assist the student in course selection and program planning.

2. Guide the student in meeting the requirements for graduation as prescribed by the College.

3. Ensure that appropriate professional/technical and general education courses are included in the chosen course of study.

CAREER SERVICES

Career Services provides many types of services to all students, graduates, and alumni, including: career exploration, resume writing preparation, career fair information and assistance in finding employment while in school and upon graduation. Students, graduates, and alumni interested in assistance with job search strategies may register with their local Career Services office. Upon registration, Career Services staff will:

1. Advise candidates of the College's career services.

2. Provide occupational information including employment trends and local and state occupational outlook data.

3. Assist the registered candidate in preparing a packet of credentials for use in finding a job. This packet may include:

   a. A resume of the candidate's education and employment experience, and

   b. Personal letters of recommendation verifying the student's employability.

4. Create and maintain folders containing original copies of the candidate's credentials for all registered candidates.

5. Prepare copies of credentials used by the candidates for referral to prospective employers. Alumni may update their credentials whenever they wish to use the Career Services Office.

Students or alumni registered with the Career Services Office will be informed of employment opportunities known to the Career Services Office. These opportunities are also posted on campus job boards and online. CareerLink (http://careerlink.ivytech.edu) is the Ivy Tech online resume referral system. Employers can post positions and students can post resumes at no cost. Local job postings as well as statewide listings can be accessed through CareerLink. Employers who register with the Career Services Office are granted access to CareerLink and are provided with the names of all qualified candidates without regard to gender, race, age, national origin or disability. Registered students or alumni are eligible for interviews with appropriate prospective employers. See the Career Services office for additional information.

COLLEGE BOOKSTORE

Each campus maintains a bookstore where students may buy textbooks and supplies. College sweaters, jackets, souvenirs and other items also are available for purchase.

LIBRARY

Libraries at each campus provide access to materials, information and services that support students' educational needs. In addition libraries have career exploration materials, inter-library loan services, general and technical periodicals, recreational reading, and audio-visual materials and equipment.

In addition to print materials the College provides a variety of online databases, many of which are full-text, that are available to students at all campuses.

Disability Support Services

Reasonable accommodations for persons with disabilities will be made to ensure access to academic programs, services, and employment in accordance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. College programs and facilities are designed to be accessible to students with disabilities. Each campus has designated parking and special restroom facilities for persons with disabilities. Disability Support Services also will aid students with disabilities with career planning, financial aid and placement. The College staff works with the Department of Vocational Rehabilitation and other service agencies to assist students with disabilities through available local community resources.

It is the student's responsibility to contact the campus Disability Services representative to request accommodations; any information shared will be kept confidential unless the student authorizes release and exchange of specified information. Requests for accommodations and documentation of disability must be received one month prior to enrollment for the next academic term. Additional time may be required for some requests. Every effort will be made to provide reasonable accommodations in a timely manner.

STUDENT LIFE

Organizations and Activities

The College recognizes the educational, recreational and social values of student organizations and extracurricular activities. Students are encouraged to participate in any or all phases of the student activities program as long as participation does not interfere with studies.

All student organizations operate under the policies and guidelines set for the College by the State Board of Trustees. Approval by the Student Government and the administration is required of all student organizations seeking to make use of College facilities. All approved organizations must be open for membership to all eligible candidates and must make available to the Student Government records of officers, membership and financial transactions.

Student Government Association (SGA)

Students in each region are provided opportunities to participate in student organizations through the Student Government Association (SGA). SGA is the representative governing body of the students. SGA representatives are elected or selected according to the by-laws of each regional SGA constitution and serve as stated in those bylaws. The student body membership may consist of representatives of each program area and an advisor as established in the by-laws.

SGA was established by students to encourage participation in SGA and to promote College spirit and recognition. SGA exercises the authority, unless otherwise delegated, to legislate on student matters subject to the approval of appropriate College administrative offices.

The constitutions of all student organizations must be approved by a quorum of the SGA, consisting of a simple majority of the total membership and one staff advisor, or as otherwise stated in the by-laws.

The functions of SGA include:

1. Communication of bona fide concerns of the student body to appropriate College officials with suggestions for improvement.

2. Approval of student organizations beneficial to student life and worthy of being part of the College.

3. Assurance that copies of the constitution, by-laws and statement of purpose and objectives of each recognized student organization are on file in the Office of Student Affairs.

4. Referral of student grievances to the appropriate College officials.

5. Planning and conducting appropriate and socially responsible extracurricular student activities.

6. Submission of student activity budgets for review and approval by the regional administration.

PHI THETA KAPPA

Phi Theta Kappa is a national honor fraternity for two-year colleges. Its purpose is to recognize and promote academic excellence. This is done by providing leadership development opportunities for service in chapter activities on campus and in regional Phi Theta Kappa activities. Membership in Phi Theta Kappa is by invitation only and is based on a minimum grade point average as well as completion of a specified number of semester hours. Contact the Office of Student Affairs for further information.

INTRAMURAL SPORTS

College sports activities consist of intramural sports sponsored by the Student Government Association (SGA). Leagues can be formed when student interest justifies their organization. All College sports activities must be approved and sponsored by SGA and the administration.

CLUBS

Students wishing to organize hobby, social or special interest clubs should submit proposals to the Student Government Association (SGA), which will determine whether sufficient interest exists. SGA is authorized to charter clubs upon approval by the administration. Each club must have an elected president and vice-president, a faculty advisor, and a constitution and by-laws.

SOCIAL ACTIVITIES

All group activities of the College must be approved and sponsored by the Student Government Association (SGA) and the administration. Classes, clubs and other groups should plan and conduct social activities for their members. SGA organizes and conducts social activities and gatherings in which all students are encouraged to participate, and to which many will be open to guests.

PROFESSIONAL ORGANIZATIONS

Student chapters of various professional organizations are formed in the same manner as other student organizations and are subject to the same requirements.

LEADERSHIP DEVELOPMENT

The College sponsors a Student Leadership Academy, a seven-month-long experience to help students better understand the roles of leaders and the leadership potential that exists in everyone. Students must apply to join the Leadership Academy. Contact the Office of Student Affairs for further information.

COMMUNITY SERVICE

Community service is an important aspect of becoming a well-rounded citizen. Community service occurs through classroom activities, student government, student clubs and organizations, and partnerships with community agencies. Please check with the student government office for volunteer opportunities.

Ivy Tech Alumni Association

Many of the regions have established chapters of the Ivy Tech Alumni Association. Membership in the association is open to current and former students. Contact the Office of Student Affairs for further information.

E-Mail

Each student has an Ivy Tech e-mail address via the MyCP college portal. Since most departments and instructors will be communicating with you via your college e-mail account, it is important that you can access the account without difficulty. Students who do not use their Ivy Tech e-mail accounts may miss information from the College that is vital to their success. Official College notices and helpful information will be provided to you through your Ivy Tech e-mail. Ivy Tech will use your Ivy Tech e-mail account to notify you of changes in your accounts, in your courses, and in college policies and procedures. You are responsible for the information and notices that are sent to you via your assigned e-mail account. It is suggested that you set your web browser to MyCP and check your account every day. The Student Computing Practices are included on the site.

MyCP: The College Portal Website

MyCP is available at http://mycp.ivytech.edu. All Ivy Tech students are given an account to this intranet which provides information, communication tools, and access to online College services through the administrative information system called SIS Plus. Students may register for and drop/add courses as well as view grades, holds, transcripts, financial aid, and other information. Along with targeted campus announcements, students access their web-based, e-mail accounts via the portal. On the My Courses tab, the user's schedule of courses is listed by semester. Each course has a simple, automatically-created website offering all enrolled students a message board, chat room, links to other resources, and the ability for faculty to e-mail the entire class or individuals.

Group Portals within MyCP have similar features to the course websites, but are available for any sanctioned group on campus. Group Portals are either public (open to anyone) or private (selective admission) and are maintained by a group leader. Group Leaders may delegate portions of the site's maintenance responsibilities to other group members.

For more information, visit the SOS Helpdesk website at http://www.ivytech.edu/sos/. Included is a FAQ (frequently asked questions), documentation from MyCP, training opportunities, and technical help.

In an upcoming semester, MyCP will become Campus Connect, offering students a more seamless system of online services and campus-specific content and announcements.

HOUSING

Ivy Tech is a commuter college and does not operate residence halls. However, the Office of Student Affairs may be able to respond to questions concerning housing in the community. Ivy Tech accepts no responsibility for locating, approving or supervising local student housing.

STUDENT PARKING

As part of registration, some campuses require students to register their motor vehicles and obtain a parking sticker. A special permit is required to park in spaces for persons with disabilities. Stickers are to be displayed in the vehicle while parked on campus, and students may park only in designated student parking areas. Vehicles improperly parked in areas reserved for the disabled, visitors or others may be towed at the expense of their owners.

STUDENT ACCIDENT INSURANCE

For students registered in credit courses, the College provides accident insurance in a designated amount for injuries sustained while participating in College-sponsored activities. The activity must take place on College premises or on any premises designated by the College. Students are also covered while traveling to and from College-sponsored activities as a member of a group under College supervision. It is the student's responsibility to report injuries promptly to the instructor or to the Office of Student Affairs. The insurance is for a specified minimum amount of coverage. It is not intended to replace insurance coverage students may already have. Students should review their own coverage. The master insurance policy issued to Ivy Tech is on file at the central administrative office. The description of the hazards insured, benefits and exclusions is controlled by the master policy. Students with questions may contact the regional Office of Student Affairs.

STUDENT HEALTH INSURANCE

The College has made arrangements for Ivy Tech students to obtain health insurance. Insurance coverage is purchased directly from the insurance company by the student. Application forms and brochures explaining coverage and rates are available through the Office of Student Affairs during registration periods. Coverages and rates are subject to change.

ACCIDENTS AND ILLNESSES

If a student has an accident on College property the student should report the accident to campus security or the Office of Student Affairs. If a student suffers an accident or illness while attending classes the student should notify the instructor. The College will take the necessary steps to intervene in a medical emergency while the student is on campus. If paramedic services or hospitalization is required the student is financially responsible.

If a student is suffering from an illness that makes it impossible to attend classes the student should contact his/her instructors.

The College does not provide a health services center. The College supports the Drug Free Schools and Communities Act of 1989. Many community agencies are available to assist students seeking counseling or treatment. Please contact the Office of Student Affairs for a listing of community resources. The College conducts a biennial review of the effectiveness of its drug and alcohol abuse prevention programs. This review is available in the Office of Student Affairs.

VOTER REGISTRATION

Students are strongly encouraged to exercise their right to vote. In order to vote in national, state or local elections one must be a registered voter at the person's current address. Students who need a voter registration form due to either not having previously registered or having moved can pick up a voter registration form at the Office of Student Affairs. Forms can also be downloaded from the Indiana Secretary of State's office at http://www.in.gov/sos/forms/index.html. Under the "Elections" section, select form VRG-7i. A Spanish-language version is also available.

EMERGENCY CLOSING OF CAMPUSES

Severe weather conditions or other emergencies occasionally make it necessary to close a campus. Each campus has designated local radio stations to announce information on closings.

STUDENT RIGHTS AND RESPONSIBILITIES

STUDENT CONDUCT

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

The reputation of the College and the community depends in large part upon the behavior of its students. Students enrolled at the College are expected to conduct themselves in a mature, dignified and honorable manner. Students are entitled to a learning atmosphere free from discrimination, harassment, sexual harassment and intimidation. This applies to the conduct between faculty and staff to students, student to student, and students to faculty and staff.

Students are subject to College jurisdiction while enrolled at the College. The College reserves the right to take disciplinary action against any student whose conduct, in the opinion of College representatives, is not in the best interests of the student, other students, or the College. Students who are disciplined should expect to find their sanctions enforced at other Ivy Tech campuses.

All students are expected to abide by the following College rules of conduct.

"Student" as used refers to a student, a group of students, a prospective student or a group of prospective students.

COLLEGE RULES

1. Academic Integrity

   Faculty are responsible for maintaining the academic integrity of the institution. Academic integrity is expected of all students and faculty.

   Ivy Tech recognizes academic integrity as a fundamental principle of collegial life. The credibility of the College's educational programs rests upon the foundation of student learning and integrity. Students who misrepresent their academic work violate the rights of their fellow students and undermine the faculty's authority and their ability to assess learning. The College therefore views any act of academic dishonesty as a serious offense requiring disciplinary measures, including failure for the exam or specific course work, course failure, suspension, and expulsion from the College. In addition, an act of academic dishonesty my have unforeseen effects and lead to formal processes outside the College.

   Definitions: Violations of academic integrity include, but are not limited to, the following acts:

   Cheating: Unauthorized use of notes or study aids, or acquiring information from another student's papers, on an examination; or obtaining a copy of an examination or questions from an exam prior to taking the exam; or altering graded work with the intent to deceive by resubmitting it for re-evaluation; or altering or destroying grade records; or allowing another person to do one's work and then submitting as one's own name; or allowing another to take an examination in one's name; or submitting identical or similar papers for credit in more than one course without obtaining prior permission from the instructors of all the courses involved.

   Aiding Cheating or Other Acts of Academic Dishonesty: Providing material or information to another student with the knowledge that this material or information will be used to deceive faculty in an effort to acquire higher grades.

Plagiarism: Presenting within one's own work the ideas, representations, or words of another person without customary and proper acknowledgment of that person's authorship is considered plagiarism. Students who are unsure of what constitutes plagiarism should consult with their instructors. Claims of ignorance will not necessarily excuse the offense.

Data Misrepresentation: Fabricating data; deliberately presenting in an assignment data that were not gathered in accordance with assigned guidelines or are deliberately fabricated; or providing an inaccurate account of the method by which the data were gathered or generated.

Falsification of Academic Records or Documents: Falsification of academic records or documents includes but is not limited to altering any documents affecting academic records; forging signatures; or falsifying information of an official academic document such as a grade report, ID card, library card, or any other official College letter or communication will constitute academic dishonesty.

Unauthorized Access to Computerized Academic or Administrative Records or Systems: Unauthorized access to computerized academic or administrative records or systems means 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; or interfering with the use or availability of computer systems or information. Also, when college-sponsored activities are held at locations owned or managed by other institutions or organizations, the unauthorized use, viewing, copying, or altering of those institutions' computer records, systems, or program would similarly constitute a violation of academic integrity.

2. Assembly: College policy states that assembly in a manner that obstructs the free movement of others about the campus, inhibits the free and normal use of the College buildings and facilities, or prevents or obstructs the normal operation of the College is not permitted. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College-sponsored or supervised activities is included in the definition of obstruction.

3. Children on Campus: Due to insurance and security purposes, children are not allowed to be on Ivy Tech property without direct supervision by parent or guardian, with the exception of childcare centers. Children are not allowed in classrooms unless through the expressed consent of the instructor.

4. Commitment of College Funding: Committing College funding, including student clubs or organizations, without written approval and paperwork will result in the student being responsible for the money owed, the student being removed from the club or organization, and disciplinary action being evoked. No student shall enter into a contract with an outside agency using the name of the College. Contracts entered into in violation of this rule shall be the personal responsibility of the student.

5. Compliance and Identification: Students who fail to comply with direction of College officials or law enforcement officers in the performance of their duties and/or fail to identify themselves to these persons when requested to do so are subject to disciplinary sanctions.

6. Discrimination Activities: Any student involved in discrimination activities towards students or staff will face disciplinary action.

7. Disruptive Behavior: Behaviors or actions that disrupt the College's processes (academic and/or non-academic) are in violation of College rules. No student shall behave in a manner that is unacceptable in a learning environment or that endangers or infringes on the rights and/or safety of himself or herself or other students, visitors, staff, patients in a clinical situation, and/or children in childcare centers at Ivy Tech. If misconduct warrants an immediate suspension from the institutional setting for the remainder of the instructional period the instructor may do so without a prior hearing. If the student does not voluntarily leave the institutional setting campus official(s) and/or campus security officers may remove the student from that setting upon oral request by the instructor.

8. Electronic Equipment or Programs: Use of electronic equipment or programs in a manner that is disruptive to other students, staff, or College processes is prohibited. This includes electronic equipment being played loudly. Students introducing computer viruses will be subject to disciplinary action, including dismissal.

9. Financial Responsibility: Students are expected to pay all fees, fines, or loans in a timely manner. Official transcripts and copies of records will not be given to the student and degrees will not be awarded until debts to the College are paid. Students will be allowed to inspect and view transcripts and records. Students will not be allowed to register in an "owe fees" status.

10. Fundraising or Solicitation: College policy requires that individuals or organizations seeking the use of campus facilities or scheduling activities to solicit funds must first obtain written approval from the appropriate College official. College rules and regulations govern fundraising activities, the money collected, and the use of the money collected by the fundraising activities. Misrepresentation or misuse will result in the student's being responsible for the money owed to an institution or individual, the student's being removed from the club or organization, and the student's facing disciplinary action. The student is also accountable to state and federal laws and regulations.

11. Furnishing False Information With Intent to Deceive: Providing false information is against College rules and state laws.

12. Harassment/Sexual Harassment/Stalking and/or Intimidation: This is defined as conduct causing alarm or creating a risk by threatening to commit crimes against persons or their property or making unwelcome sexual advances or requests for sexual favors. This also covers harassment or intimidation of persons involved in a disciplinary hearing and of persons in authority who are in the process of discharging their responsibilities. Harassment, stalking, and/or intimidation are not permitted. Perpetrators are also subject to Indiana state law. Please see the policy regarding harassment at the end of this section.

13. Hazing: Hazing, an initiation process usually into a club or organization which often involves humiliating or otherwise harmful tasks, performances, or behaviors is not permitted.

14. Inappropriate Use of College Computer Resources: Theft or other abuse of computer time is against College rules, which include but are not limited to:

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

b) unauthorized transfer of a file, unauthorized use of another user's identification and password or use of computing facilities to interfere with the work of another student, faculty member or college official.

c) use of computing facilities to send, receive, or view obscene or abusive messages.

d) use of computing facilities to interfere with normal operation of the College computing system.

e) use of computing facilities for students' personal benefit.

f) use of College-owned computer resources to prepare or print work for commercial purposes.

g) Inappropriate use of printers:

    1. Printers are intended for class-related activities. Printing Internet web pages or other information not directly related to an authorized use is prohibited.

    2. Excessive printing is prohibited. Students must follow lab guidelines limiting the number of copies or pages that may be printed.

    3. Using non-approved paper in a college-owned printer is prohibited.

15. Motor Vehicles: Students are expected to comply with parking regulations. Parking spaces for persons with disabilities and visitors' areas are reserved for those purposes, and vehicles improperly parked in those areas may be ticketed or towed at the owner's expense.

16. Safety: No student shall engage in behavior that violates the safety rules of any institutional setting or other College premises, and/or College sponsored events whether such procedures are written or oral rules or directions. This shall include, but not be limited to, the wearing of any required personal protective equipment and the prescribed methods and procedures for handling and disposing of certain materials that may be hazardous, unstable, infectious, etc.

17. Signs or Surveys: Students may erect signs, conduct surveys, or display signs or posters on designated bulletin boards.

18. Use of College Name: The College name and logo are registered trademarks. The use of the College name or logo must be authorized by the officials in charge of College trademarks. Use without authorization is against College rules.

19. Use of College Facilities: Students are permitted on campus during normal published Ivy Tech hours and at other times established in the College calendar. Students wishing to utilize College facilities at other times must request permission from the appropriate College official. Unauthorized possession, duplication, or use of keys or electronic locking devices to any College premise, or unauthorized entry to or use of College premises is against College rules.

20. Compliance with Indiana State Laws: Violation of these laws is also against College rules and violators may also be prosecuted according to Indiana law.

- Alcoholic beverages: Consuming, being under the influence of or possessing intoxicating beverages on College property is not permitted.

- Arms/deadly weapons/explosives/chemicals: Possession of firearms (except those possessed by police or campus security officers) and other weapons, dangerous chemicals, or any explosive or explosive device is prohibited on College property or at any College-sponsored activity held elsewhere. No student shall use or threaten to use firearms, other weapons, dangerous chemicals, or any explosive or explosive device on College property or at any College-sponsored activity held elsewhere. A harmless instrument designed to look like a firearm, explosive, or weapon that is used by a person to cause fear in or assault of another person is included within the meaning of a firearm, explosive or weapon.

- Assault and battery, abusive actions, physical and/or verbal altercations and /or threatening language: Assault and battery, abusive actions, physical and/or verbal altercations, and/or threatening language are prohibited under College rules. Perpetrators are also subject to Indiana State law. No student shall threaten or commit a physical or sexual attack on faculty, staff or another student. No student shall force or threaten to force another student, faculty or staff member to have sexual contact against that person's will. Any student charged with an assault on Ivy Tech property or at any College-sponsored activity is subject to prosecution and will be disciplined under the campus code of student conduct.

- Counterfeiting and altering: Copying or altering in any manner any record, document, or identification form used or maintained by the College is not permitted.

- Dumping and littering: No student shall deposit, dump, litter or otherwise dispose of any refuse on college property except in duly designated refuse depositories.

- Gambling: Gambling is not allowed except where permitted by state law or within a sanctioned program or class.

- Illegal use of drugs: Being under the influence of, use of, possession of, or distributing illegal drugs is not permitted.

- Smoking: All Ivy Tech buildings are classified as "non-smoking" facilities. Smoking is permitted only in designated areas.

- Theft of property: Theft of personal property, College property, or property located on College property is a violation of College rules.

- Vandalism: The destruction or mutilation of Ivy Tech books, magazines, equipment, resources or buildings is a violation of College rules.

REPEATED OFFENSES OF A LESS SERIOUS NATURE

Repeated offenses of a less serious nature are considered disruptive and will be handled under the College's disciplinary process.

POLICY AND COMPLAINT PROCEDURE AGAINST HARASSMENT

The College will not tolerate harassment based on gender (with or without sexual conduct), sexual orientation, race, color, religion, national origin, age, disability, and/or opposition to prohibited discrimination or participation in this or any other complaint procedure. This prohibition covers harassment against any student at an Ivy Tech campus by anyone, including other students, employees or non-employees during any College activity or program. The policy prohibiting harassment includes adverse treatment of students because they report harassment or provide information related to such complaints.

Sexual harassment is simply one form of harassment covered by this policy. Sexual harassment encompasses unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature where:

Submission to the conduct is an explicit or implicit term of student status (which includes academic and non-academic decisions).

Submission or rejection of the conduct is the basis for any decision affecting that individual's student status; or such conduct has the purpose or effect of unreasonably interfering with an individual's academic performance or creates an intimidating, hostile or offensive academic environment.

Sexual harassment would include, but not be limited to, actions such as: (1) sex-oriented oral or written "kidding" or abuse, (2) photographs, drawings or graffiti of a sexual nature, (3) subtle pressure for sexual activity, (4) physical conduct such as patting, pinching, or constant brushing against another's body, and (5) explicit demands for sexual favors, whether or not accompanied by implied or overt promises of preferential treatment or threats concerning an individual's student status.

REPORTING AND COMPLAINT PROCEDURE

Students are encouraged to report harassment before it becomes severe or pervasive. A student who thinks that he or she has been a victim of harassment and who desires to file a complaint to that effect should report a complaint as follows:

If the complaint is regarding harassment by another student it may be filed with or reported to the Dean of Student Affairs or an academic chairperson with the expectation that the harassing behavior will be a violation of the College's Code of Student Conduct, either on its own terms or as a violation of another College policy.

If the complaint is regarding harassment by a College employee or non-employee it may be filed with or reported to the Dean of Student Affairs, any of the employee's supervisors, or with the Director of Human Resources or anyone else in a managerial role. All supervisors and members

of management to whom a complaint of harassment is brought or who independently observe behavior prohibited by the harassment policy are to report the complaint of harassment or information about harassment promptly to the highest ranking official at the respective facility who is not the alleged harasser, to the Dean of Student Affairs or to the Director of Human Resources.

INVESTIGATION

Students filing complaints of harassment are assured that information about the allegation of harassment will be shared only with those who need to know about it. Records relating to harassment complaints will be kept confidential on the same basis. Complete confidentiality cannot be guaranteed since conducting an effective investigation would not be possible without revealing certain information to the alleged harasser and potential witnesses. Under no circumstances will the individual who conducts the investigation or who has any direct or indirect control over the investigation be subject to the supervisory authority of the alleged harasser.

DETERMINATION

After all of the evidence is in, interviews are final, and any credibility issues are resolved, a determination as to whether harassment occurred will be made and the parties informed of the determination. If no determination can be made because the evidence is inconclusive the parties will be informed of this result.

CORRECTIVE ACTION

After the determination is made the College will undertake prompt and appropriate corrective action including discipline up to and including termination of employment of an employee harasser or dismissal of a student harasser, whenever it determines that harassment has occurred in violation of this policy. Such corrective action will be reported to the student making the complaint.

VIOLATIONS

The College strives to provide an educational and professional environment that allows individuals to engage in their daily activities in a safe, healthy and secure manner. Local, state or federal law enforcement officials will be notified of anyone violating local, state or federal laws. Violators shall be subject to prosecution by the appropriate law enforcement officials.

Anyone found in violation of College regulations shall be subject to disciplinary action by the College through due process procedures for student conduct violations.

The regulations and procedures will be placed for reading and review in the library. Copies will also be available through the Office of Admissions or Student Affairs.

DISCIPLINARY ACTION

Cases of student misconduct and/or lack of academic integrity are to be referred to the chief academic officer or chief student affairs officer. A student who violates the rules and regulations of the College may be subject to disciplinary actions, which may include, but not be limited to, the following:

1. Verbal reprimand;
2. Restitution for damages;
3. Restriction of privileges such as access to lab facilities, library facilities, testing center, etc.;
4. Failure of the exam, quiz, project, etc.
5. Failure of the assignment or course;

6. Withdrawal from a course, program or the College for the remainder of the semester or term;

7. Suspension from the College (one calendar year);

8. Dismissal from the College (five years; student may appeal for reinstatement).

In addition, the College representative will be responsible to review all initial disciplinary procedures and may suspend a student for a period of time until the Student Status Committee can meet.

Students are provided an opportunity to appeal any disciplinary decision and are required to sign a waiver if they choose to waive the right to appeal. The basic process in discipline cases is as follows: notice of charges, notice of possible penalty, and opportunity to explain a defense to some authority.

1. An appropriate College official shall notify the student that he or she is accused of violating a regulation.

2. The student shall be notified in writing that he or she may elect one of three courses of action:

A. The student may admit the alleged violation and agree with the recommended disciplinary action. A signed waiver which waives the right to appeal is required.

B. The student may admit the alleged violation and request a hearing before the Student Status Committee.

C. The student may deny the alleged violation, in which case the administrative officer shall refer him/her to the Student Status Committee.

The Student Status Committee hears all appeals relating to disciplinary actions.

STUDENT GRIEVANCE POLICY

The student grievance process provides the College an appropriate mechanism to deal with violations of student rules of conduct and conversely allows a student with a disagreement to grieve against a College employee's decision affecting that student. The College encourages students to resolve their complaints informally. The informal grievance procedures are designed to accomplish a quick resolution that is most expeditious and effective.

Whenever the informal process does not result in a satisfactory resolution, the College formal grievance procedure is also available.

INFORMAL GRIEVANCE PROCEDURE

The student shall initiate the informal process with the student working one-on-one with appropriate faculty or staff and must be started within 30 calendar days of the incident. Students must bring to the attention of their instructor (in cases involving academic coursework) or relevant supervisory staff member legitimate complaints perceived by them. The student should first bring the complaint to the attention of his/her instructor or the person with whom the student has a complaint. A conference with the student will be scheduled as soon as possible and within five working days (Monday - Friday) of notice of the student complaint, at the latest. The intent of these conferences is to ensure an early discussion of the issue, that the issue has been raised in a timely fashion and that if possible a mutually acceptable resolution can be reached.

A student who feels that the conference would be futile because of that person's involvement or the situation/concern cannot be resolved with the instructor or staff with whom the student has the complaint, he or she should bring the grievance in writing to the supervisor of that area or department. The conference will be held as soon as possible and at least within five working days of notice of the complaint. Such conferences are to be conducted in proper sequence of supervisors. If the grievance is not resolved with an instructor the student may elect to request

a conference with a department head, division chair or the chief academic officer, as deemed appropriate. Non-instructional areas follow the same step process. Through Student Affairs, for example, the process would be advisors/counselors, then manager, and finally the chief student affairs officer. Grievances may cover matters such as the application of College policies and practices to the grievant but the existence or content of the policies may not be grieved.

FORMAL GRIEVANCE PROCEDURE

If a student is not satisfied with the results of the informal process the student may proceed with the formal grievance as described below.

FORMAT OF THE WRITTEN GRIEVANCE

If the complaint is not resolved to the student's satisfaction through the informal procedure the student shall put the grievance to writing. The formal complaint must:

1. Clearly state the facts giving rise to the grievance.

2. Describe the efforts to informally resolve the complaint.

3. State the remedy sought by the grievant.

4. Be signed and dated.

TIMELY FILING OF A FORMAL GRIEVANCE

Students must file complaints within a reasonable period of time, not to exceed 30 calendar days, after the informal grievance process has been exhausted. Students must file a grievance within 30 days of the end of the term in which the incident occurred

FILING THE FORMAL GRIEVANCE

Original copies of the formal written grievance document shall be filed with both the regional office of Student Affairs and the College's Executive Director for Student Support Systems (One West 26th Street, Indianapolis, Indiana 46208). The Executive Director shall assign a College Grievance Coordinator who shall coordinate the handling of the grievance within the region.

MEDIATION

Reasonable efforts should be made by the Grievance Coordinator to mediate a mutually agreeable resolution of the matter with the parties. A signed document should be generated by the Grievance Coordinator stating the results of the mediation.

STUDENT STATUS COMMITTEE

The Student Status Committee is a committee whose purpose is to review all formal grievances referred to it and recommend a resolution to the chief administrative officer. It will be composed of six members, including two full-time instructional staff members and two administrative staff persons appointed by the chief administrative officer of the region. The additional two members will be students designated by the Student Government Association or the chief student affairs officer. The Committee's review of a formal appeal will begin no later than 30 days after fact-finding and mediation terminates. The Grievance Coordinator shall keep the grievance body informed of efforts related to fact-finding and mediation. Central Office support, as needed, will be available to the Grievance Coordinator.

DISPOSITION OF A FORMAL GRIEVANCE
BY THE STUDENT STATUS COMMITTEE

If mediation does not resolve the grievance the Student Status Committee shall, in all cases, conduct a hearing. Unless there is a mutual resolution of the grievance the grievance shall not be dismissed prior to the hearing. Written notice of the procedures, actions and meetings at all stages of the formal complaint procedure, including the role of advisors to each party, will be provided to both the student (grievant) and respondent.

The Student Status Committee will ensure the student due process. The student has the following rights:

1. Reasonable advance written notification of the time and place of the hearing;

2. Notification in writing of the charges with sufficient particularity to enable the student to prepare a defense;

3. Notification in writing of the names of the witness (es) directly responsible for reporting the alleged violation or, if there are no such witness (es), written notification of how the alleged violation was reported;

4. Notice of actions and meetings at all stages of this appeal procedure;

5. An opportunity to be heard;

6. An opportunity to question witnesses at hearings;

7. An opportunity to have a representative present when presenting facts, being questioned, or asking questions;

8. An expeditious hearing of the case;

9. An explanation of the decision rendered in the case.

The student shall not be required to testify against him or herself.

Once the formal grievance has been initiated and attempts by the Grievance Coordinator to mediate a settlement have been exhausted a hearing shall be held pursuant to the hearing guidelines entitled "Student Grievance Hearing Procedural Guidelines." These guidelines, which are occasionally updated, describe how the actual hearing will be conducted. The Grievance Coordinator will provide a copy to both the student (grievant) and respondent at the beginning of the formal process. Persons who desire to view the guidelines should contact the chief student affairs officer for a copy.

The Student Status Committee will issue a recommendation(s) to the chief administrative officer following its deliberation. Recommendations of the Student Status Committee if approved by the chief administrative officer are final, unless appealed to the Office of the President (see Appeal to the Office of the President). The student will be informed in writing of the chief administrative officer's decision. A copy of the letter with the chief administrative officer's decision will be filed in the student's permanent record.

APPEAL TO THE OFFICE OF THE PRESIDENT

If the student does not accept the decision of the Student Status Committee the student may appeal, in writing, within 30 calendar days from the written notification by sending a written notice to the General Counsel, Collegewide Appeals Grievance Body, at P.O. Box 1763, Indianapolis, IN 46206.

An appeal of the decision of the Student Status Committee to the Collegewide Appeals Grievance Body is limited to procedural errors. The Collegewide Appeals Grievance Body does not review or re-hear the merits of the original grievance. The Collegewide Appeals Grievance Body can

recommend to the President that the decision should stand or to remand it back to the campus chief administrative officer for reconsideration. The decision of the President is final.

REINSTATEMENT TO THE COLLEGE

If a student is dismissed from any campus/region of Ivy Tech, that individual is dismissed from the College. The year starts at the time/date of official notification to the student by the Chancellor/Executive Dean. After one calendar year the individual under suspension may apply for reinstatement. If the student is dismissed the student may appeal for reinstatement after five years. The individual must begin the reinstatement appeal process by informing the Dean of Student Affairs at the campus where the dismissal took place of his/her intentions. The appeal for reinstatement may be applied for at any campus/region of Ivy Tech where the individual hopes to attend. The appeal will be reviewed by the Dean of Academic Affairs and the Dean of Student Affairs. If there is reinstatement that is agreed to by the student, no further action is necessary. If the student is not satisfied with the reinstatement decision, the formal due process procedure is implemented. The campus/region Student Status Committee will act on the appeal within 30 days of its receipt. The recommendation of the Student Status Committee will be forwarded to the Chancellor/Executive Dean of the campus/region. That individual will render a judgment on the appeal. That judgment will be final.

STUDENT APPEAL OF A GRADE

When a student believes the final grade he or she received in a course is inaccurate, he or she should make an appointment with the instructor who issued the grade or status and explain the reasons for this belief. This process must be initiated within 30 calendar days of receiving the grade. The instructor and the student should make every effort to resolve the issue. It is expected that most if not all misunderstandings will be resolved at this level.

If the grade or status issue is not resolved the student can appeal in writing to the instructor's supervisor. This individual may be the department chairperson or program chairperson. Once the student has appealed the grade or status with the chairperson, if the issue is not resolved to the student's satisfaction the student may appeal to the department chairperson, next higher chairperson, or whomever is next in line.

The student's next recourse is to appeal to the chief academic officer. If the student feels further appeal is necessary he or she may file a formal grievance to the Student Status Committee following the procedures as outlined above.

STUDENT RIGHT TO KNOW

The 1990 federal Student Right to Know Act requires colleges and universities to report to prospective and current students the persistence and graduation rates of full-time technical certificate and degree-seeking students. The graduation rate is based upon program completion within 150 percent of time usually required for a full-time student. For technical certificate students, this is the number of full-time students graduating in three semesters. For associate degree students, this is the number of students graduating in six semesters. Contact the Office of Student Affairs for further information.

CAMPUS SECURITY INFORMATION

JEANNE CLERY ACT (CAMPUS CRIME STATISTICS) INFORMATION

The Crime Awareness and Campus Security Act of 1990 (also known as the Jeanne Clery Act) requires colleges and universities to disclose an annual report highlighting crime statistics for the previous three years, safety awareness programming, student conduct information, and other information on campus crime and incidents. Ivy Tech Community College of Indiana is

committed to provide safe and secure environment for the campus community. Please contact the Office of Student Affairs for a copy of the annual report.

CAMPUS SEX CRIME PREVENTION ACT

The federal Campus Sex Crimes Prevention Act requires state procedures to ensure that offender registration information is made available in a timely manner to law enforcement agencies with jurisdiction where institutions of higher education are located, and that it is entered into appropriate state records and data systems. Law enforcement agency information provided by the State concerning registered sex offenders may be found at the Indiana Criminal Justice Institute website located at http://www.in.gov/cji/ or the Indiana Sheriff's Association website located at http://www.indianasheriffs.org/default.asp.

CORPORATE AND CONTINUING EDUCATION SERVICES

CORPORATE SERVICES

Each Ivy Tech region offers specialized corporate services for business and industry through its office of Corporate and Continuing Education Services (CCES). Through CCES, the College develops customized programs and services to meet the training needs of local business and industry. In addition to training courses delivered at the College or at a business site, CCES can provide consulting services, assessment, job profiling and other business services that may be requested by the employer. The CCES Departments work with business and industry, trade unions, and community economic development groups to deliver training and services rapidly and flexibly when and where it is needed.

In addition to providing instruction in multi-craft maintenance, computers, advanced manufacturing, welding and other such technical training needs, the College also provides programs in management, supervision, soft skills, and basic skills development. Courses may be delivered through a contractual arrangement with a single employer or a consortium of employers.

CONTINUING EDUCATION

Through the continuing education operation of the CCES Department, professional development courses are offered to individuals on the open enrollment schedule. Continuing education courses can help students meet their occupational continuing education or certification requirements and to enhance and upgrade their workplace skills. Each campus also offers courses in personal enrichment to the community; examples might include such courses as fitness and wellness, investing, or the arts.

WORKFORCE CERTIFICATION

Nearly all of the College's campuses provide Centers for Workforce Certification. Certification training and testing is provided in the areas of information technology, e.g., Novell, Microsoft and Cisco. They also offer training and testing in a wide variety of other discipline areas in health, business, public services and technology. The centers provide pre-assessment services, classroom and hands-on training, post-assessment and certification testing services in a one-stop setting. Courses are offered both in semester length and short-term sessions and in credit and not-for-credit formats. Faculty have identified many certifications that equate to college credit courses through faculty evaluation; credit equivalencies for certifications appear on the "Certification Crosswalk" on the College website.

Ivy Tech has been and continues to be a leader in promoting Indiana's economic development by providing comprehensive training services to Indiana's businesses and industries. Detailed information about the programs, courses, and services provided is available through each campus' CCES Department.

INSTRUCTIONAL PROGRAMS

The College's degree programs are offered in six divisions:

- Division of Arts and Design
- Division of Business
- Division of General Education
- Division of Health Sciences
- Division of Public Services
- Division of Technology

The College offers the following degrees and certificates:

ASSOCIATE OF ARTS (AA) DEGREE PROGRAMS

The associate of arts degree program prepares students for transfer to four-year institutions. General education and liberal arts courses make up all or almost all of the curriculum, and students are required to take a minimum of eight credit hours in a foreign language. Concentrations are available in nine areas. The coursework provides students with a foundation for transfer to a related baccalaureate program at a four-year institution.

Students interested in the Associate of Arts program should contact their local Ivy Tech campus and institution to which they want to transfer for further information.

ASSOCIATE OF SCIENCE (AS) DEGREE PROGRAMS

The College offers two types of AS programs: AS programs in technical and professional areas and AS programs in the liberal arts.

AS degree programs in technical and professional areas prepare students for transfer to cooperating four-year institutions and for careers. Technical/professional AS programs typically contain 40 percent or more general education, with the balance in technical and profession courses. The coursework provides students with a foundation for transfer to a related baccalaureate program at a four-year institution, and equips students with skills for the job market. AS curricula in technical/professional areas are tailored to meet specific institutional transfer objectives.

The AS degree program in the liberal arts prepares students for transfer to four-year institutions. General education and liberal arts courses make up all or almost all of the curriculum. Concentrations are available in eight areas. The coursework provides students with a foundation for transfer to a related baccalaureate program at a four-year institution.

Students interested in Associate of Science programs should contact their local Ivy Tech campus and institution to which they want to transfer for further information.

ASSOCIATE OF APPLIED SCIENCE (AAS) DEGREE PROGRAMS

Associate of applied science degree programs are two-year programs that prepare students for careers, career changes and career advancement. AAS programs may also prepare students for transfer to four-year institutions. These programs offer education in recognized technical areas and specialties with emphasis on analysis, synthesis and evaluation. The program content, which is approximately 30 percent general education, provides depth and breadth in conceptual and professional/technical skills. The general education courses equip students with the problem-solving, communications, scientific and mathematical skills to compete successfully in the job

market. Professional/technical courses equip students with the skills to obtain employment and to advance in the workforce.

Associate of Fine Arts (AFA) Degree Programs

The associate of fine arts degree program prepares students for transfer to cooperating four-year institutions and for becoming professionals in the field of art. General education coursework makes up approximately 40 percent of the curriculum, including six hours of art history. The balance of the curriculum includes arts foundation, studio art, graphic and design work, and elective coursework. The coursework provides students with a foundation for transfer to a related baccalaureate arts program at a four-year institution.

Students interested in the Associate of Fine Art degree should contact their local Ivy Tech campus for availability of programs and for further information.

Technical Certificate (TC) Programs

Technical Certificate programs provide education in conceptual and technical skills for specific occupations. Each program contains a sequence of required courses in a recognized specialty within one of the programs at the College. The program content is designed to develop competency in the comprehension of general and technical skills.

Career Development Certificates (CDC)

Ivy Tech provides short-term programs for individuals who desire to develop competencies in a specific area. These programs are less than 30 semester credits in length. Instruction is delivered through methods that include regular courses and specifically designed courses. Many of these courses are based on a sequence of learning experiences determined by a certifying state or national association or organization. Completion of certain short-term programs qualifies students to sit for certification examinations. The number and type of short-term programs vary among the Ivy Tech campuses.

Statewide Program Initiatives

Distance Education

Ivy Tech offers dozens of courses each semester online (sometimes called eLearning). Taking a course on the Internet allows you to work on your course at the time most convenient for you and there will still be plenty of interaction with your instructor and with other students. For more information about the College's online offerings, visit the College website at: www.ivytech. edu/distance.

In addition, the Indiana Partnership for Statewide Education(IPSE) is a collaboration of Indiana's colleges and universities committed to delivering higher education courses via distance education to learners all over Indiana. Most IPSE courses are online, though some are delivered via two-way video or some other medium. Most courses offered through IPSE are transferable among all seven of Indiana's public colleges and universities as well as several of the private institutions. Contact your local campus for availability of courses or visit the Indiana College Network website at www.icn.org.

Apprenticeship Programs

Ivy Tech is a partner with Industrial and Building Trades Apprenticeship programs in Indiana to provide certificates and associate degree programs to Indiana companies and employees.

The College and the local joint apprenticeship training committees (JATC) come together and offer educational programs. Individuals who have been selected by the JATC become Ivy Tech students and have an opportunity to earn college credit while advancing through a registered apprenticeship program. Because Ivy Tech has adopted the national standards of the Industrial

and Building Trades apprenticeship programs, the apprentice has an opportunity to earn a Technical Certificate (TC), Associate of Applied Science (AAS), or Associate of Science (AS) degree. Students should contact the Apprenticeship Manager at the local Ivy Tech campus for more information.

Those apprentices or journeypersons who wish to explore transfer opportunities after earning an AAS or AS degree can contact Indiana State University, Indiana University-Labor Studies, the National Labor College, or Sullivan University. Interested apprentices and journeypersons should consult the current catalog of the institution in which they are interested, and should review their options with an academic advisor. Additional course and transfer prospects may also be available.

Senior Scholars

In the spring of 2001, Ivy Tech launched the Senior Scholars program. Indiana citizens 60 years of age and older can take credit courses at Ivy Tech tuition-free. Students are responsible for books and any associated fees. In order to qualify for this program a person must meet the following requirements:

Be an Indiana resident;

Be 60 years of age or older at the start of a semester;

Possess a high school diploma or GED;

Be retired from their primary vocation (does not apply to homemakers); and

Not be employed on a full-time basis.

Non-credit courses are not included in the Senior Scholars program. Please contact the Office of Admissions for further information.

Programs of Study

IVY TECH
COMMUNITY
COLLEGE

IVY TECH PROGRAM INVENTORY

DIVISION OF ARTS AND DESIGN

Environmental Design	AAS
	Specialties: Garden Design
	Interior Design
Visual Communications	AAS, AS, AFA
	Specialties: Graphic Design
	Graphic Media Production
	Photography
	Video
	Web and Interactive Design
	Webmaster Designer

DIVISION OF BUSINESS

Accounting   TC, AAS*, AS
Offered via distance education at Terre Haute

Business Administration   TC, AAS, AS*
Offered via distance education at Terre Haute   Specialties: eBusiness
Financial Services
Health Care Management
Human Resources Management
Logistics Management
Marketing
Management
Operations Management
Quality Management
Real Estate
Sports Management

Computer Information Systems   TC, AAS*, AS*
Available via distance education statewide   Specialties: Database Management
Information Technology
Network
PC Support and Administration
Programmer/Analyst
Web Management

Logistics Management   AS

Office Administration   TC, AAS*, AS
Available via distance education statewide   Specialties: Administrative
Legal
Medical
Software Applications

DIVISION OF GENERAL EDUCATION

General Studies   AS*
Available via distance education statewide

Division of General Education (continued)

Liberal Arts	AA, AS
	Specialties: English
	History
	Liberal Arts
	Liberal Studies
	Philosophy
	Political Science
	Pre-Law
	Psychology
	Sociology
Professional Communication	AS

Division of Health Sciences

Biotechnology	AAS, AS
Dental Assistant	TC
Medical Assisting	TC, AAS
	Specialties: Administrative
	Clinical
	EKG
	Generalist
	Insurance
	Medical Assistant
	Pharmacy Technician
	Phlebotomy
	Therapeutic Massage
	Transcription
Medical Laboratory Technology	AAS
Nursing	AS
Paramedic Science	AAS, AS
Physical Therapist Assistant	AS
Practical Nursing	TC
Radiation Therapy	AS
Radiologic Technology	AS
Respiratory Care	AS
Surgical Technology	AAS, AS
Therapeutic Massage	TC, AAS

Division of Public Services

Criminal Justice	AAS, AS
	Specialties: Corrections
	Law Enforcement
	Youth Services
Early Childhood Education	TC*, AAS*, AS
Available via distance education statewide	Specialties: Administration
	Curriculum
	Generalist
	Infant/Toddler
Hospitality Administration	TC, AAS
	Specialties: Baking and Pastry Arts
	Culinary Arts
	Event Management

Hotel Management
Restaurant Management

Human Services   TC, AAS*, AS*
Available via distance education statewide   Specialties: Correctional Rehabilitation Services
                                                                      Generalist
                                                                      Gerontology
                                                                      Mental Health
                                                                      Substance Abuse

Mortuary Science   AAS
Paralegal Studies   AAS*, AS*
Available via distance education statewide
Public Safety   TC, AAS
                                                            Specialties: Environmental Health and Safety
                                                                      Fire Science
                                                                      Hazardous Materials
                                                                      Public Administration

Division of Technology

Automotive Technology   TC, AAS, AS
                                                            Specialties: Auto Body Repair
                                                                      Auto Service
                                                                      Automotive Management
                                                                      Dealer Co-Op

Aviation Technology   TC, AAS
                                                            Specialties: Aircraft Maintenance Technology

Building Construction Management   AAS, AS
Building Trades Apprenticeship   TC, AAS, AS
                                                            Specialties: Boilermaker
                                                                      Bricklayer
                                                                      Carpenter
                                                                      Cement Mason
                                                                      Electrical Lineman
                                                                      Electrician
                                                                      Elevator Constructor
                                                                      Ironworker
                                                                      Millwright
                                                                      Operating Engineer
                                                                      Painter
                                                                      Plasterer
                                                                      Plumber/Pipefitter
                                                                      Sheet Metal Worker
                                                                      Sprinkler Fitter
                                                                      Substation Mechanic
                                                                      Telecommunications Technician

Chemical Technology   AAS
                                                            Specialties: Chemical Lab Tech
                                                                      Forensics Lab Tech

Construction Technology   TC, AAS
                                                            Specialties: Architectural
                                                                      Cabinetry
                                                                      Electrical
                                                                      HVAC

Division of Technology (continued)

		Interior Planning and Design
		Landscape Technology
		Residential and Light Carpentry
Design Technology	TC, AAS*, AS	
Offered via distance education at Terre Haute	Specialties:	Architecture
		CAD-M
		Civil
		Computer Graphics
		Mechanical
Electronics and Computer Technology	AAS, AS	
	Specialties:	Automation Controls
		Biomedical
		Communications
		Computer Systems/Networking
		Electronics
		Electrical Maintenance
		Industrial
		Instrumentation
		Telecommunications
Industrial Apprenticeship	TC, AAS	
	Specialties:	Electrician
		Facilities Maintenance
		Heating Ventilating/Air Conditioning
		Industrial Mechanic
		Machine Repair
		Mechanic-Gas/Electric Vehicles
		Millwright
		Mold/Die Maker
		Pattern Repairer
		Plumber/Pipefitter
		Sheet Metal
		Stationary Power Plant
		Toolmaker
Machine Tool Technology	AAS	
Manufacturing and Industrial Technology	TC, AAS, AS	
	Specialties:	CAD/CAM
		CIM
		CNC
		Facilities Maintenance
		HVAC
		Industrial Electrician
		Industrial Maintenance
		Machine Tool
		Maintenance Technician Mechanical
		Mechanical Maintenance
		Operations
		Plastics
		Process Control and Automation
		Quality Assurance
		Tool and Die
		Welding

Accounting

Program Description

The Accounting program develops an understanding of accounting principles, business law, communications, business equipment and related areas of study in the field. Instruction is offered in computerized accounting systems. Technical skills in financial accounting, cost accounting and tax preparation are emphasized. Students graduating from the Accounting program participate in evaluations of proficiency in general and technical education.

Accounting duties typically include maintaining journals and ledgers, processing banking transactions, billing, preparing payroll, maintaining inventory records, purchasing, processing expense reports, preparing financial statements and analyzing managerial reports. Position titles may include junior or staff accountant, junior auditor, cost accounting clerk, bookkeeper, payroll clerk, inventory clerk, accounts receivable clerk and financial management trainee.

A two-year program leads to an associate of applied science degree. Technical certificates and career development certificates also are available. An associate of science degree is available at selected campuses. The accounting program is available via distance education for interested students. The availability of degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

None

Program Available at:

Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Michigan City
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Valparaiso
Warsaw

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Accounting

Associate of Applied Science

General Education Core	18
Professional/Technical Core	30
Locally Determined Courses	12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	*ECN XXX	Economics Elective	3
	ENG 111	English Composition	3
	**MAT XXX	Intermediate Algebra or Higher	3
	* XXX XXX	Life/Physical Sciences Elective	3
	* XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (30 CREDITS)	ACC 101	Financial Accounting	3
	ACC 102	Managerial Accounting	3
	ACC 105	Income Tax	3
	ACC 201	Intermediate Accounting I	3
	ACC 203	Cost Accounting 1	3
	^ACC 225	Integrated Accounting Systems	3
	BUS 101	Introduction to Business	3
	BUS 102	Business Law	3
	CIS 101	Introduction to Microcomputers	3
	OAD 218	Spreadsheets	3
OTHER REQUIRED COURSES (12 CREDITS)		Locally Determined Courses	12

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Accounting

Technical Certificate

General Education Core	6
Professional/Technical Core	3
Specialty Core	6
Locally Determined Courses	15

You Must Have	Required Courses	Credit Hours
GENERAL EDUCATION (6 CREDITS)	**COM 101 Fundamentals of Public Speaking	3
	OR	
	**ENG 111 English Composition	3
	*XXX XXX Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	CIS 101 Introduction to Microcomputers	3
SPECIALTY (3 CREDITS)	ACC 101 Financial Accounting	3
	ACC 102 Managerial Accounting	3
OTHER REQUIRED COURSES (15 CREDITS)	Locally Determined Courses	15

Key (See page 2 for definitions)
* Elective ** Locally Determined ^ Capstone Course

Automotive Technology

Program Description

The Automotive Technology Program prepares students with the general and technical education needed for successful careers in automotive service, sales, technical support, management and customer relations, and for continuation in higher education. Students graduating from the Automotive Technology program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Automotive Technology students wishing to pursue a bachelor's of science may complete the associate of science degree program available at selected campuses or directly enter the workforce. Technical and career development certificates also are available. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Automotive Body Repair*
- *Automotive Management*
- *Automotive Service*
- *Dealer Co-op*

Program Available at:

East Chicago
Evansville
Fort Wayne
Indianapolis
Kokomo
Lafayette
Muncie
Richmond
Sellersburg
South Bend
Terre Haute

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Automotive Technology

Associate of Science

Articulated transfer through an Associate of Science in Automotive Technology is available with Indiana State University. To view this Associate of Science transfer degree program and to see if it is available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Automotive Technology and then on the Associate of Science curriculum.

Students are encouraged to review this option with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 66-67 credits in the following areas:

General Education Core	18-19
Professional/Technical Core	18
Specialty Core	18-30
Locally Determined Courses	0-12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18-19 CREDITS)	*COM XXX	Communications Elective	3
	ENG 111	English Composition	3
	*MAT 1XX	Math Elective	3
	**SCI XXX	Physical Science Course	3-4
	*XXX XXX	General Education Elective	3
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	AMS 101	Steering and Suspension Systems	3
	AMS 107	Engine Principles and Design	3
	AMS 113	Electrical and Electronics I	3
	AMS 121	Braking Systems	3
	AMS 123	Electrical and Electronics II	3
	AMS 201	Climate Control Systems	3
Choose One of the Following Specialties			
AUTOMOTIVE BODY REPAIR SPECIALTY (30 CREDITS)	ABR 101	Body Repair Fundamentals	3
	ABR 103	Auto Paint Fundamentals	3
	^ABR 104	Collision Damage Analysis and Repair	3
	ABR 105	Conventional Frame Analysis and Diagnosis	3
	ABR 106	Body Repair II	3
	ABR 107	Automotive Painting Technology	3
	ABR 108	Unibody Structural Analysis and Repair	3
	ABR 109	Collision Damage Appraising	3
	ABR 120	Fiberglass Plastic Repair	3
	MIT 114	Introductory Welding	3

Specialties Continued Next Page

Automotive Technology

Associate of Applied Science

		Required Courses	Credit Hours
AUTOMOTIVE MANAGEMENT SPECIALTY (30 CREDITS)	ACC 101	Financial Accounting	3
	AMS 253	Service Organization and Parts	3
	BUS 101	Introduction to Business	3
	BUS 102	Business Law	3
	MKT 101	Principles of Marketing	3
	TEC 104	Computer Fundamentals for Technology	3
		Regionally Determined Courses	12
AUTOMOTIVE SERVICE SPECIALTY (30 CREDITS)	AMS 105	Powertrain Service	3
	AMS 109	Engine Performance I	3
	AMS 125	Manual Drivetrain Service	3
	AMS 127	Engine Repair	3
	AMS 135	Automatic Transmission	3
	AMS 209	Engine Performance II	3
	AMS 219	Engine Performance III	3
	AMS 229	Driveability Diagnosis	
	^AMS 243	Advanced Electronics	3
	AMS 280	Co-op/Internship	3
		OR	
	AMS XXX	Automotive Elective	3
DEALER CO-OP SPECIALTY (30 CREDITS)	AMS 107	Engine Principles and Design	3
	AMS 109	Engine Performance I	3
	^AMS 243	Advanced Electronics	3
	AMS 271	Cooperative - Drivelines	3
	AMS 272	Cooperative - Suspension	3
	AMS 273	Cooperative - Brakes	3
	AMS 274	Cooperative - Electrical Systems	3
	AMS 275	Cooperative - Engine Repair	3
	AMS 276	Cooperative - Engine Performance	3
	TEC 104	Computer Fundamentals for Technology	3

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Automotive Technology

Technical Certificate

General Education Core	6
Professional/Technical Core	3
Specialty Core	6-30
Locally Determined Courses	0-24

You Must Have	Required Courses	Credit Hours
GENERAL EDUCATION (6 CREDITS)	**COM XXX Communications Course	3
	**XXX XXX General Education Course	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	AMS 101 Steering and Suspension Systems	3

Choose One of the Following Specialties

AUTOMOTIVE BODY REPAIR SPECIALTY (30 CREDITS)	ABR 101 Body Repair Fundamentals	3
	ABR 103 Auto Paint Fundamentals	3
	ABR 104 Collision Damage Analysis and Repair	3
	ABR 105 Conventional Frame Analysis and Diagnosis	3
	ABR 106 Body Repair II	3
	ABR 107 Automotive Painting Technology	3
	ABR 108 Unibody Structural Analysis and Repair	3
	ABR 109 Collision Damage Appraising	3
	ABR 120 Fiberglass Plastic Repair	3
	MIT 114 Introductory Welding	3
AUTOMOTIVE SERVICE SPECIALTY (30 CREDITS)	AMS 113 Electricital and Electronics 1	3
	AMS 121 Braking Systems	3
	Locally Determined Courses	24

Aviation Technology

Program Description

The Aviation Technology program prepares students to become certified Aviation Technicians with ratings for Aircraft Maintenance or Avionics. The course of instruction introduces control methods, team building, technical writing and computer skills. Opportunities exist for employment with commercial air carriers and private maintenance operations. Students graduating from the Aviation Technology program participate in evaluations of proficiency in general and technical education.

Aviation Technology

Associate of Applied Science

To earn this degree, you must have 96 credits in the following areas:

General Education Core   19
Professional/Technical Core   77

You Must Have

GENERAL EDUCATION
(19 CREDITS)

OFESSIONAL/TECHNICAL

IRCRAFT MAINTENANCE
TECHNICIAN SPECIALTY
(77 CREDITS)

	Required Courses	Credit Hours
ENG 111	English Composition	3
ENG 211	Technical Writing	3
MAT 111	Intermediate Algebra	3
MAT 131	Algebra/Trigonometry I	3
PHY 101	Physics I	4
*XXX XXX	Humanities/Social Sciences Elective	3
AVT 141	Aviation Basics I	3
AVT 142	Aviation Basics II	3
AVT 144	Aircraft Electricity	4
AVT 145	Aircraft Ground Servicing	2
AVT 146	Aviation Regulations	2
AVT 148	Aviation Materials and Processes	3
AVT 222	Nonmetallic Structures	2
AVT 223	Aircraft Finishes	2
AVT 224	Aircraft Inspection	4
AVT 225	Aircraft Fluid Systems	4
AVT 226	Airframe Electrical Systems	4
AVT 227	Aircraft Sheetmetal	6
AVT 228	Aircraft Instruments and Avionics	3
AVT 231	Reciprocating Powerplants	5
AVT 232	Turbine Powerplants	5
AVT 233	Powerplant Fuel and Induction Systems	5
AVT 234	Reciprocating Engine Ignition and Fuel Systems	2
AVT 235	Powerplant Fluid and Indicating Systems	3
AVT 236	Turbine Starting Systems and Auxiliary Power	2
AVT 237	Propellers	4
^AVT 238	Turbine Systems and Components	4
AVT 240	Structural Repair	5

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Biotechnology

Program Description

The Biotechnology associate degree programs prepare students
to work in fields related to biotechnology and the life sciences
and to pursue baccalaureate degrees in related or general fields.
Graduates of the program will be proficient in the maintenance of
a safe laboratory environment; general techniques of a bioscience
laboratory; proper methods for formulation and sterilization of
reagents; generation and maintenance of cell cultures; isolation,
purification, and analysis of biological molecules; use of bioreactors
and fermentors for industrial applications; recombinant DNA
technology; informatics related to the biosciences; and use and
maintenance of associated laboratory equipment. ·
Students will also develop problem-solving skills and proper
methods for documentation of laboratory activities. Students
graduating from the Biotechnology program participate in
evaluations of proficiency in general and technical/professional
education.

Biotechnology program graduates may expect employment
as technicians in various areas of biotechnology. Employment
possibilities include industries such as pharmaceuticals, animal
and agricultural science, surgical and medical instruments,
biomedical suppliers and safety equipment, biomedical plastics,
and environmental management.

Biotechnology

Associate of Science

Articulated transfer through an Associate of Science in Biotechnology is available with IUPUI. To view this Associate of Science transfer degree program and to see if it is available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Biotechnology and then on the Associate of Science curriculum.

Students are encouraged to review this option with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 66-70 credits in the following areas:

General Education Core	26-27
Professional/Technical	28
Locally Determined Courses	12-15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (26-27 CREDITS)	BIO 121	General Biology	4
	CHM 105	General Chemistry I	5
	CHM 106	General Chemistry II	5
	ENG 111	English Composition	3
	ENG 211	Technical Writing	3
	MAT 133	College Algebra with Analytic Geometry	4
		OR	
	MAT 136	College Algebra	3
	XXX XXX	Humanities/Social Science Elective	3
PROFESSIONAL/TECHNICAL (40-43 CREDITS)	BTN 101	Introduction to Biotechnology	4
	BTN 103	Safety and Regulatory Compliance for Biotechnology	3
	BTN 201	Cell Culture and Cellular Processes	4
	BTN 211	Analytical Methods for Biotechnology I	3
	BTN 227	Genetic Engineering and DNA Analysis	4
	BTN 233	Protein Analysis and Purification	4
	BTN 280	Internship	3
	CIS 101	Introduction to Microcomputers	3
		OR	
	TEC 104	Computer Fundamentals for Technology	3
		Locally Determined Courses	12-15

Program Description

The Building Construction Management program combines professional and managerial skills that focus on all aspects of a construction project, from inception to successful completion. The program involves knowledge of trade skills, construction materials and methods involved in the construction process, and managerial and business methods necessary for successful construction business operation.

Students will acquire an in-depth knowledge of the processes and tasks required for the management of various building projects including construction planning, scheduling, estimating, record keeping and documentation, interpreting contracts and specification, material purchasing and expediting, and site management. Students will also build a strong foundation in materials science, concrete and soil technology, statics and strength of materials, surveying, building fabrication techniques, and mechanical and electrical systems. Students graduating from the Building Construction Management program participate in evaluations of proficiency n general and technical/professional education.

Graduates may be employed by small, medium, and large establishments involved in residential, commercial, and industrial construction; general and specialty contracting; architectural and construction consulting services; and management of municipal, county, state and federal projects.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*

Specialties Offered:

None

Program Available at:

East Chicago
Evansville

Building Construction Management

Associate of Science

Articulated transfer through an Associate of Science in Building Construction Management is available with Indiana State University. To view this Associate of Science transfer degree program and to see if it is available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Building Construction Management and then on the Associate of Science curriculum.

Students are encouraged to review this option with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 61 credits in the following areas:

General Education Core	19
Professional/Technical	30
Locally Determined Courses	12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (19 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	MAT 13X	First Course in a Series	3
	MAT 13X	Second Course in a Series	3
	PHY 101	Physics I	4
	XXX XXX	Humanities/Social Science Elective	3
PROFESSIONAL/TECHNICAL (42 CREDITS)	BCM 102	Construction Graphics and Print Reading	3
	BCM 104	Commercial and Industrial Construction	3
	BCM 115	Construction Management Practices	3
	BCM 205	Concrete and Soils	3
	BCM 206	Construction Estimating	3
	BCM 210	Codes and Specifications	3
	^BCM 220	Project Planning and Control	3
	DSN 210	Surveying	3
	DSN 221	Statics	3
	DSN 222	Strength of Materials	3
		Locally Determined Courses	12

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Business Administration

Program Description

The Business Administration program gives students the broad background they need for general administrative positions in a variety of business environments. It also provides an opportunity for specialization. Students graduating from the Business Administration program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Business Administration students wishing to pursue a bachelor's of science in Business Administration, or other business baccalaureate programs, may complete an associate of science degree program in Business Administration. Students should choose the appropriate associate of science curriculum for the university they plan to attend. Students completing the associate of science program will also be able to enter the workforce. Technical certificates and career development certificates are available. The Business Administration program is available via distance education for interested students. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available
- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered
- *eBusiness*
- *Financial Services*
- *Health Care Mgmt.*
- *Human Resources M*
- *Logistics Manageme*
- *Management*
- *Marketing*
- *Operations Manager*
- *Quality Managemen*
- *Real Estate*

Program Available at:
Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Gary
Greencastle
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Michigan City
Muncie
Richmond
Sellersburg
South Bend
Tell City
Terre Haute
Valparaiso
Wabash
Warsaw

Availability of specialt and degrees varies b campus. Contact yo local campus for mo information. See pag for contact informatio

Business Administration

Associate of Science

Articulated transfer through an Associate of Science in Business Administration is available with Ball State University, Indiana State University, IUPU-Fort Wayne, and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to Academic Options/Curricula section of http://www.ivytech.edu/. Click on Business Administration and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 60-66 credits in the following areas:

General Education Core	18
Professional/Technical Core	18
Specialty Core	12-15
Locally Determined Courses	9-12

You Must Have

	Required Courses	Credit Hours
GENERAL EDUCATION (18 CREDITS)		
COM 101	Fundamentals of Public Speaking	3
*ECN XXX	Economics Elective	3
ENG 111	English Composition	3
**MAT 1XX	Intermediate Algebra or higher	3
*XXX XXX	Life / Physical Sciences Elective	3
*XXX XXX	Humanities / Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)		
ACC 101	Financial Accounting	3
BUS 101	Introduction to Business	3
BUS 102	Business Law	3
BUS 105	Principles of Management	3
CIS 101	Introduction to Microcomputers	3
MKT 101	Principles of Marketing	3

Choose One of the Following Specialties

	Required Courses	Credit Hours
eBUSINESS SPECIALTY (24 CREDITS)		
^BUS 204	Case Problems in Business	3
BUS 209	Introduction to eBusiness	3
CIS 252	Web Site Development	3
MKT 240	Internet Marketing	3
	Locally Determined Courses	12
FINANCIAL SERVICES SPECIALTY (24 CREDITS)		
BNK 101	Principles of Banking	3
BNK 103	Consumer Lending	3
^BUS 204	Case Problems in Business	3
MKT 205	Principles of Insurance	3
	Locally Determined Courses	12

Specialties Continued Next Page

Business Administration

Associate of Applied Science—Specialties

	Required Courses	Credit Hours
HEALTH CARE MANAGEMENT SPECIALTY (24 CREDITS)		
BUS 202	Human Resource Management	3
^BUS 204	Case Problems in Business	3
HLT 125	Health Care Systems and Trends	3
HLT 226	Organizational Development in Health Care	3
	Locally Determined Courses	12
HUMAN RESOURCES MANAGEMENT SPECIALTY (24 CREDITS)		
BUS 202	Human Resource Management	3
^BUS 204	Case Problems in Business	3
BUS 222	Benefits Administration	3
BUS 223	Occupational Safety and Health	3
	Locally Determined Courses	12
LOGISTICS MANAGEMENT SPECIALTY (24 CREDITS)		
^BUS 204	Case Problems in Business	3
BUS 227	Logistics / Supply Chain Management	3
BUS 228	Principles of Purchasing	3
BUS 229	Transportation Systems	3
	Locally Determined Courses	12
MANAGEMENT SPECIALTY (24 CREDITS)		
BUS 202	Human Resource Management	3
BUS 203	Business Development	3
^BUS 204	Case Problems in Business	3
BUS 210	Managerial Finance	3
	Locally Determined Courses	12
MARKETING SPECIALTY (24 CREDITS)		
^BUS 204	Case Problems in Business	3
MKT 104	Promotion Management	3
MKT 201	Introduction to Market Research	3
MKT 220	Principles of Retailing	3
	Locally Determined Courses	12
OPERATIONS MANAGEMENT SPECIALTY (24 CREDITS)		
^BUS 204	Case Problems in Business	3
OPM 102	Techniques of Supervision I	3
OPM 224	Operations Management	3
QSC 204	Total Quality Management	3
	Locally Determined Courses	12

Specialties Continued Next Page

Key (See page **2** for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Business Administration

Associate of Applied Science—Specialties

	Required Courses	Credit Hours

			Credit Hours
QUALITY MANAGEMENT SPECIALTY (24 CREDITS)	^BUS 204	Case Problems in Business	3
	QSC 101	Quality Control Concepts and Techniques I	3
	QSC 102	Statistical Process Control	3
	QSC 202	Quality Control Concepts and Techniques II	3
		Locally Determined Courses	12
REAL ESTATE SPECIALTY (24 CREDITS)	MKT 221	Real Estate Broker	3
	MKT 222	Real Estate Sales	3
	MKT 223	Real Estate Appraising	5
	MKT 224	Uniform Standards of Professional Appraisal Practice (USPAP)	1
	^BUS 204	Case Problems in Business	3
		Locally Determined Courses	9

Key   (See page 2 for definitions)
* Elective   ** Locally Determined   ^ Capstone Course

Business Administration

Technical Certificate

General Education Core	6	
Professional/Technical Core	3	
Specialty Core	6-18	
Locally Determined Courses	3-18	

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	**ENG 111	English Composition	3
		OR	
	**COM 101	Fundamentals of Public Speaking	3
	** MAT 1XX	Intermediate Algebra or higher	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	BUS 101	Introduction to Business	3

Choose One of the Following Specialties

You Must Have	Required Courses		Credit Hours
FINANCIAL SERVICES SPECIALTY (21 CREDITS)	ACC 101	Financial Accounting	3
	BNK 101	Principles of Banking	3
	BNK 103	Consumer Lending	3
		Locally Determined Courses	12
HEALTH CARE MANAGEMENT SPECIALTY (24 CREDITS)	BUS 202	Human Resources Management	3
	HLT 125	Health Care Systems and Trends	3
		Locally Determined Courses	18
HUMAN RESOURCES MANAGEMENT SPECIALTY (21 CREDITS)	BUS 102	Business Law	3
	BUS 105	Principles of Management	3
	BUS 202	Human Resource Management	3
	BUS 222	Benefits Administration	3
	BUS 223	Occupational Safety and Health	3
	CIS 101	Introduction to Microcomputers	3
		Locally Determined Courses	3
MANAGEMENT SPECIALTY (21 CREDITS)	CIS 101	Introduction to Microcomputers	3
	BUS 105	Principles of Management	3
		Locally Determined Courses	15
MARKETING SPECIALTY (21 CREDITS)	CIS 101	Introduction to Microcomputers	3
	MKT 101	Principles of Marketing	3
		Locally Determined Courses	15
OPERATIONS MANAGEMENT SPECIALTY (21 CREDITS)	CIS 101	Introduction to Microcomputers	3
	OPM 102	Techniques of Supervision 1	3
		Locally Determined Courses	15
QUALITY MANAGEMENT SPECIALTY (21 CREDITS)	CIS 101	Introduction to Microcomputers	3
	QSC 101	Quality Control Concepts and Techniques I	3
		Locally Determined Courses	15

Chemical Technology

Program Description

If you have an interest in science, mathematics, technology or health, and have good communication skills, and like working with computers, you may find success in a career in the chemical technology field. Lab technicians work in laboratories and production facilities and in the community when field-work is required. They use state of the art technological equipment to gather and analyze data.

A wide variety of manufacturers and laboratories employ chemical lab technicians, providing mobility and opportunity. Technicians earn high salaries with two years of training and education. Nationwide, the job outlook for chemical lab technicians is expected to be very good through 2008 for qualified graduates.

Forensic lab technicians work mostly in laboratories, police departments, and medical examiner/coroner offices. They work in laboratories, at crime scenes, in offices, and in morgues. They investigate crimes by collecting and analyzing physical evidence.

Ivy Tech Community College offers a Chemical Lab Technician and a Forensic Lab Technician specialty within the Chemical Technology program. Students who successfully complete the program will receive an associate of applied science degree in Chemical Technology. Students graduating from the Chemical Technology program participate in evaluations of proficiency in general and technical education. The program was developed in cooperation between Ivy Tech State College and local business.

Chemical Technology

Associate of Applied Science

To earn this degree, you must have 63 or 64 credits in the following areas:

General Education Core	22
Professional/Technical Core	19
Specialty Core	22-23

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (22 CREDITS)	CHM 105	General Chemistry I	5
	CHM 106	General Chemistry II	5
	*COM XXX	Communication Elective	3
	ENG 111	English Composition	3
	MAT 136	College Algebra	3
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (19 CREDITS)	CHT 101	Industrial Laboratory Techniques	4
	CHT 170	Success in Science	1
	CHT 201	Industrial Instrumentation and Techniques I	3
	CHT 202	Industrial Instrumentation and Techniques II	3
	CHT 270	Professional Development	1
	^CHT 280	Co-op/Internship	4
	TEC 104	Computer Fundamentals for Technology	3

Choose One of the Following Specialties

CHEMICAL LABORATORY TECHNICIAN SPECIALTY (22 CREDITS)	CHT 204	Presentation of Technical Issues	3
	CHT 207	Food, Drugs, and Polymers	3
	CHT 210	Quantitative Analysis	3
	CHT 211	Organic Chemistry I	5
	CHT 212	Organic Chemistry II	5
	QSC 101	Quality Control Concepts and Techniques I	3
FORENSIC LABORATORY TECHNICIAN SPECIALTY (23 CREDITS)	CHT 211	Organic Chemistry I	5
	CHT 212	Organic Chemistry II	5
	CRJ 101	Introduction to the Criminal Justice Systems	3
	CRJ 105	Introduction to Criminology	3
	FRN 101	Introduction to Forensic Science	3
	FRN 203	Crime Methods and Techniques	4

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Computer Information Systems

Program Description

The Computer Information Systems curriculum is designed to provide a flexible and comprehensive education. Instruction includes both theoretical concepts and practical applications needed to produce graduates able to function in positions of responsibility. Students graduating from the Computer Information Systems program participate in evaluations of proficiency in general and technical education.

Automated systems allow for the integration of several functionally related applications such as word processing, database management, spreadsheets, programming, electronic mail systems, graphics generation and telecommunications. These systems may be stand-alone, shared logic, distributed or integrated. Demand for employees with computer and business skills is particularly high in small- and medium-sized firms which create, transmit and control information by using computer technology as a management tool.

A two-year program leads to an associate of applied science degree. Technical certificates and career development certificates also are available. An associate of science degree is available at selected campuses. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Database Management*
- *Information Technology*
- *Network (Cisco)*
- *Network (Microsoft)*
- *Network (Multi-Vendor)*
- *PC Support & Administration*
- *Programmer/Analyst*
- *Web Management*

Program Available at:

Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Valparaiso
Wabash
Warsaw

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Computer Information Systems

Associate of Science

Articulated transfer through an Associate of Science in Computer Information Systems is available with Indiana State University, IUPUI, and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Computer Information Systems and then on the Associate of Science transfer curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 60 credits in the following areas:

General Education Core	18
Professional/Technical Core	18
Specialty Core	12
Locally Determined Courses	12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	*ECN XXX	Economics Elective	3
	ENG 111	English Composition	3
	**MAT 1XX	Intermediate Algebra or Higher	3
	*XXX XXX	Humanities/Social Sciences Elective	3
	*XXX XXX	Life/Physical Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	ACC 101	Financial Accounting	3
	BUS 101	Introduction to Business	3
	CIS 101	Introduction to Microcomputers	3
	CIS 102	Information Systems Fundamentals	3
	CIS 106	Microcomputer Operating Systems	3
	^CIS 203	Systems Analysis and Design	3
Choose One of the Following Specialties			
DATABASE MANAGEMENT SPECIALTY (24 CREDITS)	CIS 201	Database Design and Management	3
	CIS 205	Database Design	3
	CIS 225	Advanced Database Management Systems	3
	CIS 231	Structured Query Language	3
		Locally Determined Courses	12

Specialties Continued Next Page

Computer Information Systems

Associate of Applied Science—Specialties

		Required Courses	Credit Hours
INFORMATION TECHNOLOGY SPECIALTY (24 CREDITS)	CIS 114	Principles of Management Information Systems	3
	CIS 201	Database Design and Management	3
	CIS 206	Project Development with High Level Tools	3
	CIS 227	Topics in Information Management	3
		Locally Determined Courses	12
NETWORK/CISCO SPECIALTY (28 CREDITS)	CIS 275	Cisco I - Cisco Networking Fundamentals	4
	CIS 276	Cisco II - Routers and Internet Operating Systems	4
	CIS 277	Cisco III - Local Area Network Design	4
	CIS 278	Cisco IV - Wide Area Network Design	4
		Locally Determined Courses	12
NETWORK/MICROSOFT SPECIALTY (24 CREDITS)	CIS 235	Network Fundamentals	3
	CIS 262	Windows Client Operating System	3
	CIS 263	Windows Network Operating System	3
	CIS 265	Managing a Windows Network	3
		Locally Determined Courses	12
NETWORK/MULTI-VENDOR SPECIALTY (24 CREDITS)	CIS 235	Network Fundamentals	3
	CIS 243	Novell Network Administration I	3
	CIS 255	Network Server Technology	3
	CIS 263	Windows Network Operating System	3
		Locally Determined Courses	12
PC SUPPORT AND ADMINISTRATION SPECIALTY (24 CREDITS)	CIS 202	Data Communications	3
	CIS 240	A+ Core Hardware	3
	CIS 241	A+ Operating System	3
	CIS 251	Advanced Operating Systems: Linux	3
		Locally Determined Courses	12
PROGRAMMER/ANALYST SPECIALTY (24 CREDITS)	CIS 113	Logic, Design and Programming	3
	CIS 201	Database Design and Management	3
	***CIS XXX	Introduction to (Language) Programming	3
	***CIS XXX	Advanced (Language) Programming	3
		Locally Determined Courses	12
WEB MANAGEMENT SPECIALTY (24 CREDITS)	CIS 201	Database Design and Management	3
	CIS 252	Web Site Development	3
	CIS 257	Advanced Web Site Development	3
	CIS 259	Web Administration	3
		Locally Determined Courses	12

Computer Information Systems

Technical Certificate

To earn this degree, you must have 30 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Other Required Courses	6
Locally Determined Courses	15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	ENG 111	English Composition	3
	MAT 1XX	Intermediate Algebra or Higher	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	CIS 101	Introduction to Microcomputers	3
OTHER REQUIRED COURSES (21 CREDITS)	CIS 102	Information Systems Fundamentals	3
	CIS 106	Microcomputer Operating Systems	3
		Locally Determined Courses	15

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Construction Technology

Program Description

The Construction Technology program educates technicians with broad-based skills in construction methods, estimation and specification, and blueprint interpretation. Students may choose a specialty area to build on the foundation skills. The flexibility of the program allows students to pursue a full course of study or take courses as needed to update skills. Students graduating from the Construction Technology program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Technical and career development certificates also are available. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Architectural*
- *Cabinetry*
- *Electrical*
- *Heating, Ventilation, and Air Conditioning*
- *Interior Planning and Design*
- *Landscape Technology*
- *Residential and Light Carpentry*

Program Available at:

East Chicago
Fort Wayne
Kokomo
Muncie
Richmond

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Construction Technology

Associate of Applied Science

To earn this degree, you must have 61-64 credits in the following areas:

General Education Core	19
Professional/Technical Core	18
Specialty Core	12
Locally Determined Courses	12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (19 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	MAT 121	Geometry/Trigonometry	3
	**PHY 100	Technical Physics	4
		or	
	**PHY 101	Physics I	4
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	CON 101	Introduction to Construction Technology	3
	CON 102	Construction Materials	3
	CON 106	Construction Blueprint Reading	3
	CON 127	Electrical Basics	3
	^CON 204	Estimating and Specifications	3
	TEC 104	Computer Fundamentals for Technology	3

Choose One of the Following Specialties

You Must Have	Required Courses		Credit Hours
ARCHITECTURAL SPECIALTY (24 CREDITS)	DSN 105	Architectural Design I	3
	DSN 109	Construction Materials and Specifications	3
	DSN 204	Architectural Design II	3
	DSN 208	Structural Design and Detailing	3
		Locally Determined Courses	12
CABINETRY SPECIALTY (24 CREDITS)	BCT 120	Woodworking Fundamentals	3
	BCT 121	Furniture Design and Construction	3
	BCT 122	Woodworking Jig Layout	3
	BCT 126	Furniture Door and Drawer Assembly	3
		Locally Determined Courses	12
ELECTRICAL SPECIALTY (24 CREDITS)	BCT 201	Residential Wiring	3
	BCT 213	Motor and Motor Controls	3
	BCT 220	Electrical Troubleshooting Techniques	3
	BCT 222	Commercial/Industrial Wiring	3
		Locally Determined Courses	12

Specialties Continued Next Page

Construction Technology

Associate of Applied Science—Specialties

		Required Courses	Credit Hours
Heating, Ventilation, and Air Conditioning Specialty (24 Credits)	HEA 101	Heating Fundamentals	3
	HEA 103	Refrigeration 1	3
	HEA 104	Heating Service	3
	HEA 106	Refrigeration II	3
		Locally Determined Courses	12
Interior Planning and Design Specialty (24 Credits)	EDN 216	CAD for Environmental Designers	3
	INT 103	Introduction to Interior Design	3
	INT 104	Textiles for Interiors	3
	INT 211	Kitchen and Bath Design	3
		Locally Determined Courses	12
Landscape Technology Specialty (24 credits)	LND 101	Landscape Trees	3
	LND 102	Shrubs and Other Plants	3
	LND 103	Landscape Management I	3
	LND 104	Turf Management I	3
		Locally Determined Courses	12
Residential and Light Carpentry Specialty (24 credits)	BCT 104	Floor and Wall Layout and Construction	3
	BCT 105	Roof Construction	3
	BCT 114	Exterior Trim	3
	BCT 221	Interior Trim	3
		Locally Determined Courses	12

Construction Technology

Technical Certificate

To earn this degree, you must have 30-39 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	6-9
Locally Determined Courses	15-18

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	**COM 101	Fundamentals of Public Speaking	3
		OR	
	**ENG 111	English Composition	3
	*XXX XXX	Math/Social Sciences/Humanities/Life/Physical Sciences Elective	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	CON 101	Introduction to Construction Technology	3

Choose One of the Following Specialties

ARCHITECTURAL SPECIALTY (33 CREDITS)	DSN 109	Construction Materials and Specifications	3
	DSN 204	Architectural Design II	3
		Locally Determined Courses	18
ELECTRICAL SPECIALTY (33 CREDITS)	BCT 201	Residential Wiring	3
	CON 127	Electrical Basics	3
		Locally Determined Courses	18
HEATING, VENTILATION, AND AIR CONDITIONING SPECIALTY (33 CREDITS)	HEA 101	Heating Fundamentals	3
	HEA 103	Refrigeration I	3
		Locally Determined Courses	18
LANDSCAPE TECHNOLOGY SPECIALTY (33 CREDITS)	LND 101	Landscape Trees	3
	LND 102	Shrubs and Other Plants	3
	LND 103	Landscape Management I	3
		Locally Determined Courses	15
RESIDENTIAL AND LIGHT CARPENTRY SPECIALTY (33 CREDITS)	BCT 104	Floor and Wall Layout and Construction	3
	BCT 105	Roof Construction	3
		Locally Determined Courses	18

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Criminal Justice

Program Description

The Criminal Justice program prepares graduates to work in a wide variety of public and private criminal justice facilities and service providers. Students will acquire an in-depth understanding of the psychological, social and environmental needs of clients served by these facilities. Students who choose to continue their education will have a solid academic foundation upon which to pursue a baccalaureate degree.

The program serves those entering the field as well as providing education and training to upgrade the skills and knowledge of those currently employed. Graduates may find employment in law enforcement, adult and juvenile correctional facilities, community services and other human service agencies. With experience and additional education, graduates may qualify for promotion to supervisory positions.

Students graduating from the Criminal Justice program participate in evaluations of proficiency in general and technical/professional education.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*

Specialties Offered:

- *Corrections*
- *Law Enforcement*
- *Youth Services*

Program Available at:

Bloomington
Columbus
Evansville
Fort Wayne
Indianapolis
Kokomo
Lafayette
Muncie
South Bend
Terre Haute
Valparaiso

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Criminal Justice

Associate of Science

Articulated transfer through an Associate of Science in Criminal Justice is available with Indiana State University, IU-Kokomo, IU-Northwest, IUPU-Fort Wayne, IUPUI, and IU-South Bend. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Criminal Justice and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 63-64 credits in the following areas:

General Education Core	21
Professional/Technical Core	18
Specialty Core	21
Locally Determined Courses	3-4

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (21 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	*MAT XXX	Mathematics Elective	3
	POL 101	Introduction to American Government and Politics	3
	PSY 101	Introduction to Psychology	3
	SOC 111	Introduction to Sociology	3
	*XXX XXX	Life/Physical Science Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	CRJ 101	Introduction to Criminal Justice Systems	3
	CRJ 103	Cultural Awareness	3
	CRJ 105	Introduction to Criminology	3
	CRJ 255	Interview and Interrogation	3
	HMS 113	Problems of Substance Abuse in Society	3
	LEG 211	Criminal Law and Procedure	3

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Criminal Justice

Associate of Applied Science - Specialties

	Required Courses	Credit Hours
Choose One of the Following Specialties		
CORRECTIONS SPECIALTY (24-25 CREDITS)		
CRJ 131	Community-Based Corrections	3
CRJ 133	Legal Issues in Corrections	3
CRJ 202	Adjudication	3
^CRJ 223	Special Issues in Corrections	3
HMS 105	Introduction to Correctional Rehabilitation Services	3
HMS 205	Behavior Modification/Choice Theory	3
HMS 240	Rehabilitation Processes: Probation and Parole	3
	Locally Determined Courses:	
CRJ 280	Internship	4
	OR	
CRJ XXX	Criminal Justice elective	3
LAW ENFORCEMENT SPECIALTY (24-25 CREDITS)		
CRJ 111	Introduction to Traffic Enforcement & Investigation	3
CRJ 113	Criminal Investigations	3
CRJ 115	Criminalistics	3
CRJ 118	Introduction to Law Enforcement	3
CRJ 202	Adjudication	3
^CRJ 203	Police and Community Relations	3
CRJ 205	Procedural Criminal Law	3
	Locally Determined Courses:	
CRJ 280	Internship	4
	OR	
CRJ XXX	Criminal Justice elective	3
YOUTH SERVICES SPECIALTY (24-25 CREDITS)		
CRJ 121	Juvenile Law and Procedures	3
CRJ 123	Juvenile Justice System	3
CRJ 202	Adjudication	3
^CRJ 222	Special Issues in Youth Services	3
ECE 204	Families in Transition	3
HMS 205	Behavior Modification/Choice Theory	3
HMS 215	Juvenile Delinquency	3
	Locally Determined Courses:	
CRJ 280	Internship	4
	OR	
CRJ XXX	Criminal Justice elective	3

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Dental Assistant

Program Description

Students in the Dental Assistant program receive instruction in preparing patients for treatment and in chairside assisting as the dentist examines and treats patients. The dental assistant will expose and process X-ray films, sterilize instruments, provide oral health instruction, and assist with record keeping and other office management practices. In addition to academic and clinical course work on campus, students are provided with practical experience in dental offices under the supervision of College and dental office personnel. Students graduating from the Dental Assistant program participate in evaluations of proficiency in general and technical education.

A one-year program leads to a technical certificate. Graduates are eligible to take the certification exam administered by the Dental Assisting National Board, Inc.

Degrees Available:

• *Technical Certificate*

Specialties Offered:

None

Program Available at:

Kokomo
Lafayette

Technical Certificate

To earn this degree, you must have 39 credits in the following areas:

General Education Core	6
Professional/Technical Core	33

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
PROFESSIONAL/TECHNICAL (33 CREDITS)	DEN 102	Dental Materials and Laboratory 1	3
	DEN 115	Preclinical Practice I	4
	DEN 116	Dental Emergencies/Pharmacology	2
	DEN 117	Dental Office Management	2
	DEN 118	Dental Radiography	4
	DEN 122	Clinical Practicum I	1
	DEN 123	Dental Anatomy	2
	DEN 124	Preventive Dentistry/Diet and Nutrition	2
	DEN 125	Preclinical Practice II	3
	DEN 129	Dental Materials and Laboratory II	3
	DEN 130	Clinical Practicum II	5
	DEN 131	Basic Integrated Science	2

Design Technology

Program Description

The Design Technology program prepares people for challenging and rewarding careers in a design profession. The Design program provides a strong foundation in design principles and technology utilizing the latest computer software and hardware available. Graduates of the design technology program have the skills and knowledge necessary to respond to future advances and changes in technology. Students graduating from the Design program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Design Technology students wishing to pursue a bachelor's of science may complete the associate of science degree program available at selected campuses. Students completing the associate of science program will also be able to enter the workforce. Technical certificates and career development certificates also are available. The availability of degrees will vary from campus to campus. Interested students should contact local Ivy Tech Campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Architecture*
- *Civil*
- *CADD-M*
- *Computer Graphics*
- *Mechanical*

Program Available at:

Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Madison
Marion
Muncie
Sellersburg
South Bend
Terre Haute
Valparaiso

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Design Technology

Associate of Science

Articulated transfer through an Associate of Science in Design Technology is available with Ball State University, Indiana State University, and IUPUI. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Design Technology and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 64 credits in the following areas:

General Education Core	19
Professional/Technical Core	18
Specialty Core	12-15
Locally Determined Courses	12-15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (19 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	**MAT 111	Intermediate Algebra	3
		AND	
	**MAT 121	Geometry/Trigonometry	3
		OR	
	**MAT 131	Algebra/Trigonometry I	3
		AND	
	**MAT 132	Algebra/Trigonometry II	3
		OR	
	**MAT 133	College Algebra	4
		AND	
	**MAT 134	Trigonometry	2
	PHY 101	Physics I	4
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	DSN 103	CAD Fundamentals	3
	DSN 106	Descriptive Geometry	3
	DSN 220	Advanced CAD	3
	DSN 221	Statics	3
	DSN 225	Portfolio Preparation	3
	TEC 102	Technical Graphics	3

Specialties Continued Next Page

Design Technology

Associate of Applied Science—Specialties

Choose One of the Following Specialties	Required Courses		Credit Hours
ARCHITECTURE SPECIALTY (27 CREDITS)	DSN 105	Architectural Design I	3
	DSN 109	Construction Materials and Specifications	3
	DSN 204	Architectural Design II	3
	^DSN 208	Structural Design and Detailing	3
	DSN 222	Strength of Materials	3
		Locally Determined Courses	12
CIVIL SPECIALTY (27 CREDITS)	DSN 109	Construction Materials and Specifications	3
	^DSN 208	Structural Design and Detailing	3
	DSN 210	Surveying	3
	DSN 213	CAD Mapping	3
	DSN 222	Strength of Materials	3
		Locally Determined Courses	12
COMPUTER-AIDED DESIGN AND MANUFACTURING SPECIALTY (27 CREDITS)	DSN 222	Strength of Materials	3
	MTT 208	CNC Programming I	3
	MTT 220	CAD/CAM I	3
	^MTT 221	CAD/CAM II	3
	TEC 101	Processes and Materials	3
		Locally Determined Courses	12
COMPUTER GRAPHICS SPECIALTY (27 CREDITS)	ART 111	Drawing for Visualization	3
	ART 114	Graphic Design	3
	VIS 101	Fundamentals of Design	3
	VIS 115	Introduction to Computer Graphics	3
		Locally Determined Courses	15
MECHANICAL SPECIALTY (27 CREDITS)	DSN 104	Mechanical Graphics	3
	DSN 214	Kinematics of Machinery	3
	^DSN 217	Design Process and Applications	3
	DSN 222	Strength of Materials	3
	TEC 101	Processes and Materials	3
		Locally Determined Courses	12

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Design Technology

Technical Certificate

To earn this degree, you must have 33 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	6
Locally Determined Courses	18

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	ENG 111	English Composition	3
	**XXX XXX	General Education Elective	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	TEC 104	Computer Fundamentals for Technology	3
OTHER REQUIRED COURSES (24 CREDITS)	DSN 103	CAD Fundamentals	3
	TEC 102	Technical Graphics	3
		Locally Determined Courses	18

Early Childhood Education

Program Description

The Early Childhood Education program focuses on early childhood growth and development, including adult-child relationships. Emphasis is placed on the development of skills and techniques for providing appropriate environments and care for young children. Instruction is provided in the physical, emotional, social and cognitive areas of early childhood. The student develops competencies through classroom instruction, observation and participation in early childhood settings. Students graduating from the Early Childhood Education program participate in evaluations of proficiency in general and technical education.

Employment opportunities include day care, nursery school, Head Start, family day care, pediatrics setting, nanny care, school aide, school age care, employer-sponsored day care, infant/toddler care, resource and referral services, intergenerational care, respite/sick care and other settings.

A two-year program leads to an associate of applied science degree. A technical certificate also is available. Associate of science degrees are available at selected campuses. The Early Childhood Education program is available via distance education for interested students. The availability of degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Administration*
- *Curriculum*
- *Generalist*
- *Infant/Toddler*

Program Available at:

Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Michigan City
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Valparaiso
Warsaw

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Early Childhood Education

Associate of Science

Articulated transfer through an Associate of Science in Early Childhood Education is available with Ball State University, Indiana State University, and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Early Childhood Education and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 66 credits in the following areas:

General Education Core	18
Professional/Technical Core	30
Specialty Core	12
Locally Determined Courses	6

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	ENG 111	English Composition	3
	*ENG 112	Exposition and Persuasion	3
		OR	
	*ENG 211	Technical Writing	3
		OR	
	*COM 102	Introduction to Interpersonal Communication	3
	*MAT 111	Intermediate Algebra	3
		OR	
	*MAT 112	Functional Mathematics	3
	PSY 101	Introduction to Psychology	3
	SOC 111	Introduction to Sociology	3
	*XXX XXX	Life/Physical Science Elective	3
PROFESSIONAL/TECHNICAL (30 CREDITS)	ECE 100	Introduction to Early Childhood Education	3
	ECE 101	Health, Safety and Nutrition	3
	ECE 103	Curriculum in the Early Childhood Classroom	3
	ECE 120	Child Growth and Development	3
	ECE 130	Developmentally Appropriate Guidance in a Cultural Context	3
	ECE 204	Families in Transition	3
	ECE 210	Early Childhood Administration	3
	ECE 230	The Exceptional Child	3
	ECE 233	Emerging Literacy	3
	^ECE 260	Early Childhood Professional	3

Early Childhood Education

Associate of Applied Science—Specialties

Choose One of the Following Specialties		Required Courses	Credit Hours
ADMINISTRATION SPECIALTY (18 CREDITS)	ECE 213	Infant and Toddler Care Programming	3
	ECE 216	Curriculum Planning for Early Childhood Administrators	3
	ECE 218	Leadership and Mentoring in Early Childhood Education	3
	ECE 243	Cognitive Curriculum	3
		Locally Determined Courses	6
CURRICULUM SPECIALTY (18 CREDITS)	ECE 213	Infant and Toddler Care Programming	3
	ECE 216	Curriculum Planning for Early Childhood Administrators	3
	ECE 223	School Age Programming	3
	ECE 243	Cognitive Curriculum	3
		Locally Determined Courses	6
GENERALIST SPECIALTY (18 CREDITS)	ECE 200	Family/Teacher Partnership Skills	3
	ECE 213	Infant and Toddler Care Programming	3
	ECE 223	School Age Programming	3
	ECE 243	Cognitive Curriculum	3
		Locally Determined Courses	6
INFANT/TODDLER SPECIALTY (18 CREDITS)	ECE 110	Infant/Toddler Growth and Development	3
	ECE 111	Environments for Infants and Toddlers	3
	ECE 201	Skills for Parenting	3
	ECE 213	Infant and Toddler Care Programming	3
		Locally Determined Courses	6

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Early Childhood Education

Technical Certificate

To earn this degree, you must have 30 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	18
Locally Determined Courses	3

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	ENG 111	English Composition	3
	**PSY 101	Introduction to Psychology	3
		OR	
	**SOC 111	Introduction to Sociology	3
PROFESSIONAL TECHNICAL (3 CREDITS)	ECE 120	Child Growth and Development	3
SPECIALTY (21 CREDITS)	ECE 100	Introduction to Early Childhood Education	3
	ECE 101	Health, Safety and Nutrition	3
	ECE 103	Curriculum in the Early Childhood Classroom	3
	ECE 130	Developmentally Appropriate Guidance in a Cultural Context	3
	ECE 230	The Exceptional Child	3
	ECE 233	Emerging Literacy	3
		Locally Determined Courses	3

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Electronics & Computer Technology

Program Description

The Electronics Technology program is designed to meet the ongoing needs of business, industry and the student. The Associate of Applied Science and the Associate of Science degrees are structured to develop the technical skills, general knowledge, and critical thinking and problem solving abilities of graduates. Broad-based technical skills and critical thinking processes assist the student in adapting to changes in the work environment and allow advancement in the field. Students graduating from the Electronics and Computer Technology program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Students completing the associate of science program will be able to enter the workforce, as well as having transfer opportunities. A technical certificate and career development certificates are available. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses. Students graduating from the Electronics program participate in evaluations of proficiency in general and technical education.

Electronics & Computer Technology

Associate of Science

Articulated transfer through an Associate of Science in Electronics Technology is available with Indiana State University, IUPU-Fort Wayne, and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Electronics Technology and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 64-65 credits in the following areas:

General Education Core	19
Professional/Technical Core	21
Specialty Core	9-12
Locally Determined Courses	12-16

You Must Have

Required Courses

Credit Hours

GENERAL EDUCATION
(19 CREDITS)

COM 101	Fundamentals of Public Speaking	3
ENG 111	English Composition	3
**MAT 1XX	First Course in a Series	3
**MAT 1XX	Second Course in a Series	3
PHY 101	Physics I	4
*XXX XXX	Humanities/Social Sciences Elective	3

PROFESSIONAL/TECHNICAL
(21 CREDITS)

ELT 120	Introduction to Electronics	3
ELT 121	Circuits I	3
ELT 122	Circuits II	3
ELT 124	Digital I	3
ELT 126	Solid State I	3
^ELT 234	Advanced Problem Solving	3
TEC 104	Computer Fundamentals for Tecnology	3

Choose One of the Following Specialties

AUTOMATION CONTROLS
SPECIALTY (24-25 CREDITS)

CIM 102	Introduction to Robotics	3
ELT 224	Linear Integrated Circuits	3
MIT 104	Fluid Power Basics	3
MIT 205	Programmable Controllers I	3
	Locally Determined Courses	12-13

Specialties Continued Next Page

Electronics & Computer Technology

Associate of Applied Science—Specialties

	Required Courses		Credit Hours
BIOMEDICAL SPECIALTY (24-25 CREDITS)	ELT 219	Biomedical Electronics I	3
	ELT 220	Biomedical Electronics II	3
	ELT 221	Solid State II	3
	ELT 224	Linear Integrated Circuit Applications	3
		Locally Determined Courses	12-13
COMMUNICATIONS SPECIALTY (24-25 CREDITS)	ELT 221	Solid State II	3
	ELT 224	Linear Integrated Circuit Applications	3
	ELT 228	Communications Electronics	3
	ELT 230	Advanced Communications Electronics	3
		Locally Determined Courses	12-13
COMPUTER SYSTEMS/ NETWORKING SPECIALTY (24-25 CREDITS)	ELT 125	Digital II	3
	ELT 140	Networking	3
	ELT 222	Microprocessors	3
	ELT 226	Computer Troubleshooting	3
		Locally Determined Courses	12-13
ELECTRICAL MAINTENANCE SPECIALTY (24-25 CREDITS)	ELT 233	Industrial Motors and Controls	3
	ELT 238	Process Instrumentation	3
	MIT 104	Fluid Power Basics	3
	MIT 205	Programmable Controllers 1	3
		Locally Determined Courses	12-13
ELECTRONICS SPECIALTY (24-25 CREDITS)	ELT 125	Digital II	3
	ELT 221	Solid State II	3
	ELT 222	Microprocessors	3
		Locally Determined Courses	15-16

Specialties Continued Next Page

Electronics & Computer Technology

Associate of Applied Science—Specialties

		Required Courses	Credit Hours
INDUSTRIAL SPECIALTY (24-25 CREDITS)	ELT 221	Solid State II	3
	ELT 223	Electrical Machines	3
	ELT 224	Linear Integrated Circuit Applications	3
	MIT 205	Programmable Controllers I	3
		Locally Determined Courses	12-13
INSTRUMENTATION SPECIALTY (24-25 CREDITS)	ELT 221	Solid State II	3
	ELT 235	Process Control	3
	ELT 237	Calibration	3
	MIT 205	Programmable Controllers I	3
		Locally Determined Courses	12-13
TELECOMMUNICATIONS SPECIALTY (24-25 CREDITS)	ELT 130	Fiber Optics	3
	ELT 222	Microprocessors	3
	ELT 224	Linear Integrated Circuit Applications	3
	ELT 229	Telecommunications	3
		Locally Determined Courses	12-13

Key (See page 2 for definitions)
* Elective ** Locally Determined ^ Capstone Course

Environmental Design

Program Description

The Environmental Design Program provides career education in the creation of safe, functional, productive and aesthetically pleasing interior and exterior environments for work, home, health and recreation.

Students will investigate the interaction of social and cultural perception and usage of the physical environment, the interrelationship of human beings and natural ecosystems, conceptual designs and the problem-solving process, building codes and legal regulations, materials technology and methods of construction, custom detailing and manufacturing, product selection and specification, integration of mechanical, lighting and acoustical systems, great designers and historical styles and project management.

Visual and verbal presentations allow students to develop their design vocabulary and professional management skills. Representational drawings and model studies of design projects are developed for exploration of the visual principles, color application and 3-D organization of enclosures as they relate to environments.

Degrees Available:

- *Associate of Applied Science*

Specialties Offered:

- *Garden Design*
- *Interior Design*

Program Available at:

Evansville
South Bend

Environmental Design

Associate of Applied Science

To earn this degree, you must have 66 credits in the following areas:

General Education Core	18
Professional/Technical Core	18
Specialty Core	21
Locally Determined Courses	9

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	ARH 101	Survey of Art and Culture I	3
	ARH 102	Survey of Art and Culture II	3
	BIO 101	Introductory Biology	3
	**COM 101	Fundamentals of Public Speaking	3
		OR	
	**COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
	**MAT 111	Intermediate Algebra	3
		OR	
	**MAT 112	Functional Mathematics	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	EDN 101	Design Theory	3
	EDN 102	Drafting and Construction	3
	EDN 105	Design Presentations	3
	EDN 203	Professional Practices	3
	^EDN 209	Portfolio Preparation/Internship	3
	EDN 216	CAD for Environmental Designers	3
GARDEN DESIGN SPECIALTY (21 CREDITS)	GDN 110	Garden Horticulture	3
	GDN 111	Landscape Plantings	3
	GDN 112	Garden Plantings	3
	GDN 114	Introduction to Garden & Landscape Design	3
	GDN 115	History of Garden Design	3
	GDN 116	Theme Gardening	3
	GDN 231	Garden & Landscape Design II	3
		Locally Determined Courses	9
INTERIOR DESIGN SPECIALTY (21 CREDITS)	INT 103	Introduction to Interior Design	3
	INT 104	Textiles for Interiors	3
	INT 108	Interior Design II	3
	INT 109	History of Interiors I	3
	INT 200	Lighting and Building Systems	3
	INT 201	Interior Materials	3
	INT 202	Contract Design	3
		Locally Determined Courses	9

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

General Studies

Program Description

The Associate of Science (A.S.) in General Studies provides an opportunity for students to pursue two-year sequences of general and professional coursework, in preparation for employment and in preparation for continuing their postsecondary education at the baccalaureate level.

The A.S. in General Studies is an individualized, multi-disciplinary program which requires 63-65-credit: 30-32 credit hours of coursework in communications, social sciences, humanities, mathematics, and science; and 33 credits of electives. Students graduating with an A.S. in General Studies are required to prepare a portfolio and to participate in evaluations of general education.

In the 33 credits of electives students' expectations about their baccalaureate degree program goals and the requirements of the institution to which they plan to transfer will be matched with the specific courses which will make it possible for them to enter the baccalaureate program as a junior and complete the baccalaureate degree within two years. Students are encouraged to review their options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer.

Program Description

The Hospitality Administration program emphasizes the techniques of such hospitality leaders as Ritz, Escoffier, Statler, Hilton and Marriott. By choosing a specialty area, students begin building leadership skills for the profession of welcoming and serving guests. The hospitality program produces graduates who can perform well in the hospitality industry. Students graduating from the Hospitality Administration program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Technical certificates and career development certificates are also available. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered

- *Baking & Pastry Arts*
- *Culinary Arts*
- *Event Management*
- *Hotel Management*
- *Restaurant Managem*

Program Available at:

East Chicago
Fort Wayne
Gary
Indianapolis
Michigan City
Muncie
South Bend

Availability of specialtie and degrees varies by campus. Contact your local campus for more information. See page for contact information

Hospitality Administration

Associate of Science

Articulated transfer through an Associate of Science in Hospitality Administration is available with Ball State University, IUPU-Fort Wayne, and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Hospitality Administration and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 64-66 credits in the following areas:

General Education Core	18
Professional/Technical Core	19
Specialty Core	27-33
Locally Determined Courses	0-6

You Must Have

GENERAL EDUCATION
(18 CREDITS)

Required Courses		Credit Hours
**COM 101	Fundamentals of Public Speaking	3
	OR	
**COM 102	Introduction to Interpersonal Communication	3
ENG 111	English Composition	3
**MAT 111	Intermediate Algebra	3
	OR	
**MAT 112	Functional Mathematics	3
*XXX XXX	Physical Science Elective	3
*XXX XXX	Social Science Elective	3
*XXX XXX	Humanities Elective	3

PROFESSIONAL/TECHNICAL
(19 CREDITS)

HOS 101	Sanitation and First Aid	3
HOS 102	Basic Food Theory and Skills	3
HOS 104	Nutrition	3
HOS 108	Human Relations Management	3
HOS 109	Hospitality Purchasing	2
HOS 203	Menu, Design, and Layout	2
HOS 204	Food and Beverage Cost Control	3

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Hospitality Administration

Associate of Applied Science—Specialties

	Required Courses	Credit Hours
Choose One of the Following Specialties		
BAKING & PASTRY ARTS SPECIALTY (30 CREDITS)		
HOS 105	Introduction to Baking	3
HOS 106	Pantry and Breakfast	3
HOS 111	Yeast Breads I	3
HOS 112	Yeast Breads II	3
HOS 113	Baking Science	3
HOS 208	Cakes, Icings, and Fillings	3
HOS 209	Advanced Decorating and Candies	3
HOS 213	Classical Pastries and Chocolates	3
HOS 270	Bakery Merchandising	3
^HOS 280	Co-op/Internship	3
CULINARY ARTS SPECIALTY (33 CREDITS)		
HOS 103	Soup, Stock, and Sauces	3
HOS 105	Introduction to Baking	3
HOS 106	Pantry and Breakfast	3
HOS 110	Meat Fabrication	3
HOS 202	Fish and Seafood	3
HOS 207	Table Service	3
HOS 210	Classical Cuisine	3
HOS 212	Garde Manger	3
^HOS 280	Co-op/Internship	3
	Locally Determined Courses	6
EVENT MANAGEMENT SPECIALTY (33 CREDITS)		
ACC 101	Financial Accounting	3
BUS 105	Principles of Management	3
CIS 101	Introduction to Microcomputers	3
HOS 114	Introduction to Hospitality	3
HOS 144	Travel Management	3
HOS 171	Introduction to Convention & Meeting Management	3
HOS 172	Development and Management of Attractions	3
HOS 271	Mechanics of Meeting Planning	3
HOS 272	The Tourism System	3
^HOS 280	Co-op/Internship	3
MKT 101	Principles of Marketing	3

Specialties Continued Next Page

Hospitality Administration

Associate of Applied Science—Specialties

	Required Courses		Credit Hours

HOTEL MANAGEMENT SPECIALTY (33 CREDITS)	ACC 101	Financial Accounting	3
	BUS 102	Business Law	3
	BUS 105	Principles of Management	3
	CIS 101	Introduction to Microcomputers	3
	HOS 114	Introduction to Hospitality	3
	*HOS 144	Travel Management	3
		OR	
	*BUS 101	Introduction to Business	3
	HOS 207	Table Service	3
	HOS 215	Front Office	3
	HOS 217	Housekeeping	3
	^HOS 280	Co-op/Internship	3
	MKT 101	Principles of Marketing	3
RESTAURANT MANAGEMENT SPECIALTY (33 CREDITS)	ACC 101	Financial Accounting	3
	BUS 101	Introduction to Business	3
	BUS 102	Business Law	3
	BUS 105	Principles of Management	3
	BUS 208	Organizational Behavior	3
	CIS 101	Introduction to Microcomputers	3
	HOS 207	Table Service	3
	HOS 114	Introduction to Hospitality	3
	^HOS 280	Co-op/Internship	3
	MKT 101	Principles of Marketing	3
	*OPM 224	Operations Management	3
		OR	
	*MKT 204	Marketing Management	3

Hospitality Administration

Technical Certificate

To earn this degree, you must have 30 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	8-9
Locally Determined Courses	15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	**COM 102	Introduction to Interpersonal Communication	3
		OR	
	**ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
		OR	
	MAT 112	Functional Mathematics	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	HOS 101	Sanitation and First Aid	3

Choose One of the Following Specialties

BAKING & PASTRY ARTS SPECIALTY (24 CREDITS)	HOS 105	Introduction to Baking	3
	HOS 113	Baking Science	3
	HOS 270	Bakery Merchandising	3
		Locally Determined Courses	15
CULINARY ARTS SPECIALTY (23 CREDITS)	HOS 102	Basic Foods Theory and Skills	3
	HOS 104	Nutrition	3
	HOS 109	Hospitality Purchasing	2
		Locally Determined Courses	15

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Human Services

Program Description

The Human Services program offers students the opportunity to become human services generalists and/or to concentrate in the areas of substance abuse, gerontology, correctional rehabilitation services or mental health.

Human services professionals reach out to individuals, families and communities. The Human Services program provides students with the broad understanding they need to help others meet their psychological, social and environmental needs. The human services generalist may find employment in a variety of settings such as community centers, group homes, substance abuse centers and nursing homes. Those who study human services with a focus on substance abuse may find positions in substance abuse centers (residential, detoxification and hospitals) as counselors or residents-in-training. Those who focus on gerontology may find jobs in adult day care centers, senior citizens centers and extended care facilities.

Program objectives include training the entry-level worker, providing education and training to upgrade the skills and knowledge of those currently employed, and providing development and enhancement. Throughout the program students examine their values and attitudes which reflect upon their interactions with others. Students graduating from the Human Services program participate in evaluations of proficiency in general and technical education.

A two-year program of study leads to an associate of applied science degree. Human Services students wishing to pursue a bachelor of science degree may complete an Associate of Science degree available at selected campuses. Students completing an associate of science program will also be able to enter the workforce. The availability of degrees and specialties will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate in Mental Health*

Specialties Offered:

- *Correctional Rehabilitation Services*
- *Generalist*
- *Gerontology*
- *Mental Health*
- *Substance Abuse*

Program Available at:

Anderson
Elkhart
Evansville
Fort Wayne
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Madison
Marion
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Warsaw

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Human Services

Associate of Science

Articulated transfer through an Associate of Science in Human Services is available with Ball State University, Indiana State University, IUPU-Fort Wayne, and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Human Services and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 65 credits in the following areas:

General Education Core	21
Professional/Technical Core	26
Specialty Core	12
Locally Determined Courses	6

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (21 CREDITS)	**BIO 101	Introductory Biology	3
		OR	
	**SCI 111	Physical Science	3
	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	**MAT 111	Intermediate Algebra	3
		OR	
	**MAT 112	Functional Mathematics	3
	POL 101	Introduction to American Government and Politics	3
	PSY 101	Introduction to Psychology	3
	SOC 111	Introduction to Sociology	3
PROFESSIONAL/TECHNICAL (26 CREDITS)	CIS 101	Introduction to Microcomputers	3
	HMS 101	Introduction to Human Services	3
	HMS 102	Helping Relationship Techniques	3
	HMS 103	Interviewing and Assessment	3
	HMS 201	Internship 1	4
	^HMS 202	Internship II	4
	HMS 205	Behavior Modification/Choice Theory	3
	HMS 206	Group Process and Skills	3

Human Services

Associate of Applied Science—Specialties

Choose One of the Following Specialties	Required Courses		Credit Hours
CORRECTIONAL REHABILITATION SERVICES SPECIALTY (18 CREDITS)	HMS 105	Introduction to Correctional Rehabilitation Services	3
	HMS 113	Problems of Substance Abuse in Society	3
	HMS 215	Juvenile Delinquency	3
	HMS 240	Rehabilitation Process: Probation and Parole	3
		Locally Determined Courses	6
GENERALIST SPECIALTY (18 CREDITS)	HMS 109	Understanding Diversity	3
	HMS 113	Problems of Substance Abuse in Society	3
	HMS 220	Issues and Ethics in Human Services	3
	PSY 201	Lifespan Development	3
		Locally Determined Courses	6
GERONTOLOGY SPECIALTY (18 CREDITS)	HMS 108	Psychology of Aging	3
	HMS 120	Health and Aging	3
	HMS 130	Social Aspects of Aging	3
	HMS 140	Loss and Grief	3
		Locally Determined Courses	6
MENTAL HEALTH SPECIALTY (18 CREDITS)	HMS 104	Crisis Intervention	3
	HMS 220	Issues and Ethics in Human Services	3
	PSY 201	Lifespan Development	3
	PSY 205	Abnormal Psychology	3
		Locally Determined Courses	6
SUBSTANCE ABUSE SPECIALTY (18 CREDITS)	HMS 113	Problems of Substance Abuse in Society	3
	HMS 208	Treatment of Substance Abuse	3
	HMS 209	Counseling Issues in Substance Abuse	3
	HMS 210	Substance Abuse in Family Systems	3
		Locally Determined Courses	6

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Human Services

Technical Certificate—Mental Health

To earn this degree,
you must have
30 credits in the
following areas:

General Education Core	6
Professional/Technical Core	3
Other Required Courses	6
Locally Determined Courses	15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	COM 102	Introduction to Interpersonal Communication	3
	PSY 101	Introduction to Psychology	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	HMS 101	Introduction to Human Services	3
OTHER REQUIRED COURSES (21 CREDITS)	HMS 205	Behavior Modification/Choice Theory	3
	PSY 205	Abnormal Psychology	3
		Locally Determined Courses	15

Liberal Arts

Program Description

The Associate of Arts and Associate of Science in Liberal Arts are transfer programs that provide an opportunity for students to complete the first two years of study leading to a bachelor's degree in liberal arts areas.

The following nine concentrations are available under the Associate of Arts in Liberal Arts: liberal studies, English, history, philosophy, political science, psychology, sociology, liberal arts, and pre-law. The following eight concentrations are available under the Associate of Science in Liberal Arts: liberal studies, English, history, political science, psychology, sociology, liberal arts, and pre-law.

Availability of concentrations varies among campuses. Students should contact their local Ivy Tech campus to learn more about what is available, or go to the Academic Options/Curricula section of http://www.ivytech.edu/ and click on Liberal Arts.

Articulation agreements have been established with all of the public, four-year university campuses in Indiana so that students who complete the associate degree may fulfill the requirements for a related bachelor's degree in an additional two years of full-time study at the university.

Students are encouraged to review their transfer options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Degrees Available:

- *Associate of Arts*
- *Associate of Science*

Specialties Offered:

- *English*
- *History*
- *Liberal Arts*
- *Liberal Studies*
- *Philosophy*
- *Political Science*
- *Pre-Law*
- *Psychology*
- *Sociology*

Program Available at:

Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Michigan City
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Valparaiso
Warsaw

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Liberal Arts

Associate of Arts

To earn this degree, you must have 62-66 credits in the following areas:

General & Liberal Education Core	37-40
Concentration Requirements	24-27

You Must Have	Required Courses		Credit Hours
ENGLISH CONCENTRATION: GENERAL EDUCATION (38 CREDITS)	CIS 100	Using the Windows Environment	1
	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	HSY 101	Survey of American History I	3
	MAT XXX	Intermediate Algebra or higher	3
	PSY 101	Introduction to Psychology	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Humanities Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (24 CREDITS)	COM 204	Voice and Articulation	3
	ENG 222	American Literature I	3
	ENG 223	American Literature II	3
	ENG 224	Survey of English Literature I	3
	ENG 225	Survey of English Literature II	3
	ENG 249	Linguistics	3
	ENG 250	English Grammar	3
	SOC 111	Introduction to Sociology	3

Programs Continue on Following Pages

Key (See page 2 for definitions)
* Elective ** Locally Determined ^ Capstone Course

Liberal Arts

Associate of Arts

You Must Have		Required Courses	Credit Hours
TORY CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	ECN 201	Principles of Macroeconomics	3
	ECN 202	Principles of Microeconomics	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Humanities Elective - Broad.Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (25 CREDITS)	ANH 254	Introduction to Archaeology OR	3
	HSY 125	History of American Technology	3
	GEO 207	World Geography	3
	HSY 101	Survey of American History I OR	3
	HSY 235	World Civilization I	3
	HSY 102	Survey of American History II OR	3
	HSY 236	World Civilization II	3
	POL 101	Introduction to American Government and Politics	3
	POL 201	Introduction to Political Science	3
	POL 211	Introduction to World Politics	3
	SOC 111	Introduction to Sociology	3
	XXX XXX	Elective	1

Liberal Arts

Associate of Arts

You Must Have	Required Courses	Credit Hours
LIBERAL ARTS CONCENTRATION: GENERAL EDUCATION (40 CREDITS)	**CIS 101** Introduction to Microcomputers	3
	COM 101 Fundamentals of Public Speaking	3
	ENG 111 English Composition	3
	ENG 112 Exposition and Persuasion	3
	ECN 201 Principles of Macroeconomics	3
	OR	
	SOC 245 Cultural Diversity in the United States	3
	OR	
	SOC 252 Social Problems	3
	ECN 202 Principles of Microeconomics	3
	OR	
	SOC 111 Introduction to Sociology	3
	FIT 100 Fitness and Wellness	2
	HUM 201 Humanities I	3
	OR	
	ENG 220 Introduction to World Literature I	3
	OR	
	ENG 227 Introduction to World Fiction	3
	HUM 202 Humanities II	3
	OR	
	ENG 221 Introduction to World Literature II	3
	MAT XXX Intermediate Algebra or higher	3
	XXX XXX Foreign Language Electives (both courses same language)	8
	XXX XXX Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (24-26 CREDITS)	**ARH 110** Art Appreciation	3
	OR	
	HUM 118 Music Appreciation	3
	HSY 101 Survey of American History I	3
	HSY 102 Survey of American History II	3
	PHL 101 Introduction to Philosophy	3
	PHL 102 Introduction to Ethics	3
	XXX XXX Laboratory Science Elective	3
	XXX XXX Foreign Language or Electives	6-8

Liberal Arts

Associate of Arts

You Must Have	Required Courses		Credit Hours
LIBERAL STUDIES CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	COM 101	Fundamentals of Public Speaking	3
		OR	
	COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Humanities Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
	XXX XXX	Social Science Elective - Core List	6
CONCENTRATION REQUIREMENTS (26 CREDITS)	**XXX XXX	Directed Elective	3
	#XXX 2XX	Clustered 200-Level Electives	15
	#XXX XXX	Electives	8

Key   (See page 2 for definitions)

Use courses from Course Inventory Tables (pages 1-3).
** Regionally determined.

Liberal Arts

Associate of Arts

You Must Have	Required Courses		Credit Hours
PHILOSOPHY CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	ENG 220	Introduction to World Literature I	3
	ENG 221	Introduction to World Literature II	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	POL 201	Introduction to Political Science	3
		OR	
	ECN 101	Economics Fundamentals	3
	SOC 111	Introduction to Sociology	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (27 CREDITS)	ARH 110	Art Appreciation	3
		OR	
	HUM 118	Music Appreciation	
	HSY 235	World Civilization I	3
	HSY 236	World Civilization II	3
	HUM 201	Humanities I	3
	PHL 101	Introduction to Philosophy	3
	PHL 102	Introduction to Ethics	3
	PHL 213	Logic	3
	PHL 220	Philosophy of Religion	3
	XXX XXX	Science Elective	3

Liberal Arts

Associate of Arts

You Must Have	Required Courses		Credit Hours
POLITICAL SCIENCE CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	ECN 201	Principles of Macroeconomics	3
	ECN 202	Principles of Microeconomics	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Humanities Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (25 CREDITS)	GEO 207	World Geography	3
	HSY 101	Survey of American History I	3
		OR	
	HSY 235	World Civilization 1	3
	HSY 102	Survey of American History II	3
		OR	
	HSY 236	World Civilization II	3
	POL 101	Introduction to American Government and Politics	3
		OR	
	POL 112	State and Local Government	3
	POL 201	Introduction to Political Science	3
	POL 210	Personal Law	3
	POL 211	Introduction to World Politics	3
	POL 220	Public Administration	3
	XXX XXX	Elective	1

Key   (See page 2 for definitions)

\# Use courses from Course Inventory Tables (pages 1-3).
** Regionally determined.

Liberal Arts

Associate of Arts

You Must Have	Required Courses		Credit Hours
PRE-LAW CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ECN 201	Principles of Macroeconomics	3
	ECN 202	Principles of Microeconomics	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	English Literature Elective - Broad Core List	3
	XXX XXX	English Literature Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (27 CREDITS)	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	HSY 235	World Civilization 1	3
	HSY 236	World Civilization ll	3
	POL 101	Introduction to American Government and Politics	3
	POL 201	Introduction to Political Science	3
	POL 210	Personal Law	3
	POL 211	Introduction to World Politics	3
	PSY 101	Introduction to Psychology	3

Liberal Arts

Associate of Arts

You Must Have	Required Courses		Credit Hours
PSYCHOLOGY CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	BIO 101	Introductory Biology	3
	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	HSY 101	Survey of American History I	3
		OR	
	HSY 235	World Civilization I	3
	HSY 102	Survey of American History II	3
		OR	
	HSY 236	World Civilization II	3
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Humanities Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (27 CREDITS)	PSY 101	Introduction to Psychology	3
	PSY 201	Lifespan Development	3
	PSY 205	Abnormal Psychology	3
	SOC 111	Introduction to Sociology	3
	SOC 252	Social Problems	3
	XXX 2XX	Psychology Elective	3
	XXX XXX	Social Science Elective	6
	XXX XXX	Elective	3

Use courses from Course Inventory Tables (pages 1-3).
** Regionally determined.

Liberal Arts

Associate of Arts

You Must Have	Required Courses		Credit Hours
SOCIOLOGY CONCENTRATION: GENERAL EDUCATION (37 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Foreign Language Electives (both courses same language)	8
	XXX XXX	Humanities Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (27 CREDITS)	ANH 154	Introduction to Cultural Anthropology	3
	ANH 254	Introduction to Archaeology	3
		OR	
	XXX 2XX	Social Science Elective	3
	ECN 201	Principles of Macroeconomics	3
		OR	
	XXX 2XX	Social Science Elective	3
	ECN 202	Principles of Microeconomics	3
		OR	
	XXX 2XX	Social Science Elective	3
	POL 211	Introduction to World Politics	3
		OR	
	PSY 205	Abnormal Psychology	3
		OR	
	SOC 245	Cultural Diversity in the United States	3
	PSY 101	Introduction to Psychology	3
	PSY 253	Introduction to Social Psychology	3
	SOC 111	Introduction to Sociology	3
	SOC 252	Social Problems	3

Liberal Arts

Associate of Science

General & Liberal Education Core	29-35
Concentration Requirements	27-34

You Must Have

Required Courses

Credit Hours

NGLISH CONCENTRATION:
GENERAL EDUCATION
(29 CREDITS)

Course	Title	Credit Hours
COM 101	Fundamentals of Public Speaking	3
ENG 111	English Composition	3
ENG 112	Exposition and Persuasion	3
FIT 100	Fitness and Wellness	2
HSY 101	Survey of American History 1	3
MAT XXX	Intermediate Algebra or higher	3
PSY 101	Introduction to Psychology	3
XXX XXX	Humanities Elective - Broad Core List	3
XXX XXX	Humanities Elective - Common Core List	3
XXX XXX	Laboratory Science Elective - Common Core List	3

CONCENTRATION
REQUIREMENTS
(33 CREDITS)

Course	Title	Credit Hours
COM 204	Voice and Articulation	3
ENG 202	Creative Writing	3
	OR	
ENG XXX	English Literature Elective	3
ENG 222	American Literature I	3
ENG 223	American Literature ll	3
ENG 224	Survey of English Literature I	3
ENG 225	Survey of English Literature II	3
ENG 249	Linguistics	3
ENG 250	English Grammar	3
SOC 111	Introduction to Sociology	3
XXX XXX	Literature Electives	6

Programs Continue on Following Pages

Key (See page 2 for definitions)
* Elective ** Locally Determined ^ Capstone Course

Liberal Arts

Associate of Science

You Must Have	Required Courses		Credit Hours
HISTORY CONCENTRATION: GENERAL EDUCATION (35 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	ECN 201	Principles of Macroeconomics	3
	ECN 202	Principles of Microeconomics	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Humanities or Science/Math Elective - Broad Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
	XXX XXX	Social Science Elective - Core List	6
CONCENTRATION REQUIREMENTS (27 CREDITS)	GEO 207	World Geography	3
	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	HSY 235	World Civilization I	3
	HSY 236	World Civilization II	3
	POL 101	Introduction to American Government and Politics	3
	POL 201	Introduction to Political Science	3
	POL 211	Introduction to World Politics	3
	SOC 111	Introduction to Sociology	3

Liberal Arts

Associate of Science

You Must Have		Required Courses	Credit Hours
LIBERAL ARTS CONCENTRATION: GENERAL EDUCATION (32 CREDITS)	CIS 101	Introduction to Microcomputers	3
	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	ECN 201	Principles of Macroeconomics	3
		OR	
	SOC 245	Cultural Diversity in the United States	3
		OR	
	SOC 252	Social Problems	3
	ECN 202	Principles of Microeconomics	3
		OR	
	SOC 111	Introduction to Sociology	3
	FIT 100	Fitness and Wellness	2
	HUM 201	Humanities I	3
		OR	
	ENG 220	Introduction to World Literature I	3
		OR	
	ENG 227	Introduction to World Fiction	3
	HUM 202	Humanities II	3
		OR	
	ENG 221	Introduction to World Literature II	3
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (30 CREDITS)	ARH 110	Art Appreciation	3
		OR	
	HUM 118	Music Appreciation	3
	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	PHL 101	Introduction to Philosophy	3
	PHL 102	Introduction to Ethics	3
	XXX XXX	Laboratory Science Elective	3
	XXX XXX	Electives	12

Liberal Arts

Associate of Science

You Must Have	Required Courses		Credit Hours
LIBERAL STUDIES CONCENTRATION: GENERAL EDUCATION (29 CREDITS)	COM 101	Fundamentals of Public Speaking OR	3
	COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition .	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Humanities or Science/Math Elective - Broad Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
	XXX XXX	Social Science Elective - Core List	6
CONCENTRATION REQUIREMENTS (34 CREDITS)	**XXX XXX	Directed Elective	3
	#XXX 2XX	Clustered 200-Level Electives	15
	#XXX XXX	Electives	16

Liberal Arts

Associate of Science

You Must Have		Required Courses	Credit Hours
POLITICAL SCIENCE CONCENTRATION: GENERAL EDUCATION (29 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	ECN 201	Principles of Macroeconomics	3
	ECN 202	Principles of Microeconomics	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Humanities or Science/Math Elective - Broad Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (33 CREDITS)	GEO 207	World Geography	3
	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	HSY 235	World Civilization I	3
	HSY 236	World Civilization II	3
	POL 101	Introduction to American Government and Politics	3
	POL 112	State and Local Government	3
	POL 201	Introduction to Political Science	3
	POL 210	Personal Law	3
	POL 211	Introduction to World Politics	3
	POL 220	Public Administration	3

Liberal Arts

Associate of Science

You Must Have	Required Courses		Credit Hours
PRE-LAW CONCENTRATION: GENERAL EDUCATION (29 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ECN 201	Principles of Macroeconomics	3
	ECN 202	Principles of Microeconomics	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	English Literature Elective - Broad Core List	3
	XXX XXX	English Literature Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (33 CREDITS)	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	HSY 235	World Civilization I	3
	HSY 236	World Civilization II	3
	POL 101	Introduction to American Government and Politics	3
	POL 201	Introduction to Political Science	3
	POL 210	Personal Law	3
	POL 211	Introduction to World Politics	3
	PSY 101	Introduction to Psychology	3
	XXX XXX	Elective	3
	XXX XXX	Elective	3

Liberal Arts

Associate of Science

You Must Have		Required Courses	Credit Hours
PSYCHOLOGY CONCENTRATION: GENERAL EDUCATION (29 CREDITS)	BIO 101	Introductory Biology	3
	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	HSY 101	Survey of American History I	3
		OR	
	HSY 235	World Civilization I	3
	HSY 102	Survey of American History II	3
		OR	
	HSY 236	World Civilization II	3
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Humanities or Science/Math Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (33 CREDITS)	PSY 101	Introduction to Psychology	3
	PSY 201	Lifespan Development	3
	PSY 205	Abnormal Psychology	3
	SOC 111	Introduction to Sociology	3
	SOC 252	Social Problems	3
	XXX 2XX	Psychology Elective	3
	XXX XXX	Social Science Electives	9
	XXX XXX	Electives	6

Liberal Arts

Associate of Science

You Must Have	Required Courses		Credit Hours
SOCIOLOGY CONCENTRATION: GENERAL EDUCATION (29 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	FIT 100	Fitness and Wellness	2
	HSY 101	Survey of American History I	3
	HSY 102	Survey of American History II	3
	MAT XXX	Intermediate Algebra or higher	3
	XXX XXX	Humanities or Science/Math Elective - Broad Core List	3
	XXX XXX	Humanities Elective - Common Core List	3
	XXX XXX	Laboratory Science Elective - Common Core List	3
CONCENTRATION REQUIREMENTS (33 CREDITS)	ANH 154	Introduction to Cultural Anthropology	3
	ANH 254	Introduction to Archaeology	3
		OR	
	XXX 2XX	Social Science Elective	3
	ECN 201	Principles of Macroeconomics	3
		OR	
	XXX 2XX	Social Science Elective	3
	ECN 202	Principles of Microeconomics	3
		OR	
	XXX 2XX	Social Science Elective	3
	POL 211	Introduction to World Politics	3
		OR	
	PSY 205	Abnormal Psychology	3
		OR	
	SOC 245	Cultural Diversity in the United States	3
	PSY 101	Introduction to Psychology	3
	PSY 201	Lifespan Development	3
	PSY 253	Introduction to Social Psychology	3
	SOC 111	Introduction to Sociology	3
	SOC 252	Social Problems	3
	XXX XXX	Elective	3

Logistics Management

Program Description

The Logistics Management Program provides graduates with a solid foundation in the various concepts and applications used in the field of Logistics Management. The program will provide an environment conducive to the development of general knowledge, technical skills and critical thinking skills, as well as offering experiences in the various areas of logistics management. Graduates will be prepared to respond to future advances and changes in their profession, and they will be able to pursue advanced degrees.

The program in Logistics Management meets the needs of individuals who plan to enter the field of transportation, distribution, and logistics and individuals who are seeking to transfer and complete a baccalaureate degree. Typical careers in Logistics Management include Transportation Manager, Scheduler, Materials Manager, Purchasing Agent, Purchasing Manager, Warehouse Manager, Production Supervisor and others.

This program is articulated with IUPUI. Additional opportunities for course and program transfer may also be available. Students are encouraged to review options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Students should contact the transfer office for further information.

Logistics Management

Associate of Science

To earn this degree, you must have 63 credits in the following areas:

General Education Core 30
Professional/Technical Core 33

For transfer from Ivy Tech Indianapolis to IUPUI Bachelor of Science degree in Organizational Leadership and Supervision.

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (30 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ECN XXX	Economics Elective	3
	ENG 111	English Composition	3
	GEO 207	World Geography	3
	MAT 131	Algebra/Trigonometry I	3
	MAT 132	Algebra/Trigonometry II	3
	PHL 102	Introduction to Ethics	3
	PSY 101	Introduction to Psychology	3
	SOC 111	Introduction to Sociology	3
	XXX XXX	Life/Physical Sciences Elective	3
PROFESSIONAL/TECHNICAL (33 CREDITS)	ACC 101	Financial Accounting	3
	BUS 101	Introduction to Business	3
	BUS 102	Business Law	3
	BUS 105	Principles of Management	3
	BUS 227	Logistics/Supply Chain Management	3
	BUS 228	Principles of Purchasing	3
	BUS 229	Transportation Systems	3
	BUS 230	Business Statistics	3
	CIS 101	Introduction to Microcomputers	3
	MKT 101	Principles of Marketing	3
	OPM 224	Operations Management	3

Key (See page 2 for definitions)
* Elective ** Locally Determined ^ Capstone Course

Machine Tool Technology

Program Description

The Machine Tool Technology program prepares students for the metals manufacturing industry. Graduates are employed as skilled machinists and tool and die makers. The curriculum was developed in cooperation with the National Tooling and Machining Association. The program meets the national skill standards for the industry, with National Institute for Metalworking Skills (NIMS) certification built into the student exit evaluation. Students graduating from the Machine Tool Technology program participate in evaluations of proficiency in general and technical education.

Degrees Available:

• *Associate of Applied Science*

Specialty Offered:

• *Traditional Machine Tool*

Program Available at:

Indianapolis

Machine Tool Technology

Associate of Applied Science

To earn this degree, you must have 64 credits in the following areas:

General Education Core	19
Professional/Technical Core	18
Specialty Core	27

You Must Have		Required Courses	Credit Hours
GENERAL EDUCATION (19 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	MAT 121	Geometry/Trigonometry	3
	PHY 101	Physics I	4
	XXX XXX	Humanities/Social Science Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	DSN 103	CAD Fundamentals	3
	MIT 102	Introduction to Print Reading	3
	MTT 220	CAD/CAM I	3
	TEC 101	Processes and Materials	3
	TEC 102	Technical Graphics	3
	TEC 104	Computer Fundamentals for Technology	3
MACHINE TOOL SPECIALTY (27 CREDITS)	DSN 227	Geometric Dimensions and Tolerancing	3
	MTT 102	Turning Processes I	3
	MTT 103	Milling Processes I	3
	MTT 204	Abrasive Processes I	3
	MTT 208	CNC Programming I	3
	MTT 209	CNC Programming II	3
	MTT 240	Machine Operations I	3
	MTT 241	Machine Operations II	3
	^MTT 242	CNC Machining	3

Key (See page **2** for definitions)

* Elective ** Locally Determined ^ Capstone Course

Manufacturing & Industrial Technology

Program Description

The Manufacturing Technology program is a multi-disciplinary program designed to prepare students for technician-level positions. Specialty areas allow students to choose an emphasis of interest. Graduates are prepared to perform many facets of manufacturing including set-up, troubleshooting, processing and quality control.

Skills are acquired through lectures, demonstrations and hands-on experiences. Lab activities include the use of modern equipment and techniques currently found in industry. This training provides a foundation for any graduate to enter the workforce and continue skill enhancement. Students graduating from the Manufacturing Technology program participate in evaluations of proficiency in general and technical education.

A two-year program of study leads to an associate of applied science degree. Manufacturing Technology students wishing to pursue a bachelor's of science degree may complete the associate of science degree program. Students should choose the appropriate associate of science curriculum for their baccalaureate goal. Students completing the associate of science program will also be able to enter the workforce. Technical certificates and career development certificates also are available. The availability of specialties and degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Degrees Available:
- *Associate of Science*
- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:
- *Computer-Aided Design & Manufacturing*
- *Computerized Integrated Manufacturing*
- *Computer Numerical Control*
- *Facilities Maintenance*
- *HVAC*
- *Industrial Electrician*
- *Industrial Maintenance*
- *Machine Tool*
- *Maintenance Technician*
- *Mechanical Maintenance*
- *Mechanical Operations*
- *Plastics*
- *Process Control and Automation*
- *Quality Assurance*
- *Tool and Die*
- *Welding*

Program Available at:
Anderson
Bloomington
Columbus
Connersville
East Chicago
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Muncie
Richmond
Sellersburg
South Bend
Tell City
Terre Haute
Valparaiso
Wabash

Manufacturing & Industrial Technology

Associate of Science

Articulated transfer through an Associate of Science in Biotechnology is available with IUPUI. To view this Associate of Science transfer degree program and to see if it is available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Biotechnology and then on the Associate of Science curriculum.

Students are encouraged to review this option with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 64-65 credits in the following areas:

General Education Core	19
Professional/Technical Core	18
Specialty Core	12
Locally Determined Courses	15-16

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (19 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	MAT 121	Geometry/Trigonometry	3
	**XXX XXX	Physical Science Elective	4
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	MIT 102	Introduction to Print Reading	3
	MIT 106	Introduction to the Workplace and Safety	3
	MIT 113	Basic Electricity	3
	^MIT 260	Problem Solving and Teamwork	3
	TEC 101	Processes and Materials	3
	TEC 104	Computer Fundamentals for Technology	3
Choose One of the Following Specialties			
CAD/CAM SPECIALTY (27-28 CREDITS)	DSN 103	CAD Fundamentals	3
	MTT 208	CNC Programming I	3
	MTT 220	CAD/CAM I	3
	MTT 221	CAD/CAM II	3
		Locally Determined Courses	15-16
CIM SPECIALTY (27-28 CREDITS)	CIM 102	Introduction to Robotics	3
	CIM 202	Work Cell Design and Integration	3
	CIM 205	Automated Manufacturing Systems	3
	MIT 205	Programmable Controllers I	3
		Locally Determined Courses	15-16

Manufacturing & Industrial Technology

Associate of Applied Science—Specialties

		Required Courses	Credit Hours
CNC Specialty (27-28 credits)	MTT 208	CNC Programming I	3
	MTT 209	CNC Programming II	3
	MTT 210	Interactive CNC	3
	MTT 211	Advanced Programming Techniques	3
		Locally Determined Courses	15-16
Facilities Maintenance Specialty (27-28 credits)	HEA 101	Heating Fundamentals	3
	HEA 103	Refrigeration I	3
	IDS 120	Basic Carpentry and Building Maintenance	3
	IDS 122	General Maintenance	3
		Locally Determined Courses	15-16
HVAC Specialty (27-28 credits)	HEA 101	Heating Fundamentals	3
	HEA 103	Refrigeration I	3
	HEA 104	Heating Service	3
	HEA 106	Refrigeration II	3
		Locally Determined Courses	15-16
Industrial Electrician Specialty (27-28 credits)	IMT 122	Electrical Wiring Fundamentals	3
	IMT 207	Electrical Circuits	3
	MIT 103	Motors and Motor Controls	3
	MIT 205	Programmable Controllers I	3
		Locally Determined Courses	15-16
Industrial Maintenance Specialty (27-28 credits)	IMT 203	Machine Maintenance/Installation	3
	MIT 103	Motors and Motor Controls	3
	MIT 104	Fluid Power Basics	3
	MIT 205	Programmable Controllers I	3
		Locally Determined Courses	15-16
Machine Tool Specialty (27-28 credits)	MIT 114	Introductory Welding	3
	MTT 101	Introduction to Machining	3
	MTT 110	Turning and Milling Processes	3
	MTT 204	Abrasive Processes I	3
		Locally Determined Courses	15-16
Maintenance Technician Mechanical Specialty (27 credits)	IMT 106	Millwright I	3
	IMT 201	Fluid Power Systems	3
	MIT 104	Fluid Power Basics	3
	WLD 100	Welding Processes	3
		Locally Determined Courses	15

Specialties Continued Next Page

Manufacturing & Industrial Technology

Associate of Applied Science—Specialties

		Required Courses	Credit Hours
MECHANICAL MAINTENANCE SPECIALTY (27-28 CREDITS)	IMT 203	Machine Maintenance/Installation	3
	IMT 211	Advanced Industrial Mechanics I	3
	MIT 104	Fluid Power Basics	3
	MTT 101	Introduction to Machining	3
		Locally Determined Courses	15-16
OPERATIONS SPECIALTY (27 CREDITS)	MIT 115	Iron and Steelmaking I	3
	MIT 116	Iron and Steelmaking II	3
	QSC 101	Quality Control Concepts and Techniques I	3
	QSC 102	Statistical Process Control	3
		Locally Determined Courses	15
PLASTICS SPECIALTY (27-28 CREDITS)	PMT 101	Introduction to Plastics	3
	PMT 106	Introduction to Polymer Science	3
	PMT 107	Injection Molding	3
	PMT 209	Manufacturing of Plastic Products	3
		Locally Determined Courses	15-16
PROCESS CONTROL AND AUTOMATION SPECIALTY (27 CREDITS)	MIT 205	Programmable Controllers I	3
	MIT 207	Process Control and Automation I	3
	MIT 208	Process Control and Automation II	3
	MIT 209	Process Control and Automation III	3
		Locally Determined Courses	15
QUALITY ASSURANCE SPECIALTY (27-28 CREDITS)	QSC 101	Quality Control Concepts and Techniques I	3
	QSC 201	Advanced Statistical Process Control	3
	QSC 202	Quality Control Concepts and Techniques II	3
	QSC 203	Metrology	3
		Locally Determined Courses	15-16
TOOL AND DIE SPECIALTY (27-28 CREDITS)	MIT 120	Metallurgy Fundamentals	3
	MTT 206	Tooling Design I	3
	MTT 207	Tooling Design II	3
	MTT 225	Mold Making	3
		Locally Determined Courses	15-16
WELDING SPECIALTY (27-28 CREDITS)	WLD 108	Shielded Metal Arc Welding I	3
	WLD 207	Gas Metal Arc (MIG) Welding	3
	WLD 208	Gas Tungsten Arc (TIG) Welding	3
	WLD 210	Welding Fabrication I	3
		Locally Determined Courses	15-16

Manufacturing & Industrial Technology

Technical Certificate

To earn this degree, you must have 30-39 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	6
Locally Determined Courses	15-24

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	**XXX XXX	General Education Elective	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	MIT 102	Introduction to Print Reading	3
Choose One of the Following Specialties			
CAD/CAM SPECIALTY (21 CREDITS)	MTT 220	CAD/CAM I	3
	MTT 221	CAD/CAM II	3
		Locally Determined Courses	15
CNC SPECIALTY (30 CREDITS)	MTT 208	CNC Programming I	3
	MTT 209	CNC Programming II	3
		Locally Determined Courses	24
FACILITIES MAINTENANCE SPECIALTY (30 CREDITS)	HEA 101	Heating Fundamentals	3
	HEA 103	Refrigeration I	3
		Locally Determined Courses	24
HVAC SPECIALTY (30 CREDITS)	HEA 101	Heating Fundamentals	3
	HEA 103	Refrigeration I	3
		Locally Determined Courses	24
INDUSTRIAL ELECTRICIAN SPECIALTY (30 CREDITS)	IMT 122	Electrical Wiring Fundamentals	3
	MIT 103	Motors and Motor Controls	3
		Locally Determined Courses	24

Specialties Continued Next Page

Manufacturing & Industrial Technology

You Must Have	Required Courses		Credit Hours
INDUSTRIAL MAINTENANCE SPECIALTY (30 CREDITS)	MIT 104	Fluid Power Basics	3
	MIT 113	Basic Electricity	3
		Locally Determined Courses	24
MACHINE TOOL SPECIALTY (30 CREDITS)	MTT 101	Introduction to Machining	3
	MTT 110	Turning and Milling Processes	3
		Locally Determined Courses	24
MECHANICAL MAINTENANCE SPECIALTY (30 CREDITS)	IDS 104	Fluid Power Basics	3
	IMT 203	Machine Maintenance/Installation	3
		Locally Determined Courses	24
PLASTICS SPECIALTY (21 CREDITS)	PMT 101	Introduction to Plastics	3
	PMT 106	Plastic Materials and Testing	3
		Locally Determined Courses	15
TOOL AND DIE SPECIALTY (30 CREDITS)	MIT 120	Metallurgy Fundamentals	3
	MTT 206	Tooling Design I	3
		Locally Determined Courses	24
WELDING SPECIALTY (30 CREDITS)	WLD 108	Shielded Metal Arc Welding I	3
	WLD 207	Gas Metal Arc (MIG) Welding	3
		Locally Determined Courses	24

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Medical Assisting

Program Description

The Ivy Tech State College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE).

> Commission on Accreditation of
> Allied Health Education Programs
> 35 East Wacker Drive, Suite 1970
> Chicago, IL 60602-2208
> (312) 553-9355

Only graduates of the AAS and GENERALIST-TC are eligible to take the national exam to become a Certified Medical Assistant (CMA). The American Association of Medical Assistants Certifying Board (AAMA CB) awards the CMA credential after successful completion of the exam. The Commission on Accreditation of Allied Health Education Programs (CAAHEP), in collaboration with the Curriculum Review Board (CRB) of the AAMA Endowment (a committee on accreditation of CAAHEP), accredits medical assisting programs.

Degrees Available:

- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Administrative*
- *Clinical*
- *EKG*
- *Generalist*
- *Insurance*
- *Medical Assistant*
- *Pharmacy Technician*
- *Phlebotomy*
- *Therapeutic Massage*
- *Transcription*

Program Available at:

Anderson
Columbus
Elkhart
Evansville
Fort Wayne
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Michigan City
Muncie
Richmond
Sellersburg
South Bend
Terre Haute

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Medical Assisting

Associate of Applied Science

To earn this degree, you must have 63-66 credits in the following areas:

General Education Core   18
Professional/Technical Core   18
Specialty Core   18-21
Locally Determined Courses   6-12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	ENG 111	English Composition	3
	*XXX XXX	English/Communications Elective	3
	*MAT 1XX	Math Elective	3
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	HHS 101	Medical Terminology	3
	HHS 105	Medical Law and Ethics	3
	MEA 105	Office Administration with Computer Applications	3
	MEA 106	Medical Financial Management with Computer Applications	3
	MEA 218	Pharmacology	3
	^MEA 242	Disease Conditions	3

Choose One of the Following Specialties

MEDICAL ASSISTANT SPECIALTY (27 CREDITS)	MEA 135	Medical Word Processing/Transcription	3
	MEA 137	Medical Insurance and Basic Coding with Computer Applications	3
	MEA 219	Medical Assisting Laboratory Techniques	3
	MEA 238	Clinical I	3
	MEA 239	Clinical II	3
	MEA 258	Medical Assisting Clinical Externship	3
	MEA 259	Medical Assisting Administrative Externship	3
		Locally Determined Courses	6
THERAPEUTIC MASSAGE SPECIALTY (30 CREDITS)	MEA 160	Massage Technician Training I	3
	MEA 161	Massage Technician Training II	3
	MEA 163	Holistic Approach to Massage Therapy	3
	MEA 165	Acupressure Theory and Methods	3
	MEA 167	Deep Tissue/Muscle Release	3
	MEA 170	Business Development	3
	MEA 265	Advanced Techniques and Hygiene	3
	MEA 268	Massage Though the Lifespan	3
	MEA 269	Sports Massage, Injuries, and Hydrotherapies	3
		Locally Determined Courses	3

Medical Assisting

Technical Certificate

General Education Core	6
Professional/Technical Core	3
Specialty Core	6-39
Locally Determined Courses	0-15

You Must Have	Required Courses	Credit Hours
GENERAL EDUCATION (6 CREDITS)	*XXX XXX English/Communications Elective	3
	*XXX XXX Social Science/Science/Mathematics/Humanities Elective	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	HHS 101 Medical Terminology	3

Choose One of the Following Specialties

ADMINISTRATIVE SPECIALTY (21 CREDITS)	HHS 105 Medical Law and Ethics	3
	MEA 105 Office Administration with Computer Applications	3
	Locally Determined Courses	15
CLINICAL SPECIALTY (21 CREDITS)	MEA 238 Clinical I	3
	MEA 239 Clinical II	3
	Locally Determined Courses	15
GENERALIST SPECIALTY (38-39 CREDITS)	**ANP 101 Anatomy and Physiology I	3
	AND	
	**ANP 102 Anatomy and Physiology II	3
	OR	
	**PNU 126 Integrated Life Science	5
	HHS 105 Medical Law and Ethics	3
	MEA 105 Office Administration with Computer Applications	3
	MEA 106 Medical Financial Management with Computer Applications	3
	MEA 135 Medical Word Processing/Transcription	3
	MEA 137 Medical Insurance and Basic Coding with Computer Applications	3
	MEA 218 Pharmacology	3
	MEA 219 Medical Assisting Laboratory Techniques	3
	MEA 238 Clinical I	3
	MEA 239 Clinical II	3
	MEA 258 Medical Assisting Clinical Externship	3
	MEA 259 Medical Assisting Administrative Externship	3

Specialties Continued Next Page

Medical Assisting

Technical Certificate - Specialties

		Required Courses	Credit Hours
EKG SPECIALTY (21 CREDITS)	MEA 205	Introduction to Electrocardiography	3
	MEA 206	Advanced Electrocardiography Techniques	3
		Locally Determined Courses	15
INSURANCE SPECIALTY (21 CREDITS)	MEA 137	Medical Insurance and Basic Coding with Computer Applications	3
	MEA 213	Advanced Insurance Coding	3
		Locally Determined Courses	15
PHARMACY TECHNICIAN SPECIALTY (23-24 CREDITS)	HHS 105	Medical Law and Ethics	3
	MEA 151	Pharmacy Technician I	3
	MEA 152	Pharmacy Technician II	3
	MEA 218	Pharmacology	3
	MEA 254	Pharmacy Externship	3
		Locally Determined Courses	8-9
PHLEBOTOMY SPECIALTY (21 CREDITS)	MEA 212	Phlebotomy	3
	MEA 257	Phlebotomy Externship	3
		Locally Determined Courses	15
THERAPEUTIC MASSAGE SPECIALTY (21 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	HHS 105	Medical Law and Ethics	3
	MEA 160	Massage Technician Training 1	3
	MEA 161	Massage Technician Training II	3
	MEA 163	Holistic Approach to Massage Therapy	3
	MEA 165	Acupressure Theory and Methods	3
TRANSCRIPTION SPECIALTY (21 CREDITS)	MEA 135	Medical Word Processing and Transcription	3
	MEA 235	Advanced Transcription	3
		Locally Determined Courses	15

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Medical Laboratory Technology

Program Description

The Medical Laboratory Technology program is designed to prepare graduates to work in clinics, physicians' offices, hospitals and research laboratories as medical laboratory technicians. Medical laboratory technicians perform laboratory procedures, define and solve associated problems, and use quality control techniques to aid in the diagnosis, treatment and monitoring of patients. Courses in bacteriology, parasitology, chemistry, hematology, immunology, anatomy, physiology and immunohematology provide both theory and practical applications. Two years of study leads to the associate of applied science degree. Students graduating from the Medical Laboratory Technician program participate in evaluations of proficiency in general and technical education.

Medical Laboratory Technology

Associate of Applied Science

To earn this degree, you must have 68-70 credits in the following areas:

General Education Core	18-19
Professional/Technical Core	50-51

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18-19 CREDITS)	ANP 101	Anatomy and Physiology I	3
	**ANP 102	Anatomy and Physiology II	3
		OR	
	**BIO 201	General Microbiology	4
	**COM 101	Fundamentals of Public Speaking	3
		OR	
	**COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	**PSY 101	Introduction to Psychology	3
		OR	
	**SOC 111	Introduction to Sociology	3
PROFESSIONAL/TECHNICAL (50-51 CREDITS)	**CHM 101	Introductory Chemistry I	3
		OR	
	**CHM 111	Chemistry I	4
	HHS 105	Medical Law and Ethics	3
	MLT 101	Fundamentals of Laboratory Techniques	3
	MLT 102	Routine Analysis Techniques	3
	MLT 201	Immunology Techniques	3
	MLT 202	Immunohematology Techniques	3
	MLT 205	Hematology Techniques I	3
	MLT 206	Hematology Techniques II	3
	MLT 207	Chemistry Techniques I	3
	MLT 209	Routine Analysis Applications	1
	MLT 210	Hematology Applications	3
	MLT 212	Immunology Applications	1
	MLT 213	Immunohematology Applications	3
	MLT 215	Parasitology and Mycology	1
	^MLT 218	Clinical Pathology	3
	MLT 221	Microbiology Applications	3
	MLT 222	Microbiology Techniques	3
	MLT 224	Chemistry Applications	3
	MLT 227	Chemistry Techniques II	2

Key   (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Mortuary Science

Program Description

The Mortuary Science program is designed to prepare students for the numerous challenges encountered as funeral service professionals. The curriculum addresses the changing needs and expectations associated with funeral services as well as those of the accreditation standards.

The program provides thorough training that includes a theoretical understanding as well as personalized practical instruction by licensed funeral directors and embalmers. The college not only utilizes the facilities in its own building but also works in cooperation with area funeral directors and coroners to enhance the student's exposure to a wide range of experiences. The curriculum also reflects the current and future trends in the funeral profession. There is an appreciation of the complexities facing today's funeral practitioner in such diverse areas as business, accounting, and computer science. In addition, faculty will attempt to instill a sense of social consciousness that stresses the growing responsibilities and obligations of the funeral service professional.

Ultimately, the college's goal is to provide graduates with the resources to represent funeral services as a professional caregiver offering a valuable contribution to the community. A two-year program leads to an associate of applied science degree at the East Chicago campus.

Degrees Available:

• *Associate of Applied Science*

Specialties Offered:

None

Program Available at:

*East Chicago
Indianapolis*

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Mortuary Science

Associate of Applied Science

To earn this degree, you must have 65 credits in the following areas:

General Education Core	24
Professional/Technical Core	41

You Must Have	Required Courses	Credit Hours
GENERAL EDUCATION (24 CREDITS)		
ANP 101	Anatomy and Physiology I	3
ANP 102	Anatomy and Physiology II	3
BIO 101	Introductory Biology	3
BIO 211	General Microbiology I	3
COM 102	Introduction to Interpersonal Communication	3
ENG 111	English Composition	3
MAT 111	Intermediate Algebra	3
SOC 111	Introduction to Sociology	3
PROFESSIONAL/TECHNICAL (41 CREDITS)		
ACC 101	Financial Accounting	3
BUS 101	Introduction to Business	3
CIS 101	Introduction to Microcomputers	3
MOR 100	Orientation to Funeral Service	3
MOR 101	Grief Psychology for Funeral Service	3
MOR 102	Mortuary Law	3
MOR 103	Embalming Chemistry	3
MOR 104	Funeral Service Equipment	3
MOR 202	Funeral Management	3
MOR 206	Embalming Theory	3
MOR 207	Embalming Practicum	3
MOR 208	Pathology for Funeral Service	3
MOR 209	Restorative Art	3
MOR 210	Funeral Service Internship	2

The Mortuary Science Program at Ivy Tech Community College of Indiana - De La Garza is accredited by the American Board of Funeral Service Education (ABFSE), 38 Florida Avenue, Portland, Maine 04103 (207) 878-6530.

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Nursing

Program Description

The Associate of Science in Nursing Program is designed to accommodate two groups of students: those who are entering a nursing program for the first time and those licensed practical nurses or certified paramedics seeking educational mobility to the associate-degree level. Students graduating from the ASN program participate in evaluations of proficiency in general and technical education.

Graduates of the ASN program are eligible to take the NCLEX-RN examination to become registered nurses. Graduates may seek immediate employment as nurses or choose to transfer their credits to a four-year institution offering a baccalaureate degree.

Those interested in the program are encouraged to contact the nearest campus offering a program for information concerning course and program offerings.

Articulated transfer opportunities are available with Ball State University, the IU School of Nursing, Indiana State University, and the University of Southern Indiana. Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Degrees Available:

• *Associate of Science*

Specialties Offered:

None

Program Available at:

Anderson
Bloomington
Columbus
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Madison
Marion
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Valparaiso

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Nursing

Associate of Science

To earn this degree, you must have 52-68 credits in the following areas:

General Education Core	21
Professional/Technical Core	25-40
Locally Determined Courses	6-7

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (21 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	BIO 211	General Microbiology	3
	**COM 101	Fundamentals of Public Speaking	3
		OR	
	**COM 102	Interpersonal Communication	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	PSY 101	Introduction to Psychology	3
PROFESSIONAL/TECHNICAL TRADITIONAL (40 CREDITS)	NUR 150	Nursing and Universal Needs	4
	NUR 151	Nursing and Universal Needs Practicum	4
	NUR 152	Nursing Related to Health Deviation I	5
	NUR 153	Nursing Related to Health Deviation I Practicum	5
	NUR 154	Pharmacotherapeutics	2
	^^^NUR 250	Nursing Related to Health Deviation II	5
	^^^NUR 251	Nursing Related to Health Deviation II Practicum	5
	^^^NUR 252	Nursing Related to Developmental Needs	4
	^^^NUR 253	Nursing Related to Developmental Needs Practicum	4
	NUR 254	Professional Nursing Issues	2
		Locally Determined Courses	6-7
PROFESSIONAL/TECHNICAL LPN TRANSITION TO NURSING (25 CREDITS)	!NUR 248	Transition to ASN Nursing	5
	^^^NUR 250	Nursing Related to Health Deviation II	5
	^^^NUR 251	Nursing Related to Health Deviation II Practicum	5
	^^^NUR 252	Nursing Related to Developmental Needs	4
	^^^NUR 253	Nursing Related to Developmental Needs Practicum	4
	NUR 254	Professional Nursing Issues	2
		Locally Determined Courses	6-7

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

! Verified credit given for NUR 150, 151, 152, 154.
^^^ Capstone courses use either 250/251 or 252/253, regionally determined.

Nursing

You Must Have	Required Courses		Credit Hours
PROFESSIONAL/TECHNICAL PARAMEDIC TRANSITION TO NURSING (32 CREDITS)	NUR 154	Pharmacotherapeutics	2
	!NUR 246	Paramedic Transition to Nursing	6
	!NUR 247	Paramedic Transition Practicum	4
	^^^NUR 250	Nursing Related to Health Deviation II	5
	^^^NUR 251	Nursing Related to Health Deviation II Practicum	5
	^^^NUR 252	Nursing Related to Developmental Needs	4
	^^^NUR 253	Nursing Related to Developmental Needs Practicum	4
	NUR 254	Professional Nursing Issues	2
OTHER REQUIRED COURSES (6-7 CREDITS)	ANP 201	Advanced Human Physiology	4
	CHM 101	Chemistry 1	3
	CIS 101	Introduction to Microcomputers	3
	PSY 201	Lifespan Development	3
	SOC 111	Introduction to Sociology	3

Key   (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

! Verified credit given for NUR 150, 151, 152, 154.
^^^ Capstone courses use either 250/251 or 252/253, regionally determined.

Office Administration

Degrees Available:

- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Administrative*
- *Legal*
- *Medical*
- *Software Applications*

Program Available at:

Anderson
Bloomington
Columbus
East Chicago
Elkhart
Evansville
Fort Wayne
Gary
Indianapolis
Kokomo
Lafayette
Lawrenceburg
Logansport
Madison
Marion
Muncie
Richmond
Sellersburg
South Bend
Tell City
Terre Haute
Valparaiso
Warsaw

Availability of specialtie
and degrees varies by
campus. Contact your
local campus for more
information. See page 8
for contact information

Program Description

The Office Administration program prepares students for an automated office environment. Students develop basic office skills and acquire computer skills including word processing, spreadsheets, databases, and microcomputer operating systems. Several applications (advanced word processing, desktop publishing and integrated packages) also can be studied in depth.

The Office Administration program is designed to accommodate students with different levels of training and experience. Courses are offered which provide initial, advanced and refresher education and assist individuals in achieving professional recognition and career progression. The program prepares graduates as administrative office personnel and provides opportunities for specialized training. Students who complete the recommended sequence of courses are eligible to take the Administrative/Information Processing Specialist (AIPS) or the Certified Professional Secretary (CPS) exams administered by the Institute for Certification of the International Association of Administrative Professionals (IAAP). Students graduating from the Office Administration program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. Technical certificates and career development certificates also are available. An associate of science degree is available at selected campuses. The availability of degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Office Administration

Associate of Applied Science

General Education Core	18
Professional/Technical Core	18
Specialty Core	12
Locally Determined Courses	12

You Must Have	Required Courses	Credit Hours
GENERAL EDUCATION (18 CREDITS)	COM 101 Fundamentals of Public Speaking	3
	*ECN XXX Economics Elective	3
	ENG 111 English Composition	3
	**MAT 111 Intermediate Algebra	3
	OR	
	**MAT 112 Functional Mathematics	3
	*XXX XXX Life/Physical Sciences Elective	3
	*XXX XXX Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	ACC 101 Financial Accounting	3
	BUS 101 Introduction to Business	3
	CIS 101 Introduction to Microcomputers	3
	OAD 119 Document Processing	3
	OAD 216 Business Communications	3
	^OAD 221 Office Administration and Supervision	3
Choose One of the Following Specialties		
ADMINISTRATIVE SPECIALTY (24 CREDITS)	OAD 103 Word Processing Applications	3
	OAD 114 Desktop Publishing	3
	OAD 121 Office Procedures	3
	OAD 220 Records and Database Management	3
	Locally Determined Courses	12

Key (See page 2 for definitions)
* Elective   ** Locally Determined   ^ Capstone Course

Specialties Continued Next Page

Office Administration

Associate of Applied Science - Specialties

		Required Courses	Credit Hours
LEGAL SPECIALTY (24 CREDITS)	LEG 101	Introduction to Paralegal Studies	3
	LEG 102	Legal Research	3
	LEG 103	Civil Procedure	3
	OAD 103	Word Processing Applications	3
		Locally Determined Courses	12
MEDICAL SPECIALTY (24 CREDITS)	HHS 101	Medical Terminology	3
	MEA 137	Medical Insurance & Basic Coding with Computer Applications	3
	OAD 121	Office Procedures	3
	OAD 220	Records and Database Management	3
		Locally Determined Courses	12
SOFTWARE APPLICATIONS SPECIALTY (24 CREDITS)	OAD 103	Word Processing Applications	3
	OAD 114	Desktop Publishing	3
	OAD 214	Multimedia Design	3
	OAD 218	Spreadsheets	3
		Locally Determined Courses	12

Key   (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Office Administration

To earn this degree, you must have 30 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	9
Locally Determined Courses	12

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	ENG 111	English Composition	3
	*XXX XXX	Humanities/Social Sciences Elective	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	OAD 119	Document Processing	3
OTHER REQUIRED COURSES (21 CREDITS)	CIS 101	Introduction to Microcomputers	3
	OAD 103	Word Processing Applications	3
	OAD 121	Office Procedures	3
		Locally Determined Courses	12

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Paralegal Studies

Program Description

Recognizing the demand for trained paralegals, Ivy Tech has shaped a curriculum with input from attorneys and other professionals associated with the legal field. These advisors offer Ivy Tech the opportunity to establish the qualifications necessary for success in the paralegal field.

The duties of trained paralegals can range from research and writing to interviewing and investigations. For example, paralegals can be found performing legal research, drafting legal correspondence and legal pleadings, interviewing clients and witnesses, or managing trial documents and exhibits.

An Ivy Tech education provides students with the wide variety of skills necessary to succeed in this career. The curriculum emphasizes written and oral communication skills and provides in-class opportunities for technical skill development. Courses are taught by attorneys who are selected based upon their experience in the subject matter, as well as their familiarity with the function of paralegals as part of the legal team. Students graduating from the Paralegal program participate in evaluations of proficiency in general and technical education.

A two-year program leads to an associate of applied science degree. An associate of science degree is available at selected campuses. Both degrees are available via distance education two-way video classes. The availability of degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Paralegal Studies

Associate of Science

Articulated transfer through an Associate of Science in Paralegal Studies is available with Ball State University and IUPU-Fort Wayne. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Paralegal Studies and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 60 credits in the following areas:

General Education Core	18
Professional/Technical Core	30
Locally Determined Courses	12

You Must Have

GENERAL EDUCATION (18 CREDITS)

	Required Courses	Credit Hours
COM 101	Fundamentals of Public Speaking	3
ENG 111	English Composition	3
ENG 112	Exposition and Persuasion	3
**MAT 111	Intermediate Algebra	3
	OR	
**MAT 112	Functional Mathematics	3
*XXX XXX	Humanities/Social Sciences Elective	3
*XXX XXX	Life/Physical Sciences Elective	3

PROFESSIONAL/TECHNICAL (30 CREDITS)

CIS 101	Introduction to Microcomputers	3
LEG 101	Introduction to Paralegal Studies	3
LEG 102	Legal Research	3
LEG 103	Civil Procedures	3
LEG 106	Tort Law	3
LEG 107	Contracts and Commercial Law	3
LEG 108	Property Law	3
^LEG 202	Litigation	3
LEG 203	Law Office Technology	3
LEG 204	Legal Writing	3
	Locally Determined Courses	12

Key (See page **2** for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Paralegal Studies

Associate of Applied Science - Distance Education

To earn this degree, you must have 60 credits in the following areas:

General Education Core	18
Professional/Technical Core	30
Locally Determined Courses	12

You Must Have

Required Courses

Credit Hours

GENERAL EDUCATION (18 CREDITS)

COM 101	Fundamentals of Public Speaking	3
ENG 111	English Composition	3
ENG 112	Exposition and Persuasion	3
**MAT 111	Intermediate Algebra	3
	OR	
**MAT 112	Functional Mathematics	3
*XXX XXX	Humanities/Social Sciences Elective	3
*XXX XXX	Life/Physical Sciences Elective	3

PROFESSIONAL/TECHNICAL (30 CREDITS)

CIS 101	Introduction to Microcomputers	3
LEG 101	Introduction to Paralegal Studies	3
LEG 102	Legal Research	3
LEG 103	Civil Procedures	3
LEG 106	Tort Law	3
LEG 107	Contracts and Commercial Law	3
LEG 108	Property Law	3
^LEG 202	Litigation	3
LEG 203	Law Office Technology	3
LEG 204	Legal Writing	3

ELECTIVES (12 CREDITS) CHOOSE FROM THIS LIST OF COURSES

LEG 205	Business Associations	3
LEG 209	Family Law	3
LEG 210	Wills, Trusts and Estates	3
LEG 211	Criminal Law and Procedure	3
LEG 280	Internship	3

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Paramedic Science

Program Description

The Paramedic Science program prepares competent health care providers who possess the professional qualities required to function in the uncontrolled environment of emergency medicine in the pre-hospital setting. The program qualifies graduates for state certification as emergency medical technician-paramedics. Students will gain the knowledge and skills to manage the hostile environment of accidents and traumatic occurrences in the pre-hospital setting including disentanglement, controlling armed encounters, accomplishing rescue techniques and demonstrating patient care procedures. The curriculum includes clinical and practical instruction as well as a field internship in advanced emergency care and services. Students graduating from the Paramedic Science program participate in evaluations of proficiency in general and technical education.

The two-year program leads to an associate of applied science degree. An associate of science degree is available at selected campuses. The availability of degrees will vary from campus to campus. Interested students should contact local Ivy Tech campuses.

Paramedic Science

Associate of Science

Articulated transfer through an Associate of Science in Paramedic Science is available with the University of Southern Indiana. To view the Associate of Science transfer degree program and to see if it is available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Paramedic Science and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 65.5 credits in the following areas:

General Education Core	18
Professional/Technical Core	47.5

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	*COM XXX	Communications Elective	3
	ENG 111	English Composition	3
	*MAT 111	Intermediate Algebra	3
		OR	
	*MAT 112	Functional Mathematics	3
	XXX XXX	Humanities/Social Science Elective	3
PROFESSIONAL/TECHNICAL (47.5 CREDITS)	PAR 102	Emergency Medical Technician - Basic Training	7.5
	PAR 113	Preparatory I	2.5
	PAR 114	Preparatory II	3.5
	PAR 115	Airway, Patient Assessment	3.5
	PAR 116	Clinical I	1.5
	PAR 200	Trauma	3
	PAR 210	Medical I	6
	PAR 213	Medical II	5
	PAR 215	Special Considerations	3.5
	PAR 216	Clinical II	1.5
	PAR 219	Clinical III	1.5
	PAR 220	Operations	2.5
	PAR 221	Ambulance Internship	6

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Physical Therapist Assistant

Program Description

A physical therapist assistant is a health care worker who is educated at the associate degree level and carries out many patient-care functions under the supervision of the physical therapist. The program provides the student with the cognitive and affective competencies to administer therapeutic and psychosocial support for individuals with musculoskeletal, neurological, sensorimotor, cardiopulmonary, vascular or other physiological dysfunctions. The physical therapist assistant works under the supervision of a physical therapist in a variety of clinical settings that may include a hospital, nursing home, wellness center, athletic facility, private office or home. Physical therapist assistants (PTA's) may include in their duties application of hot and cold modalities, massage, therapeutic exercise, gait training, adjusting and fitting of braces and splints, electrical stimulation, biofeedback and patient and family education.

A two-year program leads to an associate of science degree in Physical Therapist Assistant. A cooperative program with community hospitals and facilities allows the student to gain the necessary patient contact and clinical experience. Students graduating from the Physical Therapist Assistant program participate in evaluations of proficiency in general and technical education. Graduates of the program will be able to sit for the Physical Therapist Assistant licensure examination, administered under the direction of the Indiana State Health Professions Bureau. Most states, including Indiana, require a license to practice.

Degrees Available:

- *Associate of Science*

Specialties Offered:

None

Program Available at:

Fort Wayne
Gary
Muncie

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Physical Therapist Assistant

Associate of Science

To earn this degree, you must have 66 credits in the following areas:

General Education Core	24
Professional/Technical Core	42

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (24 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	COM 101	Fundamentals of Public Speaking	3
		OR	
	COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	PSY 101	Introduction to Psychology	3
	SOC 111	Introduction to Sociology	3
	SCI 111	Physical Science	3
PROFESSIONAL/TECHNICAL (42 CREDITS)	PTA 101	Introduction to Physical Therapist Assistant	3
	PTA 102	Diseases, Trauma, and Terminology	3
	PTA 103	Administrative Aspects of Physical Therapist Assisting	3
	PTA 106	PTA Treatment Modalities I	5
	PTA 107	Kinesiology	5
	PTA 115	Clinical I	2
	PTA 205	Clinical II	5
	PTA 207	PTA Treatment Modalities II	5
	PTA 215	Clinical III	5
	PTA 217	PTA Treatment Modalities III	5
	^PTA 224	Current Issues and Review	1

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Practical Nursing

Program Description

The licensed practical nurse (LPN) is an integral part of the health care team. The Practical Nursing program is a one-year course of study leading to a technical certificate. This accredited program prepares the individual to take the state licensure exam to become a licensed practical nurse. The program is designed for students to gain knowledge and technical skills necessary to care appropriately for patients in a variety of health care settings such as hospitals, convalescent centers and physicians' offices. Students learn to administer medications and treatments commonly performed by licensed practical nurses.

Career and educational mobility are also provided for those who wish to progress to the Associate of Science in Nursing level. A description of this LPN transition to Nursing is found in the Associate of Science in Nursing program description.

Degrees Available:

• *Technical Certificate*

Specialties Offered:

None

Program Available at:

Anderson
Bloomington
Columbus
Elkhart
Evansville
Fort Wayne
Gary
Greencastle
Indianapolis
Kokomo
Lafayette
Logansport
Madison
Marion
Muncie
Richmond
Sellersburg
South Bend
Terre Haute
Valparaiso

Practical Nursing

Technical Certificate

To earn this degree, you must have 51-52 credits in the following areas:

General Education Core	6
Professional/Technical Core	45-46

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	ENG 111	English Composition	3
	PSY 101	Introduction to Psychology	3
PROFESSIONAL/TECHNICAL (45-46 CREDITS)	PNU 114	Nursing Issues and Trends	1
	PNU 121	Introduction to Nursing I	4
	PNU 122	Introduction to Nursing II	6
	PNU 123	Pharmacology	3
	**PNU 126	Integrated Life Science	5
		OR	
	**ANP 101	Anatomy and Physiology I	3
		AND	
	*ANP 102	Anatomy and Physiology II	3
	PNU 127	Care of the Adult I	5
	PNU 128	Care of the Adult II	5
	PNU 129	Care of the Adult III	5
	PNU 131	Nursing Care of the Childbearing Family	6
	PNU 132	IV Therapeutics	1
	PNU 133	Care of the Older Adult	4

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Professional Communication

Program Description

The Professional Communication program provides students with a rich background in the arts and sciences that equips them with problem solving skills, communication and writing abilities, and experience in communicating and designing texts using information technologies. In this interdisciplinary program, students take coursework in the fields of communication arts, English, and electronic media. They will analyze the needs, audiences, uses, and constraints of the communication situation; use documents and presentation as tools for solving workplace problems; use both primary and secondary research techniques; obtain and use information ethically; plan and manage communication projects both individually and as a team member; design and use graphics effectively; and develop effective, clear writing and speaking/presentation styles. Students graduating from the Professional Communication program participate in evaluations of proficiency in general and technical/professional education.

Graduates may be seek employment as professional communicators, freelance writers, or consultants in a variety of settings, such as business and manufacturing, the computer industry, science fields, and advertising.

This program is articulated with IU-Kokomo. Additional opportunities for course and program transfer may also be available. Students are encouraged to review options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contract the institution to which they wish to transfer. Students should contact the transfer office for further information.

Degrees Available:

• *Associate of Science*

Specialties Offered:

None

Program Available at:

Kokomo

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Professional Communication

Associate of Science

To earn this degree, you must have 60 credits in the following areas:

General Education Core   30
Professional/Technical Core   30

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (30 CREDITS)	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	ENG 112	Exposition and Persuasion	3
	MAT 111	Intermediate Algebra	3
	XXX XXX	Science Elective	3
	XXX XXX	Social Science Electives	6
	XXX XXX	Humanities Electives	9
PROFESSIONAL/TECHNICAL (30 CREDITS)	BUS 101	Introduction to Business	3
	CIS 101	Introduction to Microcomputers	3
	CIS 102	Introduction to Interpersonal Communication OR	3
	COM 202	Small Group Communication	3
	COM 201	Introduction to Mass Communication	3
	COM 211	Fundamentals of Public Relations	3
	ENG 205	Creative Writing	3
	ENG 211	Technical Writing	3
	PSY 101	Introduction to Psychology	3
	VIS 101	Fundamentals of Design	3
	VIS 115	Introduction to Computer Graphics	3

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Public Safety

Program Description

The Public Safety program is designed to meet the ongoing needs of municipalities, students, businesses and industries. The program develops technical skills, general knowledge, critical thinking and problem solving abilities of students. Broad-based technical skills and critical thinking processes assist students in adapting to changes in the work environment and promoting successful advancement on the job.

Specialty areas allow students to choose an emphasis in environmental health and safety, fire science, hazardous materials or public administration. A two-year program leads to an associate of applied science degree. Technical certificates and career development certificates are available. The availability of associate of applied science specialties and technical certificates will vary from campus to campus. Interested students should contact local Ivy Tech campuses. Students graduating from the Public Safety program participate in evaluations of proficiency in general and technical education.

Degrees Available:

- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

- *Environmental Health and Safety*
- *Fire Science*
- *Hazardous Materials*
- *Public Administration*

Program Available at:

Fort Wayne
Gary
Indianapolis
Terre Haute

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Public Safety

Associate of Applied Science

To earn this degree,
you must have
60-66 credits in the
following areas:

General Education Core	18
Professional/Technical Core	18
Specialty Core	12-15
Locally Determined Courses	12-15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	**BIO 101	Introductory Biology	3
		OR	
	**SCI 111	Physical Science	3
	CHM 101	Introductory Chemistry I	3
	**COM 101	Fundamentals of Public Speaking	3
		OR	
	**COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	POL 101	Introduction to American Government and Politics	3
PROFESSIONAL/TECHNICAL (18 CREDITS)	PST 116	Hazardous Materials Control	3
	PST 120	First Responder	3
	PST 121	Risk Management	3
	PST 220	Incident Management Systems	3
	PST 221	Computer Design and Planning	3
	TEC 104	Computer Fundamentals for Technology	3

Choose One of the Following Specialties

ENVIRONMENTAL HEALTH AND SAFETY SPECIALTY (24-25 CREDITS)	ENV 101	Introduction to Environmental Technology	3
	^ENV 102	Environmental Management	3
	ENV 110	Environmental Toxicology	3
	HMT 200	Environmental Protection Agency (EPA) Regulations	3
		Locally Determined Courses	12-13

Specialties Continued Next Page

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Public Safety

Associate of Applied Science—Specialties

FIRE SCIENCE SPECIALTY (27-30 CREDITS)	AFS 102	Fire Apparatus and Equipment	3
	AFS 103	Firefighting Strategy and Tactics	3
	AFS 201	Fire Protection Systems	3
	^AFS 202	Fire Service Management	3
	AFS 204	Fire Service Hydraulics	3
		Locally Determined Courses	12-15

HAZARDOUS MATERIALS SPECIALTY (24-25 CREDITS)	HMT 100	OSHA Regulations	3
	HMT 104	HAZ-MAT Health Effects	3
	HMT 200	Environmental Protection Agency (EPA) Regulations	3
	HMT 220	Hazardous Materials Recovery, Incineration, and Disposal	3
		Locally Determined Courses	12-13

PUBLIC ADMINISTRATION SPECIALTY (24-25 CREDITS)	APO 112	State and Local Government	3
	BUS 105	Principles of Management	3
	BUS 208	Organizational Behavior	3
	^OPM 224	Operations Management	3
		Locally Determined Courses	12-13

Public Safety

Technical Certificate—Fire Science

To earn this degree, you must have 30 credits in the following areas:

General Education Core	6
Professional/Technical Core	3
Specialty Core	6
Locally Determined Courses	15

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (6 CREDITS)	ENG 111	English Composition	3
	POL 101	Introduction to American Government and Politics	3
PROFESSIONAL/TECHNICAL (3 CREDITS)	TEC 104	Computer Fundamentals for Technology	3
OTHER REQUIRED COURSES (21 CREDITS)	AFS 103	Firefighting Strategy and Tactics	3
	AFS 201	Fire Protection Systems	3
		Regionally Determined Courses	15

Radiation Therapy

Program Description

The Radiation Therapist is a member of the health care team who works with physicians delivering direct patient care. Radiation therapists are highly skilled professionals qualified to provide radiation therapy-related patient services under the supervision of a radiation oncologist, or where appropriate, a medical radiation physicist. The profession of radiation therapy requires judgment, knowledge and skills to use diagnostic and therapeutic doses of radiation and associated instrumentation in the production of medical images for the treatment of specific diseases in the human body. Radiation therapists also provide basic nursing and medical care and assist with emergency patient treatment where indicated.

Students graduating from the Radiation Therapy program participate in evaluations of proficiency in general and technical/professional education. Upon completion of this degree program the graduate will be eligible to apply for the registry examination given by the American Registry of Radiological Technologist (A.R.R.T).

Radiation therapy departments are located mainly in hospitals. Career opportunities allow the experienced therapist to move into management and education positions or to obtain a position with a company that provides services or equipment to the radiation therapy field.

This program is articulated with the University of Southern Indiana. Additional opportunities for course and program transfer may also be available. Students are encouraged to review options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Students should contact the transfer office for further information.

Degrees Available:

• *Associate of Science*

Specialties Offered:

None

Program Available at:

Bloomington

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Radiation Therapy

Associate of Science

To earn this degree, you must have 65 credits in the following areas:

General Education Core   28
Professional/Technical Core   37

For transfer from Ivy Tech Bloomington to University of Southern Indiana Bachelor of Science degree in Health Services.

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (28 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	CHM 101	Introductory Chemistry I	3
	CIS 101	Introduction to Microcomputers	3
	COM 101	Fundamentals of Public Speaking	3
	ENG 111	English Composition	3
	MAT 131	Algebra/Trigonometry I	3
	PSY 101	Introduction to Psychology	3
	PHY 101	Physics I	4
PROFESSIONAL/TECHNICAL (37 CREDITS)	HHS 101	Medical Terminology	3
	RTT 200	Introduction to Patient Care	2
	RTT 247	Introduction to Radioactivity	3
	RTT 249	Radiation, Biology and Safety	2
	RTT 260	Radiation Therapy Orientation	3
	RTT 261	Clinical I	1
	RTT 262	Onocology Physics	3
	RTT 263	Oncology Pathology I	3
	RTT 264	Clinical II	2
	RTT 265	Onocology Radiation I	2
	RTT 266	Oncology Pathology II	3
	RTT 267	Onocology Radiation II	2
	RTT 268	Planning and Dosimetry	4
	RTT 269	Clinical III	2
	RTT 270	Clinical IV	2

Key (See page 2 for definitions)
* Elective   ** Locally Determined   ^ Capstone Course

Radiologic Technology

Program Description

The radiologic technologist prepares and positions patients for X-rays, determines the proper voltage, current, and exposure time, and operates the equipment. Radiologic technologists work in hospitals, medical laboratories, physicians' and dentists' offices and clinics, federal and state health agencies, and certain educational institutions.

The associate of applied science program includes courses in the following areas: radiologic technique, exposure, positioning, protection, radiation physics and ethics. Clinical practice and supplemental instruction are provided in accredited hospitals. Students graduating from the Radiologic Technology program participate in evaluations of proficiency in general and technical education. Upon completion of program requirements, graduates are eligible to take the National Registry Examination.

Graduates of the Radiologic Technology program may seek immediate employment as radiologic technologists or choose to transfer and complete a baccalaureate degree in radiologic fields.

Articulated transfer opportunities are available with IUPUI and the University of Southern Indiana. Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Radiologic Technology

Associate of Science

To earn this degree, you must have 76 credits in the following areas:

General Education Core 18
Professional/Technical Core 58

You Must Have	Required Courses	Credit Hours
GENERAL EDUCATION (18 CREDITS)		
#ANP 101	Anatomy and Physiology I	3
#ANP 102	Anatomy and Physiology II	3
#COM 101	Fundamentals of Public Speaking	3
	OR	
#COM 102	Introduction to Interpersonal Communication	3
#ENG 111	English Composition	3
#MAT 111	Intermediate Algebra	3
#**PSY 101	Introduction to Psychology	3
	OR	
#**SOC 111	Introduction to Sociology	3
PROFESSIONAL/TECHNICAL (58 CREDITS)		
#CIS 101	Introduction to Microcomputers	3
#HHS 101	Medical Terminology	3
RAD 111	Orientation and Patient Care	4
RAD 112	Image Production and Evaluation I	3
RAD 113	Radiographic Positioning I and Lab	3
RAD 114	Radiographic Clinical Education I	3
RAD 115	Radiographic Positioning II and Lab	3
RAD 116	Radiographic Clinical Education II	4
RAD 117	Radiation Physics and Equipment Operation	3
RAD 201	Radiographic Positioning III and Lab	3
RAD 202	Radiographic Clinical Education III	4
RAD 203	Radiographic Clinical Education IV	4
RAD 204	Radiographic Clinical Education V	4
RAD 206	Radiobiology and Radiation Protection	3
RAD 209	Radiographic Positioning IV and Lab	3
RAD 218	Image Production and Evaluation II	2
RAD 221	Pharmacology and Advanced Procedures	3
^RAD 299	General Examination Review	3

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Courses must be successfully completed before applying to the program.

Respiratory Care

Program Description

A respiratory care practitioner is an allied health professional who works under the direction of physicians in the diagnosis, evaluation, treatment, education and care of patients with cardiopulmonary diseases or abnormalities.

A graduate of the associate of science program will be eligible to take the entry level and advanced practitioner exams given by the National Board for Respiratory Care (NBRC). Successful examination candidates will be awarded the Registered Respiratory Therapist credential. Students graduating from the Respiratory Care program participate in evaluations of proficiency in general and technical education.

The two-year program leads to an associate of science degree available at selected campuses. Interested students should contact local Ivy Tech campuses.

Articulated transfer is available with IUPUI. Students are encouraged to review this option with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Degrees Available:

• *Associate of Science*

Specialties Offered:

None

Program Available at:

Bloomington
Fort Wayne
Indianapolis
Lafayette
Michigan City
Sellersburg
Terre Haute

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Respiratory Care

Associate of Science

To earn this degree, you must have 79-81 credits in the following areas:

General Education Core	24-26
Professional/Technical Core	55

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (24-26 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	**BIO XXX	General Microbiology	3-4
	*COM 101	Fundamentals of Public Speaking	3
		OR	
	*COM 102	Introduction to Interpersonal Communication	3
		OR	
	*ENG 211	Technical Writing	3
	**CHM XXX	Chemistry I	3-4
	ENG 111	English Composition	3
	MAT 111	Intermediate Algebra	3
	PSY 101	Introduction to Psychology	3
PROFESSIONAL/TECHNICAL (55 CREDITS)	RES 121	Introduction to Respiratory Care	6
	RES 122	Therapeutic Modalities	3
	RES 123	Cardiopulmonary Physiology	3
	RES 124	Clinical I	3
	RES 125	Critical Care I	3
	RES 126	Clinical Medicine I	3
	RES 127	Clinical II	3
	RES 128	Clinical III	9
	RES 129	Respiratory Pharmacology	3
	RES 221	Cardiopulmonary Diagnostics	4
	RES 222	Critical Care II	3
	RES 224	Clinical Medicine II	3
	RES 226	Continuing Care	2
	^RES 227	Clinical IV	6
	RES 229	Emergency Management	1

Key (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Surgical Technology

Program Description

The surgical technologist is a member of the surgical team, qualified by didactic and clinical education to provide safe and efficient care to the patient in the operating room. Instruction consists of courses in anatomy and physiology, microbiology, pharmacology, medical law and ethics, surgical techniques and surgical procedures.

Closely supervised clinical education is provided in local area hospitals. The surgical technologist actively participates in surgery by performing scrub and/or circulating duties which include passing instruments and supplies to surgical team members, preparing and positioning the patient, operating equipment, assisting the anesthesiologist and keeping accurate records. Obstetrical and emergency room clinical experiences may be provided by specific hospitals.

Students graduating from the Surgical Technology program participate in evaluations of proficiency in general and technical education. Associate degree graduates of the Surgical Technology program may seek immediate employment as surgical technologists or choose to transfer and complete a bachelor of science degree in Health Services.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*

Specialties Offered:

None

Program Available at:

Columbus
Evansville
Indianapolis
Kokomo
Lafayette
Michigan City
Muncie
Terre Haute

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Surgical Technology

Associate of Science

Articulated transfer through an Associate of Science in Surgical Technology is available with IUPU-FW and the University of Southern Indiana. To view these Associate of Science transfer degree programs and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Paramedic Science and then on the Associate of Science curricula.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 67 credits in the following areas:

General Education Core	21-22
Professional/Technical Core	43
Locally Determined Courses	3

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (21-22 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	**BIO 2XX	General Microbiology	3-4
	*COM 101	Fundamentals of Public Speaking	3
		OR	
	*COM 102	Introduction to Interpersonal Communication	3
	ENG 111	English Composition	3
	*MAT 1XX	Mathematics Elective	3
	*PSY 101	Introduction to Psychology	3
		OR	
	*SOC 111	Introduction to Sociology	3
PROFESSIONAL/TECHNICAL (46 CREDITS)	HHS 101	Medical Terminology	3
	HHS 105	Medical Law and Ethics	3
	SUR 111	Fundamentals of Surgical Technology	4
	SUR 112	Application of Surgical Fundamentals	2
	SUR 113	Surgical Procedures I	3
	SUR 114	Clinical Applications I	3
	SUR 211	Surgical Procedures II	6
	SUR 212	Clinical Applications II	9
	^SUR 213	Surgical Procedures III	3
	^SUR 214	Clinical Applications III	7
		Locally Determined Courses	3

Therapeutic Massage

Program Description

The Therapeutic Massage program addresses the theory and hands-on techniques of therapeutic massage. Massage skills include assessment, relaxation massage, therapeutic massage, deep tissue, sports massage, hydrotherapies, applications for special populations including pregnant women, children, geriatrics and the disabled. The program presents an introduction to acupressure and an overview of energy systems. Anatomy, physiology, disease conditions, pharmacology and their effects on the body alone and during massage applications are studied thoroughly, to promote student understanding of massage indications and contraindications. Psychological and emotional issues, legal and ethical aspects, and business development are addressed.

The Technical Certificate for Therapeutic Massage is designed to prepare a student for beginning entry into the massage profession, with an emphasis on working within the wellness community. The Associate of Applied Science for Therapeutic Massage is designed to develop a student through an advanced level entry into the massage profession with the emphasis on working within the medical community. Students graduating from the Therapeutic Massage program participate in evaluations of proficiency in general and technical education.

A current Healthcare Provider CPR card must be held at graduation. One hundred SOAP Note hours (practice massages) must be completed prior to course completion.

Completion of the Technical Certificate provides the student in excess of 700 hours of training and preparation to sit for the NCBTMB (National Certification Board for Therapeutic Massage and Bodywork) National Certification Exam. Completion of the AAS degree provides the student in excess of 1000 hours of preparation to sit for the National Certification Exam.

Degrees Available:

- *Associate of Applied Science*
- *Technical Certificate*

Specialties Offered:

None

Program Available at:

Fort Wayne

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Therapeutic Massage

Associate of Applied Science

To earn this degree, you must have 66 credits in the following areas:

General Education Core 18
Professional/Technical 48

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (18 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	ENG 111	English Composition	3
	MAT 1XX	Mathematics Elective	3
	XXX XXX	Humanities/Social Science Elective	3
	XXX XXX	English/Communications Elective	3
PROFESSIONAL/TECHNICAL (48 CREDITS)	HHS 101	Medical Terminology	3
	TMA 101	Holistic Approach to Massage Therapy	3
	TMA 102	Legal Massage Applications	3
	TMA 120	Massage Technician Training I	3
	TMA 122	Massage Financial Management	3
	TMA 125	Acupressure Theory and Methods	3
	TMA 140	Massage Technician Training II	3
	TMA 141	Massage Through the Life Span	3
	TMA 201	Sports, Injuries and Hydrotherapies	3
	TMA 202	Deep Tissue	3
	TMA 203	Herbs, Drugs and Massage	3
	TMA 205	Pathology and Massage	3
	TMA 210	Biomechanics	3
	TMA 220	Advanced Techniques	3
	TMA 221	Business Development	3
	TMA XXX	Massage Elective	3

Key (See page 2 for definitions)

* Elective ** Locally Determined ^ Capstone Course

Therapeutic Massage

Technical Certificate

To earn this degree, you must have 48 credits in the following areas:

General Education Core 9
Professional/Technical 39

You Must Have	Required Courses		Credit Hours
GENERAL EDUCATION (9 CREDITS)	ANP 101	Anatomy and Physiology I	3
	ANP 102	Anatomy and Physiology II	3
	XXX XXX	English/Communications Elective	3
PROFESSIONAL/TECHNICAL (39 CREDITS)	HHS 101	Medical Terminology	3
	TMA 101	Holistic Approach to Massage Therapy	3
	TMA 102	Legal Massage Applications	3
	TMA 120	Massage Technician Training I	3
	TMA 122	Massage Financial Management	3
	TMA 125	Acupressure Theory and Methods	3
	TMA 140	Massage Technician Training II	3
	TMA 141	Massage Through the Life Span	3
	TMA 201	Sports, Injuries and Hydrotherapies	3
	TMA 203	Herbs, Drugs and Massage	3
	TMA 205	Pathology and Massage	3
	TMA 210	Biomechanics	3
	TMA XXX	Massage Elective	3

Key   (See page 2 for definitions)

* Elective   ** Locally Determined   ^ Capstone Course

Program Description

Students entering the Visual Communications program are exposed to a broad technical core of courses representing key topics such as organizing the visual field, color theory and application, image acquisition and manipulation technology, the computer as a powerful tool, the professional visual artist as a business person and the exit portfolio.

The program offers an associate of applied science degree with specialties in the areas of graphic design, graphic media production, multimedia, and photography. Students graduating from the Visual Communications program participate in evaluations of proficiency in general and technical education.

Degrees Available:

- *Associate of Science*
- *Associate of Applied Science*

Specialties Offered

- *Film and Video*
- *Graphic Design*
- *Graphic Media Production*
- *Photography*
- *Web and Interactive Design*
- *Webmaster Designer*

Program Available at:

*Columbus
Evansville
Indianapolis
Kokomo
Sellersburg
South Bend
Terre Haute*

Availability of specialties and degrees varies by campus. Contact your local campus for more information. See page 8 for contact information.

Visual Communications

Associate of Science

Articulated transfer through an Associate of Science in Visual Communications is available with IUPUI. To view this Associate of Science transfer degree program and to see if they are available at your local Ivy Tech campus, students should go to the Academic Options/Curricula section of http://www.ivytech.edu/. Click on Visual Communications and then on the Associate of Science curriculum.

Students are encouraged to review these options with their advisors, to consult the current catalog of the institution to which they wish to transfer, and to contact the institution to which they wish to transfer. Additional opportunities for course and program transfer may also be available at your local campus. Students should contact the transfer office of their local Ivy Tech for further information.

Associate of Applied Science

To earn this degree, you must have 66 credits in the following areas:

General Education Core	18
Professional/Technical Core	18
Specialty Core	15-21
Locally Determined Courses	9-15

You Must Have

GENERAL EDUCATION (18 CREDITS)

	Required Courses	Credit Hours
ARH 101	Survey of Art and Culture I	3
ARH 102	Survey of Art and Culture II	3
*COM 101	Fundamentals of Public Speaking	3
	OR	
*COM 102	Introduction to Interpersonal Communication	3
ENG 111	English Composition	3
*MAT XXX	Math Elective	3
*XXX XXX	Life/Physical Science Elective	3

PROFESSIONAL/TECHNICAL (18 CREDITS)

VIS 101	Fundamentals of Design	3
VIS 102	Fundamentals of Imaging	3
VIS 115	Introduction to Computer Graphics	3
VIS 201	Electronic Imaging	3
^VIS 205	Business Practices for Visual Artists	3
VIS 207	Portfolio Preparation	3

Choose One of the Following Specialties

FILM AND VIDEO SPECIALTY (30 CREDITS)

VID 111	Studio and Field Production I	3
VID 202	Studio and Field Production II	3
VID 203	Studio and Field Production III	3
VIS 105	Video and Sound	3
VIS 110	Web Design I	3
	Locally Determined Courses	15

Specialties Continued Next Page

Visual Communications

Associate of Applied Science—Specialties

		Required Courses	Credit Hours
GRAPHIC DESIGN SPECIALTY (30 CREDITS)	ART 111	Drawing for Visualization	3
	ART 114	Graphic Design I	3
	ART 115	Typography	3
	ART 116	Electronic Illustration	3
	ART 217	Graphic Design II	3
	ART 218	Digital Production	3
	ART 219	Graphic Design III	3
		Locally Determined Courses	9
GRAPHIC MEDIA PRODUCTION SPECIALTY (30 CREDITS)	ART 115	Typography	3
	ART 116	Electronic Illustration	3
	GRA 101	Graphic Media Fundamentals	3
	GRA 102	Introduction to Machine Printing	3
	GRA 106	Introduction to Color Printing	3
	GRA 201	Photomechanical Reproduction	3
	GRA 202	Science of Color	3
		Locally Determined Courses	9
PHOTOGRAPHY SPECIALTY (30 CREDITS)	PHO 104	Basic Photography	3
	PHO 106	Studio Practices	3
	PHO 107	Intermediate Photography	3
	PHO 109	Studio Lighting Techniques	3
	PHO 201	Principles of Color Photography	3
	PHO 204	Commercial Photography Techniques I	3
		Locally Determined Courses	12
WEB AND INTERACTIVE DESIGN SPECIALTY (30 CREDITS)	ART 114	Graphic Design I	3
	ART 115	Typography	3
	ART 116	Electronic Illustration	3
	VIS 103	Interactive Media I	3
	VIS 110	Web Design I	3
	VIS 210	Web Design II	3
	VIS 211	Interactive Media II	
		Locally Determined Courses	9
WEBMASTER DESIGN SPECIALTY (30 CREDITS)	ART 114	Graphic Design I	3
	ART 115	Typography	3
	VIS 103	Interactive Media I	3
	VIS 110	Web Design I	3
	VIS 210	Web Design II	3
		Locally Determined Courses	15

Course Descriptions
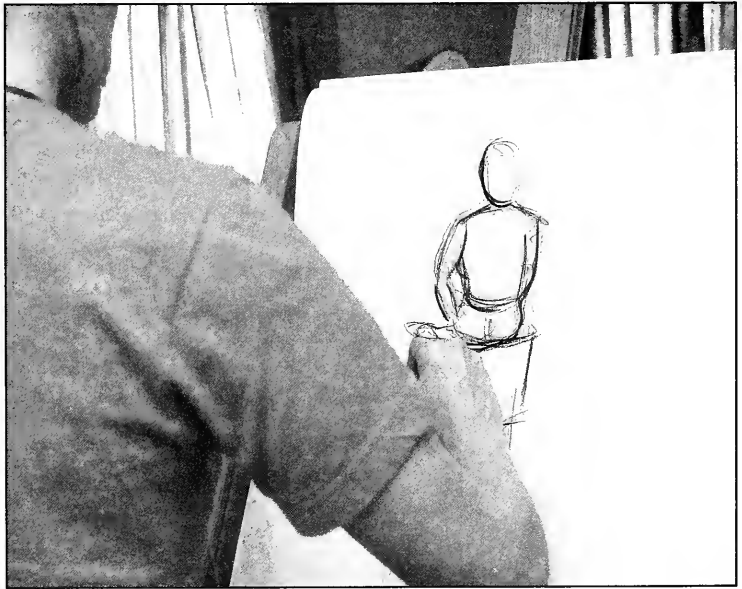
Comprehensive Course Description List
(Alphabetical Order)

ABR 101 Body Repair 1   **3 Credits**

Prerequisites: None. Examines the characteristics of body metals and includes the installation of moldings, ornaments, and fasteners with emphasis on sheet metal analysis and safety.

ABR 103 Automotive Paint Fundamentals   **3 Credits**

Prerequisites: None. Introduces auto paint considerations with emphasis on the handling of materials and equipment in modern automotive technologies.

ABR 104 Collision Damage Analysis and Repair   **3 Credits**

Prerequisites: None. Provides instruction in analyzing extensive body damage and determining the tools and procedures needed to replace panels.

ABR 105 Conventional Frame Diagnosis and Correction   **3 Credits**

Prerequisites: None. Covers the use of tools, frame machines and equipment for frame and chassis repair. Includes study of terms pertaining to front suspension and rear axle. Describes uses of frame gauges and other measuring devices.

ABR 106 Body Repair ll   **3 Credits**

Prerequisites: None. Introduces fundamentals of using hand and power tools in the repair of minor collision damage, with emphasis on safety.

ABR 107 Automotive Painting Technology   **3 Credits**

Prerequisites: None. Provides instruction on the total refinishing of an automobile with emphasis on advanced and specialty painting techniques.

ABR 108 Unibody Structural Analysis and Repair   **3 Credits**

Prerequisites: None. Covers unibody repair, identification and analysis of damage, measuring and fixing systems, straightening systems and techniques, mechanical component service and knowledge of suspension and steering systems on front-wheel-drive unibody vehicles.

ABR 109 Collision Damage Appraising   **3 Credits**

Prerequisites: None. Provides instruction in analyzing extensive body damage and determining the tools and procedures needed to replace panels.

ABR 110 Auto Body Power Tools   **3 Credits**

Prerequisites: None. Covers diagnosis of problems associated with the use of power tools in auto body work.

ABR 111 Auto Body Hydraulic Tools   **3 Credits**

Prerequisites: None. Provides instruction in the selection, use and maintenance of hydraulic tools for auto body repair.

ABR 114 Collision Damage Lab   **1 Credit**

Prerequisites: ABR 104. Provides opportunities to develop skills and knowledge in the area of collision damage analysis and repair.

ABR 115 Auto Body Circuits   **3 Credits**

Prerequisites: None. Includes fundamentals of electrical theory, automotive components and circuits, and troubleshooting techniques. Emphasizes battery construction, function and operation.

ABR 117 Auto Paint Lab   **1 Credit**

Prerequisites: ABR 103 and ABR 107. Develops auto-painting skills with emphasis on materials and equipment handling.

ABR 120 Fiberglass Plastic Repair   3 Credits

Prerequisites: None. Introduces types of fiberglass and plastic materials used in auto body repair. Covers both interior and exterior applications.

ABR 121 Unibody Repair Lab   1 Credit

Prerequisites: None. Develops skills and knowledge in the area of unibody structural analysis and repairs.

ABR 122 Conventional Frame and Unibody Structural Analysis   3 Credits

Prerequisites: None. Includes the use of tools, frame machines and equipment for frame and chassis repair. Includes study of terms pertaining to front suspension and rear axle. Describes the uses of frame gauges, tram identification and other measuring and fixturing systems; straightening systems and techniques; mechanical component service and knowledge of suspension and steering systems on front wheel drive unibody vehicles.

ACC 090 Introduction to Accounting   3 Credits

Prerequisites: None. Introduces the basic principles of accounting as utilized in a variety of office settings. Includes the principles of debit and credit, double-entry bookkeeping, use of journals, and analyzing transactions. Uses of ledgers, posting procedures, petty cash, banking procedures, payroll, depreciation, work sheets, balance sheets, and income statements are covered as well.

ACC 101 Financial Accounting   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Introduces the fundamental principles, techniques, and tools of financial accounting. The development and use of the basic financial statements pertaining to corporations both service and retail.

ACC 102 Managerial Accounting   3 Credits

Prerequisites: ACC 101. Emphasizes managerial accounting concepts, general versus cost accounting systems, cost behavior, cost-volume-profit analysis, budgeting, standard cost systems, responsibility accounting, incremental analysis, and capital investment analysis.

ACC 105 Income Tax   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Offers an overview of federal and state income tax law for individuals including taxable income, capital gains and losses, adjustments, standard and itemized deductions, tax credits and appropriate tax forms. Introduces tax concepts needed by a sole proprietorship.

ACC 106 Payroll Accounting   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Covers payroll calculating and reporting including various federal and state withholding taxes, employer payroll taxes, typical insurance and other arrangements affecting the preparation of payroll registers and employees' earnings records.

ACC 109 Personal Finance   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Examines the process of setting and achieving financial goals. Emphasizes managing financial resources, budgeting for current expenses, projecting cash flow and managing short- and long-term credit. Includes use of insurance to reduce risks and vehicles for saving and investing.

ACC 111 Financial Accounting Application   1 Credit

Prerequisites: Program Advisor approval. Presents a series of planned accounting learning problems and activities designed to accompany concepts and theories included in a Financial Accounting Application course.

ACC 112 Managerial Accounting Application   1 Credit

Prerequisites: Program Advisor approval. Presents a series of planned accounting learning problems and activities designed to accompany concepts and theories included in a Managerial Accounting Application course.

ACC 118 Financial Concepts for Accounting
3 Credits

Prerequisites: None. Surveys the applications of mathematics to various business and accounting activities. Includes a brief review of basic mathematical operations and their subsequent application to such commercial activities as payroll, consumer finance, business borrowing, inventory control, pricing, depreciation, and time value of money.

ACC 122 Accounting Systems Applications
3 Credits

Prerequisites: ACC 101. Solves accounting problems using software similar to what is currently used in business. Includes installation, operation, and analysis of an accounting software package or packages.

ACC 201 Intermediate Accounting I
3 Credits

Prerequisites: ACC 102. Studies accounting principles and applications at an intermediate level pertaining to the income statement and balance sheet, cash and cash equivalents, receivables, inventories, plant assets and intangible assets, current and contingent liabilities, corrections of errors, and statement of cash flows. Included are analysis of bad debts, inventory valuation, repairs and maintenance, depreciation of plant assets and present value applications.

ACC 202 Intermediate Accounting II
3 Credits

Prerequisites: ACC 201. Continues studies of Intermediate Accounting I and includes long-term investments, long-term debt, stockholders' equity, special accounting problems and analysis, and financial statement analysis. Also included are corporate capital and treasury stock transactions, dividends, earnings per share, accounting for income taxes, and creation of financial statements from incomplete records.

ACC 203 Cost Accounting I
3 Credits

Prerequisites: ACC 102. Examines the manufacturing process in relation to the accumulation of specific costs of manufactured products. Studies various cost accounting report forms, material, labor control, and allocation of manufacturing costs to jobs and departments.

ACC 204 Cost Accounting II
3 Credits

Prerequisites: ACC 203. Studies the master or comprehensive budget, flexible budgeting and capital budgeting. Emphasizes tools for decision-making and analysis. Introduces human resource accounting.

ACC 206 Advanced Managerial Accounting
3 Credits

Prerequisites: ACC 102. Provides an intermediate understanding of accounting records and management decision making, with topics including internal accounting records and quantitative business analysis.

ACC 207 Accounting for Government and Nonprofit Entities
3 Credits

Prerequisites: ACC 101. Emphasizes the similarities and differences between government, nonprofit and commercial accounting methods and procedures. Exposes students to the basic fund accounting cycle for the general fund and other special funds.

ACC 208 Advanced Income Tax
3 Credits

Prerequisites: ACC 101 and ACC 105. Studies procedures and problems pertaining to federal and state income tax laws for partnerships and corporations. Includes a review and in-depth study of concepts related to proprietorships covered in Income Tax I.

ACC 209 Auditing
3 Credits

Prerequisites: ACC 201. Covers public accounting organization and operation including internal control, internal and external auditing, verification and testing of the balance sheet and operating accounts, and the auditor's report of opinion of the financial statements.

ACC 212 Business Finance
3 Credits

Prerequisites: ACC 101, BUS 101 and MAT 111. Introduces basic tools and techniques of financial analysis. Financial analysis includes but is not limited to the use of ratios, common size statements, and pro forma statements.

ACC 213 Advanced Spreadsheets
3 Credits

Prerequisites: OAD 218 and ACC 102. Continues the study of electronic spreadsheets in business. Emphasizes the advanced application of electronic spreadsheets.

ACC 217 Intermediate Accounting Applications I
1 Credit

Prerequisites: ACC 102. Presents a series of planned accounting learning problems and activities designed to accompany concepts and theories included in ACC 201. Uses computerized problems.

ACC 218 Intermediate Accounting Applications II
1 Credit

Prerequisites: ACC 102. Presents a series of planned accounting learning problems and activities designed to accompany concepts and theories included in Intermediate Accounting II. Uses computerized problems.

ACC 219 Cost Accounting Applications
1 Credit

Prerequisites: ACC 102. Presents a series of planned accounting learning problems and activities designed to accompany concepts and theories included in Cost Accounting I. Uses computerized problems.

ACC 225 Integrated Accounting Systems
3 Credits

Prerequisites: ENG 111 and MAT 111 or higher and ACC 201 and OAD 218. Uses integrated accounting software package(s) to illustrate computerized accounting practices. The general ledger will be integrated with accounts receivable, accounts payable, and other accounting modules.

ACC 280 Co-op/Internship
1-6 Credits

Prerequisites: Program Chair Approval. Provides students with the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit toward an associate degree.

ACC 298 Field Study
1-6 Credits

Prerequisites: Program Chair approval. Provides students with the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit toward an associate degree.

AFS 100 Fire Suppression
3 Credits

Prerequisites: None. Designed for non-firefighters. An introduction to the fire service. Terminology, history and basic firefighting skills are applied.

AFS 101 Fire Technology
3 Credits

Prerequisites: None. A general introduction to the study of fire science. This course examines the history and growth of the fire service from its beginning to modern day firefighting. Students will cover the life safety code (NFPA-101), fire protection systems, firefighter safety and survival, along with identifying and analyzing the fire problems we face in the fire service today. This course will also cover what fire is, the chemical hazards of combustion and related by-products of fire. Fire department organization, administration, operations, and basic strategies and tactics will be covered.

AFS 102 Fire Apparatus and Equipment
3 Credits

Prerequisites: None. Examines in detail the various types of apparatus on the market today. Study is made of pumpers, aerials, elevating platforms and special apparatus. The students utilizing NFPA standards 1901, 1904, and 1500, will identify the proper chapters on a given situation. Topics will include: apparatus placement on an emergency incident, types of pumps, tests, equipment, drafting, relay, nozzles, fittings and hose lays, and maintenance on various types of apparatus.

AFS 103 Fire Fighting Strategy and Tactics
3 Credits

Prerequisites: None. Prepares students to make responsible decisions concerning fire ground strategies and tactics at the company level. Areas covered include pre-incident planning and size up. Also, the student will learn basic building construction, fire -behavior, fire control, fireground factors, fire stream management and support activities. Responsibilities of engine and ladder companies are discussed. Emphasis is placed on safety in all the above areas. Command scenarios are used throughout the course.

AFS 104 Building Construction Fire Service
3 Credits

Prerequisites: None. Examines the design principles involved in the protection of a structure from fire involvement. Additionally, the signs, symptoms, and indicators of partial or total building collapse during fire-fighting operations are studied. The course includes the study of legislative codes and laws concerning the following: building design, building fire safety, classification of building construction, blueprint reading, plan review and in-house fixed fire protection.

AFS 105 Fire /Arson Investigation
3 Credits

Prerequisites: None. Focuses on the responsibility of the firefighter, the investigator, and the department in fire scene investigations. Includes fire cause and loss, collection and preservation of evidence and determination of fire origin, with emphasis on the application of various scientific aids that assist in investigations.

AFS 108 Fire Inspection/Code Enforcement
3 Credits

Prerequisites: None. Examines the function of the fire inspector and organization of the fire prevention unit. Emphasizes the identification of the various codes and regulations utilized by the inspector, with special attention given to the Indiana Fire Code and IFSTA Fire Inspection and Code Enforcement. Includes the legal authority governing fire prevention, applications of the fire code, and management's principles as applied to a bureau.

AFS 109 Fire Department Specifications
3 Credits

Prerequisites: None. Specifications for firefighting apparatus, equipment, protective clothing, facilities and other sources of materials necessary to a fire department. The student will have a better understanding of NFPA Standards 1500 and 1901.

AFS 201 Fire Protection Systems
3 Credits

Prerequisites: None. Provides a general introduction into fire alarm monitoring devices and extinguishing systems. A strong base for application to either fire protection or a commercial application can be developed. Technical areas to be covered will be: fire extinguishing agents, portable fire extinguishers, carbon dioxide systems, dry chemical systems, halogenated systems/foam systems, explosive suppression systems, thermal/smoke/flame detection systems, and building monitoring systems. Standpipe and sprinkler systems will be covered in detail.

AFS 202 Fire Service Management
3 Credits

Prerequisites: None. Principles and functions of administrative and management personnel in the fire service. Topics discussed include: departmental organization, administrative & management procedures, personnel selection, line and staff functions, communications, the fire company unit, public relations, and current problems in administration.

AFS 204 Fire Service Hydraulics
3 Credits

Prerequisites: None. A study of compressible fluids including: fluid properties, principles of fluid statics, flow system principles, pipe friction and head loss, flow measurements, pumps, and other appliances and hydraulic devices. Applications are related to fire protection systems, water supply systems and foam systems.

AFS 205 Aircraft Firefighting
3 Credits

Prerequisites: None. Examines the hazards associated with aircraft firefighting. Emphasis will be placed on lecture and practical use of airport firefighting equipment, extinguishing agents, strategy and tactics, rescue methods, and aircraft design and construction.

AMS 101 Steering and Suspension
3 Credits

Prerequisites: None. A study of steering and suspension systems commonly used on modern vehicles. Students will study steering and suspension components, power steering units, principles of four-wheel alignment, tire repair and wheel balancing. The course will emphasize professional methods of diagnosis and repair for related components.

AMS 102 Two and Four Wheel Alignment
3 Credits

Prerequisites: None. Covers the principles of two- and four-wheel alignment and wheel balance. Emphasizes practical work experience in the lab covering all the alignment angles.

AMS 105 Powertrain Service
3 Credits

Prerequisites: None. A study of driveline theory and in-car service procedures. Theory and overhaul procedures related to the driveshaft and axle assemblies for front and rear wheel drive vehicles are included as well. Removal and installation of manual and automatic drivetrains will be covered.

AMS 107 Engine Principles and Design
3 Credits

Prerequisites: None. An introduction to engine dynamics, theory of engine operation and characteristics of engine design. Studies R & R, visual inspection, precision measuring, gaskets, lubricants, sealants, coolants of modern engines and engine service.

AMS 109 Engine Performance I
3 Credits

Prerequisites: None. The first in a series of three courses that introduces the operating systems of an internal combustion engine. The basic theory and operation of ignition, fuel, emission, and mechanical systems will be presented. Basic test procedures will be introduced. Computer engine control basics will be explained. Basic service and replacement procedures and techniques will also be covered.

AMS 113 Electrical and Electronics I
3 Credits

Prerequisites: None. The first of three electrical classes that introduce the fundamentals of electricity and automotive electronics. Extensive use of digital multimeters and circuit troubleshooting is covered. Emphasis is placed on understanding and utilizing electrical diagrams. Starting and charging systems are presented.

AMS 121 Braking Systems
3 Credits

Prerequisites: None. Theory, service and repair of automotive braking systems and their components. Emphasis is given to hydraulic theory, repair, and service of system components, including anti-lock and traction control systems.

AMS 123 Electrical and Electronics II
3 Credits

Prerequisites: AMS 113. Corequisites: MAT 044. The second in a series of three courses that will study advanced electrical circuit theory and diagnostic procedures. The topics for this course include; function, construction, principles of operation, and troubleshooting techniques for the various automotive electrical and electronic systems. Diagnosis and repair of system circuits and components using proper diagnostic techniques will be emphasized.

AMS 125 Manual Drivetrains
3 Credits

Prerequisites: None. Theory, diagnosis, and overhaul procedures related to manual transmission/transaxles, clutches, transfer cases, and differential assemblies.

AMS 127 Engine Repair
3 Credits

Prerequisites: None. Corequisites: AMS 107. A study of precision tools, equipment, and procedures needed to repair today's modern engine. Repair, proper assembly, and installation techniques applicable to the modern engine are included.

AMS 135 Automatic Transmission
3 Credits

Prerequisites: None. Corequisites: AMS 105. A study of automatic transmission theory of operation, diagnosis, testing, and repair procedures. Theory and diagnosis of computer-controlled transmissions will also be covered.

AMS 152 Diesel Engine Theory
3 Credits

Prerequisites: None. Operation of the diesel engine and the differences between a diesel and gas engine. Also includes instruction on shop equipment, fuels, oils, seals, bearings, lubrication and cooling system.

AMS 201 Climate Control Systems
3 Credits

Prerequisites: AMS 113. Covers air conditioning and heating systems used on modern vehicles. Emphasis is given to the operation and theory of the air conditioning and its components. Vacuum and electronic control circuits are included. Federal regulations for handling and recycling of all refrigerants will be stressed.

AMS 209 Engine Performance II
3 Credits

Prerequisites: AMS 107 and AMS 109. Covers the diagnosis and repair of ignition, fuel, emission, and computer systems. Extensive coverage is given to manufacturer specific computer engine control and fuel injection systems. Topics will include OBD I, OBD II, and future on-board diagnostic systems.

AMS 219 Engine Performance III
3 Credits

Prerequisites: AMS 209. Covers advanced concepts in the diagnosis and repair of ignition, fuel, emission, and computer systems. Advanced coverage of manufacturer specific computer engine control and fuel injection systems will be stressed. Federal and state emission requirements will be covered with a focus on 5-gas exhaust analysis. Alternative fuel technology will also be covered.

AMS 229 Driveability Diagnosis   3 Credits

Prerequisites: Program Advisor Approval. Designed to develop a student's ability to diagnose and repair complex driveability concerns. Emphasis will be placed on learning and following systematic diagnostic procedures. Students will utilize the advanced capabilities of diagnostic equipment provided.

AMS 243 Advanced Electronics   3 Credits

Prerequisites: ENG 111. Presents advanced theory and diagnosis of automotive electronic systems. It examines all major vehicle computer systems with an emphasis on the diagnosis, testing, and repair of these systems and advanced circuits. This course uses lab scopes, scan tools, and graphing multimeters. This is the capstone course for automotive technology.

AMS 253 Service Organization and Parts   3 Credits

Prerequisites: None Facility and personnel requirements for efficiently run parts and service departments. Emphasis is on principles, practices and procedures necessary to effectively operate the departments. Includes: manufacturer catalogs and component numbering systems, methods of scheduling time and techniques for obtaining maximum work efficiency from technicians and specialists

AMS 271 Cooperative - Drivelines   3 Credits

Prerequisites: Program Advisor Approval. Provides qualifying students an opportunity to work at a job site and complete the requirements for driveline service. Provides on-the-job experience while earning credit toward an Associate's degree.

AMS 272 Cooperative – Suspension   3 Credits

Prerequisites: Program Advisor Approval. Provides qualifying students an opportunity to work at a job site and complete the requirements for chassis and suspension service. Provides on-the-job experience while earning credit toward an Associate's degree.

AMS 273 Cooperative - Brakes   3 Credits

Prerequisites: Program Advisor Approval. Provides qualifying students an opportunity to work at a job site and complete the requirements for braking systems. Provides on-the-job experience while earning credit toward an Associate's degree.

AMS 274 Cooperative – Electrical   3 Credits

Prerequisites: Program Advisor Approval. Provides qualifying students an opportunity to work at a job site and complete the requirements for electrical systems service. Provides on-the-job experience while earning credit toward an Associate's degree.

AMS 275 Cooperative - Engine Repair   3 Credits

Prerequisites: Program Advisor Approval. Provides qualifying students an opportunity to work at a job site and complete the requirements for engine repair. Provides on-the-job experience while earning credit toward an Associate's degree.

AMS 276 Cooperative –Engine Performance   3 Credits

Prerequisites: Program Advisor Approval. Provides qualifying students an opportunity to work at a job site and complete the requirements for engine performance. Provides on-the-job experience while earning credit toward an Associate's degree.

AMS 279 Service Shop Operations   3 Credits

Prerequisites: Program Advisor Approval. Introduces students to the "Real World" atmosphere of the automotive workplace. Additionally, the course presents historical and future trends with emphasis in career/placement requirements. Safety, OSHA, EPA, and environmental standards are presented. Introduction to the eight areas of ASE Technician Certification and related tools are presented. Students will rotate the roles of Service Manager, Service Writer, Parts Manager, and Team Leader. Each student will also experience the following technician roles: general technician, alignment technician, brake technician, and diagnostic technician. Students will work on customer vehicles and gain a more clear understanding of what the expectations are for today's Automotive Service Technician.

AMS 280 Co-Op or Internship   1 Credit

Prerequisites: Program Advisor approval. Provides qualifying students an opportunity to work at a job site that is specifically related to their career objective. This class will provide on-the-job experience while earning credit toward an Associate's degree.

ANH 154 Cultural Anthropology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. The scientific study of human culture. Variations in patterns of human behavior are holistically examined in their relationship to such factors as biological evolution, socialization, kinship, economy, religion, education, personality, art, music, dance, and cultural change.

ANH 254 Introduction to Archaeology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. The scientific study of the material artifacts of human cultural remains. Provides insight into the earliest patterns of human behavior and its subsequent evolution into more complex forms. Acquaints the student with archaeological methods and with major findings of the archaeological record from selected culture areas.

ANP 067 Introduction to Anatomy and Physiology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031 and MAT 044. Introduces basic concepts and terminology used in Anatomy and Physiology. Prepares entering students who took no high school life science or took it several years ago for ANP 101 and ANP 102 (or ANP 203 and 204). Provides a general introduction to chemistry, cells, tissues, body systems, and basic physiological processes.

ANP 101 Anatomy and Physiology I   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. Develops a comprehensive understanding of the close inter-relationship between anatomy and physiology as seen in the human organism. Introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, skeleton, muscular and nervous systems as an integrated unit.

ANP 102 Anatomy and Physiology II   3 Credits

Prerequisites: ANP 101 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Continues the study of the inter-relationships of the systems of the human body. Introduces students to the study of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems.

ANP 201 Advanced Human Physiology   4 Credits

Prerequisites: Successful completion of ANP 101 and ANP 102, or equivalent. Provides a study of human physiology for students entering health-oriented fields. Emphasizes the study of the function of cells, the nervous, muscular, circulatory, respiratory, urinary, digestive and endocrine systems, and their homeostatic mechanisms and system interaction. Focuses laboratory exercises on clinically relevant measurement of human function.

ANP 203 Human Anatomy and Physiology I   5 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Provides a comprehensive study of the interrelationship between anatomy and physiology from chemical to cellular to organ interactions. Provides an in-depth study of each system of the body from a viewpoint of structure as well as function.

ANP 204 Human Anatomy and Physiology II   5 Credits

Prerequisites: ANP 203 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Provides the remaining comprehensive study of the inter-relationship between anatomy and physiology from chemical to cellular to organ interactions. Provides an in-depth study of each system of the body from a viewpoint of structure as well as function: endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems.

ARH 101 Survey of Art and Culture I   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Surveys painting, sculpture, and architectural styles from ancient cultures to the proto-Renaissance era. Emphasizes the historical context of art movements as well as analysis of the work of individual artists.

ARH 102 Survey of Art and Culture II   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Surveys painting, sculpture, and architectural styles from the Renaissance to the present. Emphasizes the historical context of art movements as well as analysis of the work of individual artists.

ARH 110 Art Appreciation
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introductory course in art which explores the creative processes of humankind, its usage of specific traditional and contemporary media for communication and the study of periods and styles in art as they relate to the human condition. The course will explore the nature of art, the evaluation of art, and the processes and materials of art. The students will examine the formal elements of design and look at a wide variety of both two and three-dimensional artworks and will learn about the processes and tools involved in their creation.

ART 111 Drawing for Visualization
3 Credits

Prerequisites: None. Introduces students to the tools and methods of drawing. Presents drawing as a catalyst to seeing and a way of recording ideas. Gives students the necessary drawing preparation for the study of design.

ART 112 Electronic Layout
3 Credits

Prerequisites: ART 115 and VIS 115. Provides intermediate instruction in practical and creative page layout. Uses an industry standard desktop publishing package designed for single and multi-page documents as a tool for executing layouts. Produces samples for student portfolios, which may include stationery, charts, forms, brochures, and calendars.

ART 113 Contemporary Art History
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. This course chronologically surveys painting, sculpture, architectural styles and the minor arts for contemporary art. Emphasis is on the historical context of art movements as well as analysis of the work of individual artists. This course will provide the basic knowledge of art with grounding in technique and vocabulary along with dealing with current issues, multicultural dimensions of art and making a connection between art history and art making. Contemporary art has a vocabulary all of its own and this course provides the introductory tools to appreciate all art forms over the last three decades. Major movements will be introduced with characteristic works including performance, painting, sculpture, printmaking, environmental, photography and computer graphics.

ART 114 Graphic Design I
3 Credits

Prerequisites: VIS 101, VIS 115 and ART 115. Provides introductory instruction in design for communication primarily for print media. Teaches the steps in design development with meaningful message and concept. Produces samples for student portfolios, which may include elements or comprehensive projects in logo, stationery, newspaper, magazine, billboard, and interface design, etc.

ART 115 Typography
3 Credits

Prerequisites: None. An introductory course which addresses the issues pertinent to the proper and creative use of type and the enhancement of communication. Covers the history of type, typographic terminology, design, attention to aesthetics, common sense, and how we read. Projects emphasize an appreciation of and the practical use of type.

ART 116 Electronic Illustration
3 Credits

Prerequisites: VIS 115. Provides intermediate instruction in illustration techniques using computer software designed for creating illustrations, technical, drawing, logos, packaging, maps, charts, and graphs. Emphasis is on preparing effective, creative illustrations for various media applications in an efficient, productive manner. Produces samples for student portfolios.

ART 120 Life and Object Drawing I
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. This introductory course will result in the advancement of basic drawing skills utilizing the human figure, natural and manufactured objects. Basic techniques and creative processes will be explored through expressive use and exploration of a variety of materials and techniques. Emphasis will be placed on developing basic quality draftsmanship with a focus on proportion and structure, specifically by drawing only from life sources.

ART 121 Color and Design Theory
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. A critical thinking course that delves into the thought processes and manual skills needed in design and its application in the realm of two-dimensional fine arts. Intermediate to advanced design and color theory will be addressed through the manipulation of imagery in two-dimensional media. Critical thinking, problem-solving and manual techniques will be emphasized equally.

ART 130 Foundation I
<div style="text-align: right">**3 Credits**</div>

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. This course introduces students to the fundamentals of art and design through a survey of multiple art processes and techniques. Exposing students to broad subject matter and using four or five material specific exercises to emphasize additive and subtractive processes.

ART 202 Special Projects I
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 114. Provides advanced instruction in specific areas of student interest or in areas where there is a need to strengthen skills. Requires performance and completed work to be portfolio quality and reflect applicability to the main areas of the program. Suggested projects may include annual reports, catalogs, newsletters, menus, direct mail and/or other multi-piece or multi-page communications. Also may include actual community or non-profit projects.

ART 203 Independent Study
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 114. Provides advanced students with opportunities to design projects for specified areas of interest. Requires the project plan to be approved by the instructor. Restricts work to student program area and requires it to be portfolio quality.

ART 217 Graphic Design II
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 114, ART 116 and VIS102. Provides intermediate instruction in design for communication primarily for print media. Further explores design theory by applying concepts to achieve meaningful marketing and advertising results. Produces samples for student portfolios, which may include elements or comprehensive projects appropriate to trade/industrial advertising, brochures, flyers, pamphlets, posters, direct mail and/or consumer magazine advertising/branding, etc.

ART 218 Digital Production
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 114. Addresses the issues of electronic prepress (preparing electronic files for digital production). Topics covered include the tasks of prepress, paper knowledge, the entire printing production process (complete with requirements of the process) and electronic file management. A strong emphasis is placed on prepress terminology and jargon.

ART 219 Graphic Design III
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 217 and VIS 201. Provides advanced instruction and experience with design projects/branding identity, which communicate a common theme or campaign through several different media -- magazine, billboard, radio, television, direct mail, brochures, point of purchase, sales promotions and/or package design, etc. Produces samples for student portfolios.

ART 220 Life and Object Drawing II
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 120. Rendering abilities will continue to advance with drawing techniques utilizing the human figure, natural and manufactured objects, specifically from life (not photographs). More advanced techniques and creative processes will be explored through expressive use and exploration of a variety of materials and techniques. Emphasis will be placed on developing a higher level of quality draftsmanship with a focus on proportion and structure.

ART 222 Three-Dimensional Design
<div style="text-align: right">**3 Credits**</div>

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introductory course into the thought processes and manual skills needed in three-dimensional design. Basic techniques and creative processes will be explored through expressive use and exploration of a variety of materials and techniques. Critical thinking, problem-solving and manual techniques will be emphasized equally.

ART 230 Foundation II
<div style="text-align: right">**3 Credits**</div>

Prerequisites: ART 130. Continues to expose students to broad subject matter by utilizing four or five material specific exercises to emphasize additive and subtractive processes at an advanced level. Students will also be exposed to the variety of artistic possibility through multiple art processes and techniques by working with the instructor and visiting artists.

ASY 101 Solar System Astronomy
<div style="text-align: right">**3 Credits**</div>

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. Survey of the history of astronomy, astronomical cycles and phenomena, astronomical instruments, formation and evolution of the planets and their satellites, comparative planetology, asteroids, comets, meteors, the sun, origin of the solar system and its place in the galaxy and the universe.

BCM 102 Construction Graphics and Print Reading
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introduction to drawing skills and techniques necessary to produce basic construction drawings. Emphasis is placed on the interpretation of the requirements of contract drawings, understanding terminology, symbols, and conventions used in residential, commercial, and industrial drawings, including architectural, structural, mechanical, electrical plans and sections.

BCM 104 Commercial and Industrial Construction
3 Credits

Prerequisites: BCM 102. An introduction to steel, concrete, and composite material buildings found in heavy construction projects. Students will study steel frame, concrete structures, Bent Surface Structures, Space Frames, and other construction types used in heavier commercial and industrial buildings.

BCM 115 Construction Management Practices
3 Credits

Prerequisites: BCM 102. Students gain knowledge and understanding of the management functions in the construction industry including the project cycle, company and project organization, financial and budgeting considerations, documentation, monitoring, cost control, etc. Emphasis is placed on the responsibilities of managers and their relationship to other agents involved in a construction project.

BCM 205 Concrete and Soils
3 Credits

Prerequisites: BCM 102 and BCM 104. A study of the properties and uses of concrete and soils in construction. Topics include design and methods of formwork, placing, curing, and finishing. The course content will also cover the properties and behavior of soils including compaction, permeability, compressibility, and shear strength. Course content is consistent with principles and standards as determined by the Portland Cement Association (PCA), the American Concrete Institute (ACI), the Construction Specifications Institute, (CSI), and the Society for Testing Materials (ASTM).

BCM 206 Construction Estimating
3 Credits

Prerequisites: MAT 133, DSN 210, BCM 102 and BCM 210. The first in a series of two estimating courses. Students will study fundamentals of performing construction estimates including making material quantity take-offs and labor estimates. The Construction Specifications Institute (material divisions) will be used to organize the estimating process. Emphasis is placed on interpreting plans and specifications to determine accurate material quantities and labor estimates, selection of appropriate material grades and types, and other miscellaneous cost associated with successful completion of a building project.

BCM 210 Codes and Specifications
3 Credits

Prerequisites: BCM 102 and BCM 104. A study of the interpretation of technical building specifications, codes, and contract documents as they affect the selection, and application of materials and equipment. The course will emphasize understanding of local, state, and national codes, and explore contractual relationships and considerations.

BCM 211 Construction Surveying
3 Credits

Prerequisites: MAT 131. An introductory course in surveying for construction applications. Students will study types of surveying equipment, procedures for performing surveying operations and erections of buildings. The course will cover surveying techniques, and computations and will require performance of field operation.

BCM 220 Project Planning and Control
3 Credits

Prerequisites: BCM 115. Covers the concepts and techniques for scheduling and control systems for effectively managing a construction project. Students will obtain the skills and knowledge necessary to effectively plan and schedule a project, to monitor and control all project aspects, and to anticipate and resolve problems as they occur.

BCM 223 Advanced Estimating
3 Credits

Prerequisites: BCM 115 and BCM 206. The second of two estimating courses with emphasis on using specialized software to perform estimating and cost control tasks. Estimating projects are focused on commercial and industrial construction.

BCM 230 Construction Equipment
3 Credits

Prerequisites: BCM 104. Introduces principles and techniques for selecting and managing construction equipment. Identification and evaluation of types of site equipment including hand tools, power equipment, earthmoving/excavation equipment, etc. Emphasis is placed on estimating and analysis of equipment productivity, ownership and operating cost.

BCM 235 Safety and Risk Management
3 Credits

Prerequisites: BCM 230. Emphasis is placed on identifying and reducing safety risk on the job site. Students will study OSHA standards, accident and fire prevention, protection from hazardous materials, use of protective equipment and clothing, construction equipment and other safety concerns. The role of managers, workers, sub-contractors and others is stressed. Students will gain an appreciation for how accidents and safety concerns affect morale and productivity.

BCM 240 Professional Internship
3 Credits

Prerequisites: Program Advisor Approval. Major focus is to provide practical on-the-job experience working with a construction company. Student interns might work in the areas of print reading, estimating, equipment management, project supervision, or other management related activities and tasks.

BCT 104 Floor and Wall Layout and Construction
3 Credits

Prerequisites: CON 101. Examines the design and construction of floor and wall systems. Student develops the skill needed for layout and construction of floor and wall systems from blueprints and professional planning documents.

BCT 105 Roof Construction
3 Credits

Prerequisites: CON 101. Studies the design and construction of roof systems. Emphasizes use of the framing square for traditional rafter and truss roofing. Instruct students in additional up-to-date techniques.

BCT 114 Exterior Trim
3 Credits

Prerequisites: CON 101. Develops necessary skills in the finishing of the exterior of a building. The student obtains skills in the installation of the cornice, windows, doors and various types of sidings used in today's market place.

BCT 115 Auxiliary Building Design and Construction
3 Credits

Prerequisites: CON 101. Develops carpentry skills in construction of garages, storage buildings, wood decks, patios, privacy fences and gazebos.

BCT 120 Woodworking Fundamentals
3 Credits

Prerequisites: None. An introductory study of the basic skills in woodworking. Emphasis is placed on safety, tool set-up and machine operations. Other topics include proper joinery and material selection.

BCT 121 Furniture Design and Construction
3 Credits

Prerequisites: BCT 120. Develops skills in the design, layout, and construction of furniture. Students are introduced to furniture styles, types of materials used, and methods of construction.

BCT 122 Woodworking Jig Layout
3 Credits

Prerequisites: BCT 120. Develops skills in the design, layout and construction of holding devices, called jigs, used for special set-ups on the table saw, joiner band saw, and other woodworking machines. Each jig can be a single function, or a multi-functioning jig.

BCT 123 Furniture Framework
3 Credits

Prerequisites: None. Introduces the basic skills and technology of furniture construction, focusing on case construction, face frames and furniture legs.

BCT 124 Millwork
3 Credits

Prerequisites: None. Introduces the basic skills and technology of the production of wood products and focuses on machinery set-up and operations for making moldings, doorframes and picture frames.

BCT 125 Furniture Finishing and Repair
3 Credits

Prerequisites: None. Develops knowledge and skills in the technology of refinishing and repairing furniture. Introduces procedures used in stripping, bleaching, caning, veneering and wood fillers.

BCT 126 Furniture Door and Drawer Assembly
3 Credits

Prerequisites: BCT 120. An advanced class that develops skills in the design, layout, and construction of doors, drawers, and table-tops. Students are introduced to various types of hardware and installation methods.

BCT 127 Basic Theory of Paint and Stain   **3 Credits**

Prerequisites: CON 127. Introduces the basic skills and techniques of finishing wood products, including proper preparation, staining and finishing procedures.

BCT 128 Woodworking Hobbies and Crafts   **3 Credits**

Prerequisites: None. Introduces the basic skills and techniques in layout and construction of small projects such as bookcases, file cabinets, and mantels. Introduces the skills in layout and assembly of small hobby projects such as kitchen accessories, and living room, bedroom decorations.

BCT 201 Residential Wiring   **3 Credits**

Prerequisites: CON 127. Covers the practice of residential wiring, including electrical service, metering equipment, lighting, switches, outlets and other common components, and methods of installation and maintenance of the residential wiring system in accordance with the current National Electrical Code.

BCT 202 Plumbing Fundamentals   **3 Credits**

Prerequisites: None. Studies the operation and function of the home plumbing system. Introduces pipe drawings and pipe layout and isometric blueprint reading symbols. Demonstrates how to rough in plumbing and install drainage, water systems, fixtures and water heaters in compliance with the plumbing code.

BCT 203 Masonry Concrete Fundamentals   ·   **3 Credits**

Prerequisites: None. Covers materials and methods of construction with concrete block, brick, and forming for poured concrete. Includes study in the preparation of the building site.

BCT 205 Advanced Projects in Building Construction I   **3 Credits**

Prerequisites: CON 204. Applies problem solving to common problems in construction. Emphasizes the cooperation between several trades in the construction industry.

BCT 206 Advanced Projects in Building Construction II   **3 Credits**

Prerequisites: BCT 205. Applies problem-solving skills to common challenges in construction. Emphasizes the cooperation between several trades in the construction industry allowing students to practice necessary skills to resolve the problem. Concentrates on decision-making skills.

BCT 207 Carpentry-Light Commercial   **3 Credits**

Prerequisites: None. Introduces carpentry skills required in light commercial construction. Focuses on construction methods and materials used for office buildings, clinics, small churches and other non-residential structures.

BCT 211 Construction Organization and Procedures   **3 Credits**

Prerequisites: None. Introduces organization and management procedures focusing on subcontracting, equipment and tool inventories, job materials, codes, inspections and permits.

BCT 213 Motors and Motor Controls   **3 Credits**

Prerequisites: CON 127. Studies the wiring and design of motor control circuits, including circuit and conductor calculations, motor circuits and controls. Includes control transformers and service, circuit layout for motor controls and machine tool hook-up and control.

BCT 214 Wall and Floor Coverings   **3 Credits**

Prerequisites: None. Covers modern materials and techniques of interior floor and wall coverings. Provides instruction on assessing the durability and maintenance of materials and techniques in correct installation procedures.

BCT 216 Advanced Residential Design   **3 Credits**

Prerequisites: Program Advisor approval. Studies residential floor plans and elevation. Analyzes contemporary living patterns, cost, privacy, convenience and efficiency, coordinated with needs. Compares exterior styles for cost and aesthetic values. Studies multiple housing, duplex arrangements, apartments and condominiums. Provides students with opportunities to do floor plans, elevations, and perspective drawings to incorporate the conclusions reached from the above research.

BCT 219 Survey and Measurement
3 Credits

Prerequisites: None. Presents fundamentals of surveying, including use of transit, reading angles, land description, restrictions and legal problems. Covers topographical maps and their use.

BCT 220 Electrical Troubleshooting Techniques
3 Credits

Prerequisites: CON 127 and BCT 201. Presents methods and techniques for troubleshooting appliances, motors, motor controls, relay wiring, commercial wiring and industrial wiring systems.

BCT 221 Interior Trim
3 Credits

Prerequisites: CON 101. Develops basic knowledge, skills, and awareness of interior trim. Provides training in installation of dry-wall, moldings, interior doors, kitchen cabinets, and baseboard moldings.

BCT 222 Commercial/Industrial Wiring
3 Credits

Prerequisites: BCT 107 and CON 127. Covers wiring methods and material selection for commercial and industrial wiring systems. Studies include mechanical installation of hardware as well as electrical design and layout. Focuses on tool use, material selection, and installation of machines in the industrial setting.

BCT 223 Plumbing Design and Installation
3 Credits

Prerequisites: BCT 202. Provides techniques for working with pipes and fittings. Studies residential and commercial electrical hot water heating systems, private well water systems and electrical components of plumbing systems.

BCT 225 Fabrication
3 Credits

Prerequisites: None. Studies concepts and techniques of industrialized housing. Covers pre-fabrication, fabrication, jigs and rigging, including manufactured housing, sectional homes and modular homes.

BCT 228 Advanced Woodworking
5 Credits

Prerequisites: BCT 120. Applies problem-solving solutions in furniture construction, as well as cabinetry construction and installation.

BIO 065 Basic Life Sciences
3 Credits

Prerequisites: None. Corequisite: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031 and MAT 044. Introduces the scientific method and the basic concepts and terminology used in biology, microbiology, anatomy, physiology and organic chemistry which is related to life sciences. Prepares entering students who took no high school science or who took science several years ago for general education life sciences courses.

BIO 100 Human Biology
4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 050. Covers the basic concepts of human biology including reproduction and development, physiological regulation, stress biology, evolution, and behavioral biology with emphasis on health, nutrition, and disease related issues. Laboratory emphasizes human anatomy and physiology.

BIO 101 Introductory Biology
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Introduces the basic concepts of life. Includes discussion of cellular and organismal biology, genetics, evolution, ecology, and interaction among all living organisms. Addresses applications of biology to society.

BIO 105 Biology I
5 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C or better" in ENG 025, ENG 032 and MAT 050. An in-depth overview of the principles of molecular and Mendelian genetics, concepts of Natural Selection in relation to evolution, and principles of population ecology and their effects on organismal diversity.

BIO 107 Biology II
5 Credits

Prerequisites: BIO 105. An in-depth overview of the principles of basic biochemistry, concepts of cell structure, cell metabolism, and cellular respiration, processes of DNA replication and gene expression, fundamentals of plant structure and function, principles of animal reproduction and development, and an overview of vertebrate anatomy.

BIO 110 Entomology
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 050. This course will cover basic entomological concepts, including structure and function, behavior, evolution and ecology. Review of insect order and look at how insects interact with human societies.

BIO 121 General Biology
4 Credits

Prerequisites: Demonstrated competency appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Also, demonstrated competency in chemistry through appropriate assessment or successful completion of CHM 061. An introduction to those biological and chemical principles associated with cell structure and function, cell division, molecular and Mendelian genetics, enzyme function and energetics. An overview of natural selection, the structure, lifecycle and classification schemes of vascular plants will also be presented.

BIO 201 General Microbiology
4 Credits

Prerequisites: BIO 101, BIO 105 or ANP 101 and earning a grade of "C" or better in MAT 050. Presents an in-depth overview of microbiology, including fundamental structures of microorganisms, their metabolism, classification and interaction with other living things, and the laboratory techniques for their study. Introduces industrial and clinical applications of microbiology and clinically related areas of bacterial, viral, fungal, and parasitic involvement.

BIO 202 General Microbiology II
2 Credits

Prerequisites: BIO 201 or BIO 211. A secondary study of microorganisms, including the characterization of bacterial growth and techniques of controlling microbial growth. Provides in-depth coverage of analytical and serological techniques commonly encountered in the microbiology laboratory.

BIO 211 General Microbiology I
3 Credits

Prerequisites: BIO 101 or ANP 101 and earning a grade of "C" or better in MAT 050. An overview of microbiology including fundamental structures of microorganisms, their metabolism, classification and interaction with other living things, and the laboratory techniques for their study. Introduces industrial and clinical applications of microbiology.

BIO 212 General Microbiology II
2 Credits

Prerequisites: BIO 211 and ANP 101. Presents a secondary study of bacteria, viruses, fungi, rickettsia, and parasites. Emphasizes the study of bacterial growth and control demonstrated by serological techniques.

BIO 220 Environmental Science
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Survey of the basic concepts of ecology, natural resources and ecosystems, relationships between humans and their natural environment, and the magnitude and scope of global environmental problems.

BIO 221 Molecular Biology
3 Credits

Prerequisites: BIO 121 or BIO 107 and CHM 101 or CHM 105. An introduction to DNA, RNA and proteins and a review of their structures and functions, including their physical and chemical properties and their roles in cellular metabolism. The course will include an in-depth look at the synthesis of these molecules, as well as DNA replication, transcription and translation.

BNK 101 Principles of Banking
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Discussion ranges from fundamentals of negotiable instruments to contemporary issues and developments within the industry.

BNK 102 Law and Banking: Applications and Principles   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Introduces laws pertaining to secured transactions, letters of credit and the bank collection process. Provides a banker's guide to law and legal issues with special emphasis on the Uniform Commercial Code.

BNK 103 Consumer Lending   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Presents an insider's view of consumer lending, offering essential information about the maze of regulations that govern credit practices, and reviews loan processing, cross selling and collections.

BNK 216 Analyzing Financial Statements   3 Credits

Prerequisites: ACC 101. Provides a practical introduction to financial analysis from the viewpoint of the commercial loan officer and develops skills needed to effectively assess a borrower's ability to repay loans.

BNK 219 Bank Management   3 Credits

Prerequisites: BNK 101. Provides a complete introduction to the handling of day-to-day bank activities and incorporates case studies to help acquire bank management skills.

BNK 220 Trust Operations   3 Credits

Prerequisites: ACC 101 and BNK 101. Provides a broad, information framework intended to introduce students to quality trust operations workmanship in a time of accelerating change in the industry. The course presents the basics of trust operations providing an overview of: the Securities Industry and the reasons for its existence; the participants and terminology in the securities industry; Trust services, includes the types of trust accounts and the management and operations of trust services; Trust accounting principals, concepts, functions and controls; and the relationship between the Bank and the trust department.

BTN 100 Survey of Biotechnology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Presents an in-depth overview of biotechnology emphasizing basic molecular techniques of manipulating DNA; processes involved in protein purification and analysis; microbial, plant, aquatic, medical and animal biotechnology; regulations and ethics of the biotechnology industry.

BTN 101 Introduction to Biotechnology   4 Credits

Prerequisites: BIO 121. Presents a basic overview of biotechnology emphasizing current DNA and RNA technologies and structure and function of biomolecules. The application of these techniques in the field of medicine, agriculture, forensics and environment is emphasized. Scientific methods, lab safety and regulations and ethics of the biotechnology industry will also be covered.

BTN 103 Safety and Regulatory Compliance for Biotechnology   3 Credits

Prerequisites: BIO 105 or BIO 121 or CHM 101 or CHM 105 or CHM 111. Overview of laboratory safety procedures and precautions, biosafety, radiation safety, compliance standards of regulatory agencies. Emphasis will be placed on understanding the regulatory environment of pharmaceutical, diagnostic and agricultural research and manufacturing. Students will be introduced to the agencies in the U.S. responsible for regulatory oversight of biotechnology. Concepts of current good laboratory practices (cGLP), current good manufacturing practices (cGMP), standard operating procedures (SOP) and validation will be addressed as they apply to industry.

BTN 201 Cell Culture and Cellular Processes   4 Credits

Prerequisites: BTN 101 and CHM 105 or CHM 111. An introduction to major biochemical pathways, cellular structure and function at a molecular level. Topics to be considered include the structure and function of the cell membrane, cytoskeleton and various organelles. Cellular respiration will be discussed. Protein synthesis, processing and export will be examined. Those processes involved in cell division will also be investigated and related to cancer. The laboratory will center upon techniques involving animal, plant, fungi and bacterial cell cultures. Students will be taught how to isolate, culture and preserve prokaryotic organisms. Students will be taught how to maintain and preserve eukaryotic cell cultures. Students will learn to procure cell cultures from ATCC and other repositories.

BTN 211 Analytic Methods in Biotechnology I   **3 Credits**

Prerequisites: BTN 101 and CHM 105 or CHM 111. Theory and application of many analytical methods currently utilized in the field of biotechnology. These methods will include: ELISA and immunoaffinity techniques; methods for determining enzymatic activity; spectrophotometric methods; chromatographic methods; electrophoresis; light and electron microscopy. When feasible, techniques will be practiced in the laboratory setting. Methods utilizing radioactive isotopes will be discussed. Considerable emphasis will be placed on proper methods for data recording, analysis and presentation.

BTN 212 Analytic Methods in Biotechnology II   **3 Credits**

Prerequisites: BTN 211. Theory and application of many analytical methods currently utilized in the field of biotechnology. These methods will include: centrifugation, light and electron microscopy, restriction endonuclease digestion, agar and acrylamide electrophoresis of nucleic acids, Southern and Northern blotting, polymerase chain reaction and bioassays. When feasible, techniques will be practiced in the laboratory setting. Methods utilizing radioactive isotopes will be discussed. Considerable emphasis will be placed on proper methods for data recording, analysis and presentation.   \

BTN 217 Biotechnology Manufacturing Processes   **3 Credits**

Prerequisites: CHM 204 or CHT 211 and BTN 211 and BTN 201. Introduction to the processes and procedures involved in the manufacture of biological molecules on both large- and small-scales. The student will learn the function of commonly used manufacturing equipment associated with biotechnology and understand the cGMP's associated with the use of such equipment. The regulatory environment associated with most biotechnology endeavors will be reviewed including those mandated by FDA, USDA and OSHA.

BTN 221 Microbiology   **3 Credits**

Prerequisites: BIO 121 and CHM 106. Corequisites: BTN 222. Presents an overview of microbiology including fundamental structures of microorganisms, their growth, metabolism, interaction with other living things, and classification. Emphasis placed on industrial applications of microbiology.

BTN 222 Microbiology Laboratory   **2 Credits**

Prerequisites: BIO 121 and CHM 106. Corequisites: BTN 221. A conventional laboratory of exercises, demonstrations and discussions. Laboratory exercises are designed to enable students to achieve proficiency in the principles and techniques necessary for cultivation of microorganisms using aseptic techniques and for performing and interpreting biochemical tests. The laboratory exercises will be filled out weekly and turned in to be graded.

BTN 227 Genetic Engineering and DNA Analysis   **4 Credits**

Prerequisites: BTN 201 or BTN 211. The essential concepts and techniques in genetic engineering. Students will practice essential gene cloning procedures: isolation of DNA, restriction endonuclease digestion, agarose gel electrophoresis analysis, DNA ligation, and transformation into a host strain. Other essential techniques such as PCR, construction and screening of genomic or cDNA libraries, Southern and Northern blot analyses will be practiced. Students will understand the principles and ethical issues of animal or human cloning practices. Current methods for transfer and propagation of genes into plants and animals will be discussed. Various gene knockout techniques such as homologous gene recombination, site-directed mutagenesis, and RNAi will be introduced. The topics in genomics, proteomics, and bioinformatics will be discussed.

BTN 231 Industrial Processes and Fermentation   **4 Credits**

Prerequisites: BTN 201 and BTN 211. An introduction to fermentation processes used for commercial purposes and the operation of small- and large-scale fermentors. Methods used to harvest product from fermentors and the regulatory requirements associated with commercial fermentation will also be explored.

BTN 233 Protein Analysis and Purification   **4 Credits**

Prerequisites: BTN 201 or BTN 211. Students will review the biochemical properties of amino acids and proteins, then study techniques of cell disintegration and extraction, protein separation, and analysis. Students will be taught to determine which method is most applicable in various situations and why that method should be utilized. When possible, students will be given an opportunity to perform these techniques in the laboratory.

BTN 235 Biotechnology Laboratory   **3 Credits**

Prerequisites: BIO 107 and CHM 105. Corequisites: BIO 221. Presents an in-depth overview of basic biotechnology laboratory skills emphasizing chromatography techniques, methods of DNA and protein electrophoresis, processes of immunoassays, data management skills, recombinant DNA technology, and the polymerase chain reaction.

BTN 241 Immunology and Immunological Processes   4 Credits

Prerequisites: BTN 211. A brief survey of the components of the immune system and how they interact. The topics covered will include, B and T cell development, activation and culture, the role of cytokines, their production and purification, signal transduction processes in B-cell activation, the role of MHC complexes, immunoglobulin synthesis and origins of diversity, antigen-antibody interactions, practical aspects of raising and purifying polyclonal and monoclonal antibodies, handling and labeling of antibodies, applications of antibodies including Western blotting, ELISA, and immunohistochemistry.

BTN 280 Co-op/Internship   2-6 Credits

Prerequisites: Program Advisor Approval. Provides students with the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit toward an associate degree.

BUS 101 Introduction to Business   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Examines the American business system in relation to the economic society. Studies business ownership, organization principles and problems, management, control facilities, administration, and development practices of American business enterprises.

BUS 102 Business Law   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.

BUS 104 Investment   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introduction to the fundamentals of investing. Presents the basis of investing, with attention to the various ways in which investment vehicles operate.

BUS 105 Principles of Management   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Describes the functions of managers, including the management of activities and personnel. Focuses on application of guidance principles in management.

BUS 106 Customer Service   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. Focuses on the importance of providing superior customer service to the organization as well as the customer service representative. Fundamental customer service techniques applicable to a variety of situations are presented.

BUS 108 Personal Finance   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. Emphasizes management of individual financial resources for growth and maintenance of personal wealth. Covers home buying and mortgage financing, installment financing, life and health insurance, securities, commodities and other investment opportunities.

BUS 120 Business Ethics and Social Responsibility   3 Credits

Prerequisites: BUS 101. An examination of individual, organizational and societal ethical issues and the social responsibility of business organizations in the resolution of these issues. Critical thinking and informed decision making are emphasized.

BUS 202 Human Resource Management   3 Credits

Prerequisites: BUS 105. Focuses on the activities of human resource management, with emphasis on employer-employee relations, job analysis and evaluation, salary administration, work measurement and standards, performance appraisal and legal compliance.

BUS 203 Business Development   3 Credits

Prerequisites: BUS 105, MKT 101 and ACC 101. Explores business operations for the self-employed or as a manager of a small business enterprise. The course includes: covering the role of entrepreneur and manager; selecting the appropriate business organization; developing plans and strategies for small, medium, and growing firms; securing financing for start-up and growing operations; exploring growth opportunities; and successfully managing human and material resources.

BUS 204 Case Problems in Business 3 Credits

Prerequisites: Program Chair approval. Applies business concepts and principles to specific case studies or problems.

BUS 205 Risk Management 3 Credits

Prerequisites: BUS 101, BUS 102 and MAT 050. Examines the risks faced by businesses and individuals; it then considers ways of handling them. Topics covered include property, liability and personal losses that may result due to assuming these risks. Much attention is paid to the use of insurance contracts in reducing the impact of the possible losses. Specific areas include automobile, home, life, health, and pension insurance as well as public policy, government regulations, and social insurance programs.

BUS 207 Introduction to International Business 3 Credits

Prerequisites: BUS 101. Provides an overview of the international environment in which business operates today. Demonstrates the global relationships between business activities and how events in one part of the world can influence business decisions and activities in other parts of the world.

BUS 208 Organizational Behavior 3 Credits

Prerequisites: BUS 105. Studies human behavior in organizations at the individual and group level, including the effects of organizational structure on behavior. Focuses on using organizational behavior concepts for developing and improving interpersonal skills.

BUS 209 Introduction to e-Business 3 Credits

Prerequisites: BUS 101 and CIS 101. Focuses on how e-business is being conducted and managed, its major opportunities, limitations, issues and risks. E-business applications to be discussed include those of business to consumer, business to business, and intra business. Because e-business is interdisciplinary, subject matter will be directed at managers, professionals, and students who wish an overview of the e-business potential.

BUS 210 Managerial Finance 3 Credits

Prerequisites: ACC 101 and BUS 101, and MAT 111 or higher. An introductory course in the principles of financial management. Develops decision-making skills related to the financial resources of a firm. Includes techniques of financial analysis, time value of money, capital budgeting, risk and return.

BUS 220 Conference Leadership Training 3 Credits

Prerequisites: None. Stresses the importance of the conference in business and industry. Emphasizes the practical application of the various techniques of conference leadership and an understanding of group dynamics in the conference setting.

BUS 221 Principles of Employment 3 Credits

Prerequisites: BUS 202. An in-depth look at the employment process. Emphasis will be placed on the role of recruiting, selecting and training of employees. Techniques in job analysis, behavioral interviewing and on-the-job training will be studied in much detail.

BUS 222 Benefits Administration 3 Credits

Prerequisites: BUS 202. Provides an in-depth look at benefit administration. Topics include vacations, holiday pay, insurance, retirement programs and other employee inducements. Emphasis will be placed on cost of benefits in relationship to the overall compensation package. The course will also look at the relevance of reward and recognition and pay structures.

BUS 223 Occupational Safety and Health 3 Credits

Prerequisites: BUS 105. A look at the importance of safety and health in the workplace. The Occupational Safety and Health Act of 1970 will be examined in depth with relationship to businesses and their employees. Emphasis will be placed on effective practices, costs, labor and management responsibilities, health hazards, alcohol and drug abuse, worker's compensation, physical conditions and training.

BUS 227 Logistics/Supply Chain Management 3 Credits

Prerequisites: BUS 101. A study of the basic concepts included in the field of logistics and supply chain management. Topics covered include: supply chain strategy, planning and design, customer service, transportation, purchasing, forecasting, inventory and warehouse management, and financial control of logistics performance.

BUS 228 Principles of Purchasing   3 Credits

Prerequisites: BUS 101. Designed to teach the basics of purchasing management. Topics covered include: the challenge of purchasing and materials management, objectives and organization, function, specification, quality control and inspection, supplier evaluation, selection, and measurement, supplier development, strategic cost management, contracts and negotiation, purchasing relationships, purchasing transportation, purchasing laws and ethics, and global sourcing.

BUS 229 Transportation Systems   3 Credits

Prerequisites: BUS 101. Examines the structure and importance of the commercial transportation industry in the logistics sector of business. Topics covered include an in-depth examination of the various modes of transportation including discussions of regulations, economics, characteristics, and development in major transportation modes. Also discussed are costing and pricing issues in transportation and relationship management between buyers and sellers of transportation.

BUS 230 Business Statistics   3 Credits

Prerequisites: BUS 101 and MAT 111 or higher. Designed to build student competence in the areas of descriptive and inferential statistics, through emphasis on the application of these statistical methods. Includes an examination of data, probability of occurrence, and basic sampling processes. Uses statistical methods to model results and uses these models for forecasting. Tests to examine the appropriateness of these techniques are introduced.

BUS 280 Co-op/Internship   1-6 Credits

Prerequisites: Program Advisor approval. Gives students the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit toward an associate degree.

CHM 061 Basic Chemistry   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade "C" or better in ENG 032 and MAT 050. Provides students with an introduction to chemistry basics. Provides instruction for students with little or no recent chemistry background, especially those desiring to continue in more advanced chemistry courses or other science courses.

CHM 101 Introductory Chemistry I   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Also, demonstrated competency in chemistry and Intermediate Algebra through appropriate assessment or successful completion of CHM 061 and MAT 111. An introductory course that includes the science of chemistry and measurement, atomic theory and the periodic table, chemical bonding, equation writing and balancing, stoichiometry, and gases.

CHM 102 Introductory Chemistry II   3 Credits

Prerequisites: CHM 101. Includes liquids and solids, solutions and solution concentrations, acids and bases, equilibrium, nuclear chemistry, and organic and biochemistry.

CHM 105 General Chemistry I   5 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Also, demonstrated competency in chemistry and Intermediate Algebra through appropriate assessment or successful completion of CHM 061 and MAT 111. Corequisite: MAT 132 or MAT133 or MAT 136. The first in a series of two introductory courses designed to cover general chemistry including measurement, atoms, molecules and ions, stoichiometry, chemical reactions, solids, liquids, and gases thermochemistry, atomic structure, and molecular bonding.

CHM 106 General Chemistry II   5 Credits

Prerequisites: CHM 105 and MAT 132 or MAT 133 or MAT 136. The second in a series of two introductory courses designed to cover general chemistry including kinetics, equilibria, acid/ base chemistry, thermodynamics, electrochemistry, nuclear chemistry, organic chemistry and descriptive inorganic chemistry.

CHM 111 Chemistry I   4 Credits

Prerequisites: MAT 111 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and CHM 061. An introductory course that includes the science of chemistry and measurement, atomic theory and the periodic table, chemical bonding, stoichiometry, liquids and solids, gases and the ideal gas law, solutions, and acids and bases.

CHM 112 Chemistry II
4 Credits

Prerequisites: CHM 111 or CHM 101. Further explores concepts of equilibrium. Includes chemistry of metals and nonmetals, environmental chemistry, nuclear chemistry, organic and biochemistry.

CHM 113 Introductory Organic and Biochemistry
3 Credits

Prerequisites: CHM 101 or CHM 111. The basic principles of organic and biochemistry are discussed. This will include the basic concepts of nomenclature and reaction equations that are necessary for understanding biochemistry. The ability to name and draw chemical structures and to write reactions for organic equations will be evaluated. Elements of biochemistry will include the basic analysis of biochemical structures and the reactions involved in the metabolic processes.

CHM 204 Lectures in Organic Chemistry
3 Credits

Prerequisites: CHM 106. The first in a series of two introductory courses designed to cover organic chemistry including nomenclature, spectroscopy, stereochemistry, reactions, and mechanisms.

CHT 101 Industrial Laboratory Techniques
4 Credits

Prerequisites: CHM 101. Introductory course dealing with basic skills needed in the industrial laboratory such as basic lab safety, identification, care and operation of basic laboratory equipment including pH meters, spectrophotometers, glassware, and definition and preparation of reagents. Includes laboratory exercises in the use of selected equipment.

CHT 170 Success in Science
1 Credit

Prerequisites: None. Introductory course covering the basics of the chemical process industry including career paths, business components and ethical standards. Scientific literature searches and safety issues are discussed.

CHT 201 Industrial Instrumentation and Techniques 1
3 Credits

Prerequisites: CHT 101 and CHM 101. Addresses theoretical aspects of industrial laboratory instrumentation, including gas and liquid chromatography (GC and LC), high performance liquid chromatography (HPLC), infra-red (IR) spectrophotometry and atomic absorption (AA). Presents theories and laws that govern the way instruments operate. Includes student experimentation on various analytical instruments.

CHT 202 Industrial Instrumentation and Techniques II
3 Credits

Prerequisites: CHT 201. Continues the theoretical study of CHT 201 by addressing industrial applications of laboratory instrumentation, including gas and liquid chromatography (GC and LC), high performance liquid chromatography (HPLC), infra-red (IR) spectrophotometry and atomic absorption (AA). Presents automation techniques, including sampling, data collection and analysis. Covers the laws that govern the way instruments operate. Includes student experimentation on various analytical instruments.

CHT 204 Presentation of Technical Issues
3 Credits

Prerequisites: Program Advisor approval. Focuses on solving problems in chemical technology settings including the analysis of the problem, generation of creative solutions and effective presentation of proposed solutions.

CHT 207 Food, Drugs and Polymers
3 Credits

Prerequisites: CHM 102 and CHT 101. A survey course designed for advanced students, this course covers the basics of Food Science, Polymer Science and Pharmaceutics.

CHT 210 Quantitative Analysis
3 Credits

Prerequisites: CHM 101 and CHM 102. Investigates techniques for quantitative analysis of samples including their applications in industrial settings. Includes techniques such as gravimetric analysis, neutralization, oxidation-reduction titrations, potentiometric measurements and complexing titrations.

CHT 211 Organic Chemistry I
4 Credits

Prerequisites: CHM 106. The first in a series of two courses designed to cover an advanced understanding of organic chemistry, including reactivity of various aliphatic and aromatic compounds, various lab techniques and basic concepts.

CHT 212 Organic Chemistry II
4 Credits

Prerequisites: CHT 211. The second in a series of two courses designed to cover an advanced understanding of organic chemistry, including reactivity of various aliphatic and aromatic compounds, various lab techniques and basic concepts.

CHT 270 Professional Development   1 Credit

Prerequisites: CHT 101. Designed to be taken the semester before students begin looking for a job. Its purpose is to help students with the professional skills required in scientific industries.

CHT 280 Internship   4 Credits

Prerequisites: Advisor approval. Students work at a job site that is specifically related to his/her career objectives. Provides extensive job experience while earning credit towards an associate degree. Students will also participate in a once a week seminar.

CIM 102 Introduction to Robotics   3 Credits

Prerequisites: None. Corequisite: TEC 104. Introduces students to robotics and automated systems and their operating characteristics. Covers robotics principles of operation and work envelopes. Teaches coordinate systems and how hydraulic, pneumatic and electromechanical systems function together as a system. Covers servo and non-servo controls, system capabilities and limitations and safety.

CIM 202 Work Cell Design and Integration   3 Credits

Prerequisites: CIM 102 and MIT 205. An advanced course which provides instruction in selecting equipment, writing specifications, designing fixtures and interconnects, integrating systems, providing interfaces and making the assigned systems operational.

CIM 203 Automation Electronics   3 Credits

Prerequisites: MIT 205 and MAT 111. Interface Programmable Controllers (PLC's) with analog I/O devices. Tune Proportional Integral Derivative (PID) loops. Analyze 4 -20 mA current circuitry of a thermal process. Achieve process control with PLC analog input/output controls using a human machine interface. Program on-line and off-line via PLC networking.

CIM 205 Automated Manufacturing Systems   3 Credits

Prerequisites: CIM 202 and CIM 203. Covers basic principles and applications for planning and controlling production operations and improvement programs. Includes system characteristics and solutions for production process and service operation problems; methods analysis; cost estimating; facilities planning, tooling and services acquisition and maintenance; production, project and program scheduling; materials and inventory management; safety and loss prevention; decision-making tools and evaluation of alternatives.

CIS 074 Computer Literacy   3 Credits

Prerequisites: None. Provides a general survey of computer basics. Includes the survey and analysis of microcomputer components, compares and contrasts computer applications, investigates software options, expose students to hardware peripherals and introduces students to Windows and office applications.

CIS 100 Using Windows Environment   1 Credit

Prerequisites: None. Introduces the basic concepts of Windows and Windows-based applications. The student will acquire the necessary concepts for accomplishing the most commonly used tasks, such as creating folders, copying, deleting and moving files from one folder to another or from a folder to an auxiliary storage medium. The student will also be introduced to Windows applets. The course includes Internet and e-mail operations and an introduction to simple word processing and spreadsheet applications.

CIS 101 Introduction to Microcomputers   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031. Introduces the physical components and operation of microcomputers. Focuses on computer literacy and provides hands-on training in four areas of microcomputer application software: word processing, electronic spreadsheets, database management and presentation software. Use of a professional business integrated applications package is emphasized.

CIS 102 Information Systems Fundamentals   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031. Introduces information processing and programming with emphasis on hands-on computer experience. Examines the role of information processing in an organization including: information processing applications, computer hardware and software, internal data representation, stored program concepts, systems and programming design, flowcharting, and data communications. Review the history of computers, related computer careers, the social impact of computers, and computer security.

CIS 104 Introduction to COBOL Programming 3 Credits

Prerequisites: Program Advisor approval. Provides an introduction to COBOL (Common Business Oriented Language) with major emphasis on developing structured programming skills. Develops proficiency in applying the programming development cycle to elementary business problems.

CIS 105 Operating Systems 3 Credits

Prerequisites: Demonstrated computer proficiency through appropriate assessment or successful completion of CIS 101. Studies of computer operating systems, purposes, structure and various functions. Provides general understanding of how comprehensive sets of language translators and service programs, operating under supervisory coordination of an integrated control program, form the total operating systems of a computer.

CIS 106 Microcomputer Operating Systems 3 Credits

Prerequisites: Demonstrated computer proficiency through appropriate assessment or successful completion of CIS 101. Introduces the organization, structure, and functions of an operating system for a microcomputer. Presents the student with operating system concepts such as commands, error messages, interrupts, function calls, device drivers, structure, files and organization. Incorporates concepts into practical applications.

CIS 107 Microcomputer Programming 3 Credits

Prerequisites: CIS 102. Corequisite: CIS 113. Introduces a structured microcomputer language. Concepts in input/output commands, arithmetic expressions, conditional control, iteration techniques and subroutines will be stressed. Concepts will be incorporated into the application of solving business problems.

CIS 109 UNIX Operating Systems 3 Credits

Prerequisites: CIS 106. Studies the UNIX operating System and its use as a time-sharing operating system. Includes basic UNIX commands, use of the visual editor, the UNIX directory structure and file management with SHELL commands. Offers opportunities to apply skills and knowledge in a laboratory environment.

CIS 113 Logic, Design and Programming 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031. Introduces the structured techniques necessary for efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. Includes program flowcharting, pseudocoding, and hierarchy charts as a means of solving these problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems. Reviews algorithm development, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks. Offers students an opportunity to apply skills in a laboratory environment.

CIS 114 Principles of Management Information Systems 3 Credits

Prerequisites: CIS 102 and BUS 101. Examines the functions and operations required to manage information for business decisions. Focuses on the use of various information technologies and tools that support transaction processing, decision-making and strategic planning. The diverse information needs of different organizations within a business will be used as examples of practical applications of MIS technology.

CIS 116 Introduction to Java Programming 3 Credits

Prerequisites: CIS 113. Provides a basic understanding of the fundamental concepts involved when using a member of a Java programming development language. The emphasis is on logical program design using a modular approach involving task oriented program functions. Java allows the design of an Internet user interface. The application is built by selecting forms and controls, assigning properties and writing code.

CIS 201 Database Design and Management 3 Credits

Prerequisites: Demonstrated computer proficiency through appropriate assessment or successful completion of CIS 101. Introduces program applications in a database environment and includes discussion of data structures; indexed and direct file organizations; data models, including hierarchical, network, and relational; storage devices, data administration and analysis; design and implementation. Using database software, students have hands-on experience creating, modifying, retrieving and reporting from databases. Students may also develop a business application using a database language.

CIS 202 Data Communications
3 Credits

Prerequisites: CIS 102. Introduces the evolution of telecommunications and its affect on data communication systems. Topics covered will include the basic components of a communications system, a study of electrical signals used to represent data, the importance of error control when transmitting information, and the functions of network systems and their role in the communication of information. Students will also have an opportunity to explore data communications topics through research.

CIS 203 Systems Analysis and Design
3 Credits

Prerequisites: Minimum of 21 CIS credits successfully completed. In this course the student will learn methodologies pertinent to the assessment, design and implementation of business computer information systems.

CIS 204 Advanced COBOL Programming
3 Credits

Prerequisites: CIS 104. Continues topics introduced in CIS 104 with more logically complex business problems. Develops a higher level of COBOL proficiency as well as greater familiarity with debugging techniques. Uses the structured approach through class instruction and laboratory experience.

CIS 205 Database Design
3 Credits

Prerequisites: CIS 201. Introduces program applications in a database environment with emphasis on loading, modifying, querying the database by means of a host language. Discusses data structures; indexed and direct file organizations; models of data, including hierarchical, network and relational; storage philosophies, data administration and analysis; design; and implementation.

CIS 206 Project Development with High-Level Tools
3 Credits

Prerequisites: Program advisor approval. Analyzes established and evolving methodologies for the development of business-oriented computer information systems. Develops competencies in techniques that apply modern software tools to generate applications directly, without requiring detailed and highly technical program writing efforts.

CIS 207 Midrange/Mainframe Database Management Systems
3 Credits

Prerequisites: Demonstrated computer proficiency through appropriate assessment or successful completion of CIS 101 and CIS 102. Presents an overview of relational database models with emphasis on midrange /mainframe management systems (DBMS). Using a variety of database tools, the student receives practical experience in creating, modifying, retrieving and reporting from databases. Students also develop business applications using the database language.

CIS 209 Computer Business Applications
3 Credits

Prerequisites: CIS 201 and COM 101 or CIS 201 and COM 102. Corequisites: CIS 203. Requires students to apply business, microcomputer and communication skills within business applications. Emphasizes application of several forms of computerized information processing including data processing, word processing, spreadsheets, graphics and communications. Analyzes the effects of automation on the office worker, management, and the work environment, and requires written and oral presentations.

CIS 211 RPG Programming Fundamentals
3 Credits

Prerequisites: CIS 102 and CIS 113. Provides a general introduction to the RPG programming language with emphasis on hands-on programming experience. Presents the most important features of the RPG language from input/output processing to applications requiring handling. Introduces language concepts in class lecture. Includes programming lab assignments.

CIS 212 C/C++/C# Programming
3 Credits

Prerequisites: CIS 113. Provides a basic understanding of the fundamentals of procedural program development using structured, modular concepts. Emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers. Data file access methods are also presented.

CIS 213 Assembler Language Programming
3 Credits

Prerequisites: CIS 102 and CIS 113. Gives students a basic understanding of the assembler process using IBM mainframe computers. Stresses the importance of byte-wise manipulation of data fields when using low-level languages. Emphasizes the actual workings of a computer during the execution of a computer program. Discusses the role of data types, EBCDIC format of data storage and addressable memory locations.

CIS 214 Pascal Programming
3 Credits

Prerequisites: CIS 113. Provides a basic understanding of the structured programming process necessary for successful Pascal programming. Emphasizes top-down program design and modularity using Pascal procedures, functions and independent subprograms. Discuss simple and advanced data types and program control aids, algorithm development and program debugging. Provides students with a fundamental understanding of good programming technique and a basic knowledge of Pascal syntax and structure.

CIS 215 Field Study
3 Credits

Prerequisites: None. A field study class is comparable to on-the-job training activities directly related to the CIS program of study. This must be approved by the program chair and the student must be in his/her last semester. A student must have a GPA of 3.0 to apply for this study position.

CIS 216 Advanced RPG Programming
3 Credits

Prerequisites: CIS 211. Offers advanced study in the use of RPG compiler language in solving business problems. Focuses on the file processing methods and a working knowledge of advanced features and techniques through laboratory experience.

CIS 220 Shell Command Language for Programmers
3 Credits

Prerequisites: CIS 109 or CIS 251. Teaches students how to write, test and debug shell procedures on a computer utilizing a UNIX operating system. Presents the shell and how it works, shell processes, variables, keyword and positional parameters, control constructs, special substitutions, pipelines, debugging aids, error/interrupt processing and shell command line. Offers students the opportunity to apply skills in a laboratory environment.

CIS 221 Advanced C/C++/C# Programming
3 Credits

Prerequisites: CIS 212. Continues those topics introduced in C Language Programming with emphasis on array processing, advanced debugging techniques, dynamic memory allocation, and classes. Introduces Windows programming in C++ using MFC. Provides the opportunity to apply skills in a laboratory environment. Students will be introduced to Object Oriented Design and Programming concepts using C++ language features. Differences between C++ and classical C programming will be addressed.

CIS 223 Integrated Business Software
3 Credits

Prerequisites: Demonstrated computer proficiency through appropriate assessment or successful completion of CIS 101. Presents knowledge of integrated microcomputer software concepts. Students design a complete business system utilizing all parts of an integrated microcomputer software package which can share the same data and manipulate it. Includes use of word processing, electronic spreadsheets, graphics, databases and command languages.

CIS 224 Hardware and Software Troubleshooting
3 Credits

Prerequisites: CIS 106. Presents an in-depth analysis of the components of a computer system and their relationship to each other. Includes concepts of parallel and serial connectivity, installation and maintenance of software, peripheral devices, interface cards, and device drivers. The student will analyze realistic hardware/software problems encountered in the workplace and learn techniques and procedures to implement solutions.

CIS 225 Advanced Database Management Systems
3 Credits

Prerequisites: CIS 201 or CIS 207. Emphasizes the development of advanced applications in database management.

CIS 227 Topics in Information Management
3 Credits

Prerequisites: CIS 114. Discusses topics of current interest in information management. Includes examples from production, operations, accounting, finance, marketing, sales and human resources. Focuses on special interest projects. Utilizes field trips, guest speakers, audio-visual activities and seminars.

CIS 229 Seminar I
1 Credit

Prerequisites: Program Advisor approval. Discusses topics of current interest in computerized information management with emphasis on applications of information management skills during lab time. Identifies and offers various seminar topics each term under this course number.

CIS 230 Seminar II
2 Credits

Prerequisites: Program Advisor approval. Discusses topics of current interest in computerized information management with emphasis on applications of information management skills during lab time. Identifies and offers various seminar topics each term under this course number.

CIS 231 Structured Query Language   3 Credits

Prerequisites: CIS 201 or CIS 207. SQL is now a dominant language used in mainframe, mini, and microcomputer databases (Access, dBASE, paradox, DB2, FoxPro, Oracle, SQL Server, and Btrieve) by diverse groups such as home computer owners, small businesses, large organizations, and programmers. It acts as a bridge between the user, the database management system, the data tables and transactions involving all three.

CIS 232 Visual Basic Programming   3 Credits

Prerequisites: CIS 113. A basic understanding of the fundamental concepts involved when using a member of a Windows programming development language. The emphasis is on logical program design using a modular approach involving task oriented program functions. Visual Basic applications are built by selecting forms and controls, assigning properties, and writing code.

CIS 233 Graphical User Interface: Windows   3 Credits

Prerequisites: Program Advisor approval. Provides a foundation of fundamental concepts in the use of GUI – type software. Explores the Windows operating system, accessories, and various operating system applications. Develops proficiency with Windows operations including customizing the environment, integrating operating systems applications, and managing files.

CIS 235 Network Fundamentals   3 Credits

Prerequisites: CIS 106. A study of local area networks, their topologies and their functions and provides a general understanding of the basic LAN protocols. Topics covered include: fundamental concepts and terminology, the IEEE/ISO Logical Link Control standard, construction of a LAN, and LAN data links for internet works.

CIS 236 Advanced Java Programming   3 Credits

Prerequisites: CIS 116. Continues those topics introduced in CIS 116 with emphasis on arrays, graphics, inheritance, the Abstract Windows Toolkit (AWT), using layout managers, and other various Java tools and concepts. Provides the opportunity to apply skills in a laboratory environment.

CIS 237 Advanced Visual Basic Programming   3 Credits

Prerequisites: CIS 232. Continues those topics introduced in CIS 232. The emphasis is on data file design, data handling, database access, ActiveX, menus, variable arrays, and Visual Basic. Students will use advanced features to increase their level of proficiency in developing Visual Basic applications.

CIS 240 A+ Core Hardware   3 Credits

Prerequisites: CIS 106. One of two courses required to prepare the student to take and pass the A+ certification examination. This course deals with the A+ core hardware objectives. The objectives include identification of basic terms, concepts and functions of system modules, and basic procedures for adding and removing field replaceable units. A review of portable system components, identification of system resources, and other detailed information concerning PC architecture, hardware and standards. Meeting all course requirements will place the student in an excellent position for taking and passing the CompTIA's A+ core hardware examination.

CIS 241 A+ Operating System   3 Credits

Prerequisites: CIS 106. One of two courses required to prepare the student to take and pass the A+ certification examination. This course deals with the A+ Operating System Technologies objectives. They include identification of basic terms, concepts and function of operating systems in microcomputers and basic procedures for installation, upgrade and utilization. A review of basic concepts and procedures for creating, viewing, and managing files, using utility programs and understanding normal operation and symptoms relating to common problems. Meeting all course requirements will place the student in an excellent position for taking and passing the CompTIA's A+ Operating System Technologies examination.

CIS 243 Novell Administration I   3 Credits

Prerequisites: CIS 235. Introduces the organization, structure, functions, and administration of a network operating system. This course is designed to train the student in administration of a local area network. Presents network operating system concepts such as file and shared printing, data protection, application installation, and electronic messaging. Concepts will be incorporated into practical applications.

CIS 244 Novell Advanced Administration   3 Credits

Prerequisites: CIS 243. Provides students with the knowledge and skills needed to design, configure, and administer a complex network. The course is designed to provide students with an advanced skill set.

CIS 245 Networking Technology Concepts
3 Credits

Prerequisites: CIS 235. Provides students with an excellent foundation upon which to build their network training. The course covers the basics of computer networking, including terms and concepts. Networking technology—how it works, and why it works – is made clear in this course, where concepts like contemporary network services, transmission media, and protocols are explained. Students learn how protocols are used in networking implementations from many vendors, especially those most common in today's LANs and WANs.

CIS 246 Novell Hardware Service and Support
3 Credits

Prerequisites: CIS 243. Focuses on the prevention, diagnosis, and resolution of hardware-related problems encountered when working with NetWare. While the course assumes the use of NetWare, the skills learned will have a great deal of practical value to network administrators as they optimize and maintain systems while using many other Novell products. The course explores a number of research tools that will assist the network administrator in acquiring the information needed to solve "real-world" problems. It includes extensive hands-on exercises, which make up approximately 60% of all class time. The course materials are designed to provide a continuing reference that will be useful back at the student's worksite.

CIS 247 Novell Administration III
3 Credits

Prerequisites: CIS 243. How to design and implement Novell eDirectory trees and related components in any type of organization for different types of organizational goals using different types of network operating systems.

CIS 251 Advanced Operating Systems: LINUX
3 Credits

Prerequisites: CIS 106. Studies advanced topics in operating systems as they apply to networking applications. Provides data relating to the different types of operating systems including workstation and server. This course will provide the necessary information in preparation for the CompTia Linux+ Certification Exam.

CIS 252 Web Site Development
3 Credits

Prerequisites: CIS 102. Creates a business or personal World Wide Web presence and uses Web technology. Creates a professional and successful World Wide Web site. Basic materials necessary to take the I-Net+ or CIW Certification Exam will be presented in this course.

CIS 253 Graphic Image Lab
3 Credits

Prerequisites: CIS 102. A fundamental course that introduces students to computer design graphic software. The focus of the course is on understanding basic computer graphics terminology, the mastering of fundamental photo editing and basic design skills and development of efficient working styles.

CIS 255 Network Server Technologies
3 Credits

Prerequisites: CIS 235 or CIS 202. A study of network servers, particularly the hardware and software necessary to efficiently maintain a modern network. This course focuses on installation, configuration, administration, and troubleshooting of network servers. In addition it deals with site preparation, performance monitoring, and disaster recovery. The course provides support and guidance for preparation of the student to take the Server+ certification exam, a COMPTIA vendor neutral test which can apply to Microsoft's MCSA, or stand on its own merit. This course contains elements above basic hardware fundamentals of a standard PC and so the certification is considered more advanced than the A+. In addition this course deals with Industry Standard Server Architecture (ISSA) issues, such as RAID, SCSI, multiple CPUs, SANs and other networking server issues.

CIS 257 Advanced Web Site Development
3 Credits

Prerequisites: CIS 252. Provides a comprehensive introduction to web programming, with little or no prior programming experience required. The student will continue with HTML and move progressively to more complex programming languages. It emphasizes a hands-on approach, and contains clear instructions for carefully chosen visual examples from a wide variety of topics. This class is designed to encourage students to find ways to capture their interests in creative web pages. This class provides most of the basics included in the CIW Site Designer Exam.

CIS 259 Web Administration
3 Credits

Prerequisites: CIS 235, CIS 251 and CIS 252. Gives the basics covered in the CIW Server Administrator Certification Exam. Students will learn to configure and manage corporate Internet and intranet infrastructure, monitor and tune Web, FTP, news and mail servers and configure and deploy e-business solutions servers for midsize to large businesses.

CIS 262 Windows Client Operating System   3 Credits

Prerequisites: CIS 202. Provides instruction to demonstrate the ability to implement, administer, and troubleshoot information systems that incorporate Microsoft Windows. This course is designed to follow a preparation path towards the appropriate Microsoft certification series.

CIS 263 Windows Network Operating Systems   3 Credits

Prerequisites: CIS 202 or CIS 235. Provides instruction to demonstrate the ability to implement, administer, and troubleshoot information systems that incorporate Microsoft Windows Server. This course is designed to follow a preparation path towards the appropriate Microsoft certification series.

CIS 264 Implementing and Administering a Windows Network Infrastructure   3 Credits

Prerequisites: CIS 262 or CIS 263. Provides instruction to demonstrate the ability to install, manage, monitor, configure, and troubleshoot DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows network infrastructure. In addition, this course builds the skills required to manage, monitor, and troubleshoot Network Address Translation and Certificate Services. This course is designed to follow a preparation path towards the appropriate Microsoft certification series.

CIS 265 Managing a Windows Network   3 Credits

Prerequisites: CIS 262 or CIS 263. Provides instruction to demonstrate the ability to administer, support, and troubleshoot information systems that incorporate Microsoft Windows. This course is designed to follow a preparation path towards the appropriate Microsoft certification series.

CIS 266 Administering Windows Directory Services   3 Credits

Prerequisites: CIS 263. Provides instruction to demonstrate the ability to install, configure, and troubleshoot the Windows Active Directory™ components, DNS for Active Directory, and Active Directory security solutions. In addition, this test measures the skills required to manage, monitor, and optimize the desktop environment by using Group Policy. This course is designed to follow a preparation path towards the Microsoft exam 70-217: Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure.

CIS 275 CISCO 1 Cisco Network Fundamentals   4 Credits

Prerequisites: Program Advisor approval. The first of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer-networking field. Includes, but isn't limited to, safety, networking, network terminology and protocols, network standards, local-area networks (LANS), wide-area networks (WANS), Open System Interconnection (OSI) models, cabling, tools, routers, router programming, Ethernet, Internet Protocols (IP) addressing, and network standards. 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. Instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations.

CIS 276 CISCO 2 Routers and Internet Operating Systems   4 Credits

Prerequisites: CIS 275. The second of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer-networking field. Includes, but isn't limited to, safety, networking, network terminology and protocols, network standards, local-area networks (LANS), wide-area networks (WANS), Open System Interconnection (OSI) models, cabling, tools, routers, router programming, Ethernet, Internet Protocols (IP) addressing, and network standards. 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. Instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations.

CIS 277 CISCO 3 Local Area Networks and Design   4 Credits

Prerequisites: CIS 276. The third of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer-networking field. Includes, but isn't limited to, safety, networking, network terminology and protocols, network standards, local-area networks (LANS), wide-area networks (WANS), Open System Interconnection (OSI) models, cabling, tools, routers, router programming, Ethernet, Internet Protocols (IP) addressing, and network standards. 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. Instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations.

CIS 278 CISCO 4 Wide Area Networks and Design   · 4 Credits

Prerequisites: CIS 277. The fourth of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer-networking field. Includes, but isn't limited to, safety, networking, network terminology and protocols, network standards, local-area networks (LANS), wide-area networks (WANS), Open System Interconnection (OSI) models, cabling, tools, routers, router programming, Ethernet, Internet Protocols (IP) addressing, and network standards. 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. Instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations.

CIS 280 Co-op/Internship   1-6 Credits

Prerequisites: Program Advisor Approval. Provides students with the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit toward an associate degree. Fourth semester standing and a cumulative GPA of 2.0 or better is recommended for Internship students.

COM 101 Fundamentals of Public Speaking   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces fundamental concepts and skills for effective public speaking, including audience analysis, outlining, research, delivery, critical listening and evaluation, presentational aids, and use of appropriate technology.

COM 102 Introduction to Interpersonal Communication   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Focuses on the process of interpersonal communication as a dynamic and complex system of interactions. Provides theory, actual practice, and criticism for examining and changing human interactions in work, family, and social contexts. Includes topics such as perception, self-concept language, message encoding and decoding, feedback, listening skills, conflict management, and other elements affecting interpersonal communication.

COM 201 Introduction to Mass Communication   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. A survey of the print and electronic media that compose the mass media industry. Included in the survey are the history, technology, utilization and influence of each of the mediums as well as their symbiotic relationship to each other.

COM 202 Small Group Communication   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introduction to communication principles and practices that enable small groups, such as committees, conferences and public discussions, to function effectively as well as the practices which limit small group effectiveness. The course is pragmatic in approach, and the student will learn small group dynamics through participation.

COM 203 Oral Interpretation of Literature   3 Credits

Prerequisites: COM 101 and ENG 111. Designed to develop the student's ability to select, analyze, interpret and communicate various types of literature to diverse audiences and to enhance the student's appreciation of literature.

COM 204 Voice and Articulation   3 Credits

Prerequisites: COM 101. Designed to improve the student's vocal abilities by providing a body of knowledge about voice production and diction and enabling the student to use this knowledge for his/her self-improvement.

CON 101 Introduction to Construction Technology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Presents history of building construction to present-day applications emphasizing future trends and construction as a career. Provides practice in the operation, maintenance and safety of various tools including the builder's level and transit.

CON 102 Construction Materials   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Develops skills in identifying building materials commonly used in modern building construction. Provides experience in the application of locally accessible materials.

CON 106 Construction Blueprint Reading   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Provides instruction and practice in the use of working drawings and applications from the print to the work. Includes relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, room schedules and plot plans.

CON 127 Electrical Basics   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. An introductory course covering both AC and DC circuits. Studies include electron theory, Ohm's Law, Watt's Law, Kirchoff's Law, series circuits, series-parallel circuits, electromagnetic induction, current, voltage, resistance, power, inductance, capacitance, and transformers. Stresses the use of electrical equipment, troubleshooting, installation of hardware, metering equipment, lights, switches, and safety procedures and practices.

CON 204 Estimating and Specifications   3 Credits

Prerequisites: CON 106. Involves the students with the estimating process for residential construction. Emphasizes reading blueprints and specifications, estimating labor costs, materials take-off and pricing.

CON 280 Co-op/Internship   1-6 Credits

Prerequisites: Program Advisor approval. Gives students the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit toward an associate degree.

CRJ 101 Introduction to Criminal Justice Systems   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introductory and fundamental course that covers the purposes, functions, and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections. This course further explores the interrelationships and responsibilities of these three primary elements of the criminal justice system.

CRJ 103 Cultural Awareness   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Emphasizes the study of American criminal justice problems and systems in historical and cultural perspectives, as well as discussing social and public policy factors affecting crime. Multidisciplinary and multicultural perspectives are emphasized.

CRJ 105 Introduction to Criminology   3 Credits

Prerequisites: None. Corequisites: CRJ 101 and SOC 111. Critically examines the history and nature of the major theoretical perspectives in criminology, and the theories found within those perspectives. Analyzes the research support for such theories and perspectives, and the connections between theory and criminal justice system practice within all the major components of the criminal justice system. Demonstrates the application of specific theories to explain violent and non-violent criminal behavior on both the micro and macro levels of analysis.

CRJ 111 Introduction to Traffic Enforcement and Investigation   3 Credits

Prerequisites: None. Examines the role of law enforcement in traffic safety, traffic administration, traffic laws, accident investigation, police safety, and patrol practices.

CRJ 113 Criminal Investigation
3 Credits

Prerequisites: CRJ 101. A study of the elements and techniques of criminal investigations. Primary aspects include crime scene examination, collection of evidence and search for witnesses, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information-gathering activity and chain of custody procedures will also be reviewed.

CRJ 115 Criminalistics
3 Credits

Prerequisites: CRJ 101. Examines the rules of evidence as applied in criminal investigation and criminal court with a discussion of relevant issues and legal standards.

CRJ 117 Introduction to Forensics
3 Credits

Prerequisites: None. Studies the organization and analysis of investigative evidence, basic considerations in preparing evidential documentation for presentation in court, collection and preservation of physical evidence, and elements of legal proof in submission of evidence.

CRJ 118 Introduction to Law Enforcement
3 Credits

Prerequisites: CRJ 101. Introduces fundamental law enforcement operations and organization. Includes the evolution of law enforcement at federal, state, and local levels.

CRJ 121 Juvenile Law and Procedures
3 Credits

Prerequisites: CRJ 123. Examination of the philosophy and theory behind the juvenile justice system and how juvenile law reflects that philosophy. Examination of the development of juvenile law and procedures, early juvenile law, landmark Supreme Court cases in juvenile justice, issues in juvenile law, and juvenile adjudicatory proceedings.

CRJ 123 Juvenile Justice System
3 Credits

Prerequisites: CRJ 101. Examination of the philosophy and theory behind the juvenile justice system and its component parts or systems. Analysis of the police response to juvenile delinquency followed by the role of the prosecuting attorney, the juvenile court, juvenile correctional facilities, and community-based programs designed for juvenile offenders. The primary focus of attention will be on the level of integration of these systems into a coherent system of justice that effectively and equitably responds to juvenile crime. The level of cooperation and coordination existing between the various component parts of the juvenile justice system will be critiqued, and the effectiveness of the juvenile system as a whole will be evaluated. Special attention will be given to the role of the juvenile justice system within the context of social, political, and economic inequality.

CRJ 131 Community-Based Corrections
3 Credits

Prerequisites: HMS 105. Reviews programs for convicted offenders that are alternatives to incarceration, including diversion, house arrest, restitution, community service, and other topics. Reviews post-incarceration situations, probation and parole.

CRJ 133 Legal Issues in Corrections
3 Credits

Prerequisites: HMS 105. Examines the four historical stages of development of the American prison system, and the six major rationales for punishment associated with those stages. Identifies the criminological perspectives that inform the rationales for punishment, and the correctional policy implications relative to each rationale. Analyzes the research support for each of the six rationales for punishment, and the policy implications associated with them. Connects relevant legal issues to the correctional policy implications relative to each rationale for punishment. Locates appellate court decisions relative to correctional policy within the context of contemporary social, economic, and political conditions and controversies. Identifies the specific rights of prisoners and the responsibilities of the state with respect to the conditions of confinement.

CRJ 202 Adjudication
3 Credits

Prerequisites: None. Introduces topics related to the adjudication process in criminal cases, including arraignments and preliminary hearings, suppression hearings, trials, sentencing, juvenile court, and probation and parole. Reviews the role of criminal justice personnel in court processes.

CRJ 203 Police and Community Relations
3 Credits

Prerequisites: CRJ 101. Introduces police-community relations, examines trends, practices, social and individual effects of police work. Emphasis on police line and support operations. Analysis of operations, enforcement policy, operations during civil disorders and disaster, as well as the role of the police officer in achieving and maintaining public support, human relations, and relationship with violators and complainants.

CRJ 205 Procedural Criminal Law　　　　　　　　　　　　　　　　　　　　　　　3 Credits

Prerequisites: LEG 211. Covers the theory and practice of procedural criminal law and introduces the student to the laws of arrest, search and seizure, probable cause, due process, confessions, suspect identification and the many types of surveillances, all the while emphasizing Indiana Criminal Law.

CRJ 215 Police Administration and Organization　　　　　　　　　　　　　　　　3 Credits

Prerequisites: CRJ 101. Introduction to the basic principles of law enforcement administration and organizational structure, their function and activities, records, communication, public relations, personnel and training, policy formation, evaluation of personnel and complaint processing and planning. The student who successfully completes this course will have an understanding of traditional and contemporary management approaches and techniques.

CRJ 222 Special Issues in Youth Services　　　　　　　　　　　　　　　　　　3 Credits

Prerequisites: CRJ 123 and HMS 215. Examines issues commonly experienced in the youth care field.

CRJ 223 Special Issues in Corrections: Classification and Treatment of Inmates　　3 Credits

Prerequisites: HMS 240 and CRJ 131. Investigates topics of special interest related to corrections, with an emphasis on the classification and treatment of inmates. Topics may vary to reflect contemporary corrections issues.

CRJ 255 Interview and Interrogation　　　　　　　　　　　　　　　　　　　　3 Credits

Prerequisites: CRJ 101, CRJ 103 and CRJ 105. Introduces students to the art of interviewing and interrogation, and further introduces them to the individual personality of the witness and/or suspect, and the means in which to secure valid information, admissions, and confessions, obtained legally and ethically, that are corroborative in nature, and that can be used to solve crimes and be introduced as evidence in court proceedings.

CRJ 280 Internship　　　　　　　　　　　　　　　　　　　　　　　　　　　4 Credits

Prerequisites: LEG 211 and 30 of 64 credits completed successfully. Provides fieldwork experience in an approved social, educational, law enforcement, corrections or other criminal justice organization.

DEN 102 Dental Materials and Lab I　　　　　　　　　　　　　　　　　　　　3 Credits

Prerequisites: Admission to the Dental Assistant program. The first in a series of two courses that reviews in-depth the properties of dental materials, proper modes of manipulation, necessary armamentarium used, and technical duties dental assistants can perform. Stresses clinical behavior of materials and biological factors of importance to dental assistant.

DEN 115 Preclinical Practice I　　　　　　　　　　　　　　　　　　　　　　4 Credits

Prerequisites: Admission to the Dental Assistant program. The first in a series of two courses that introduce in-depth qualification and legal/ethical requirements of the dental assistant. Surveys history and professional organizations. Emphasizes clinical environment and responsibilities, chairside assisting, equipment and instrument identification, tray setups, sterilization, characteristics of microorganisms and disease control.

DEN 116 Dental Emergencies/Pharmacology　　　　　　　　　　　　　　　　2 Credits

Prerequisites: Admission to the Dental Assistant program. An in-depth course that surveys the most commonly utilized and required first aid measures for emergencies. Examines proper techniques and procedures as well as equipment, medications and positioning for care of the patient. Reviews anatomy/physiology and cardiopulmonary rescue as provided by the American Heart Association.

DEN 117 Dental Office Management　　　　　　　　　　　　　　　　　　　　2 Credits

Prerequisites: Admission to the Dental Assistant program. Focus on the principles of administrative planning, bookkeeping, recall programs, banking, tax records, computer software, insurance, office practice and management as related to the dental office. Attention is given to techniques of appointment control, record keeping and credit and payment plans.

DEN 118 Dental Radiography　　　　　　　　　　　　　　　　　　　　　　　4 Credits

Prerequisites: DEN 115 and DEN 123. An in-depth course that focuses on the principles, benefits, effects, and control of X-ray production. Covers history, radiation sources, modern dental radiographic equipment and techniques, anatomical landmarks, dental films and processing. Emphasizes avoidance of errors while exposing and processing dental radiographs.

DEN 122 Clinical Practicum I
1 Credit

Prerequisites: DEN 102, DEN 115, DEN 116 and DEN 123. An in-depth course that focuses on the performance of chairside skills that are applied in a clinical office situation on live patients.

DEN 123 Dental Anatomy
2 Credits

Prerequisites: Admission to the Dental Assistant program. An in-depth course that focuses on oral, head and neck anatomy, basic embryology, histology, tooth morphology and charting dental surfaces related to the dental field. Includes dental anomalies, pathological conditions and terminology relevant to effective communication.

DEN 124 Preventive Dentistry/Diet and Nutrition
2 Credits

Prerequisites: DEN 115 and DEN 123. An in-depth course that emphasizes the importance of preventive dentistry and the effects of diet and nutrition on dental health techniques of assisting patients in the maintenance of good oral hygiene.

DEN 125 Preclinical Practice II
3 Credits

Prerequisites: DEN 102, DEN 115, DEN 116 and DEN 123. The second in a series of two in-depth courses that continues Preclinical Practice I. Anesthesia is presented. The following dental specialties are presented: Oral and Maxillofacial Surgery, Periodontics, Endodontics, Pediatric Dentistry, Orthodontics, Prosthodontics, and Dental Public Health.

DEN 129 Dental Materials and Lab II
3 Credits

Prerequisites: DEN 102. The second in a series of two in-depth courses that reviews the properties of dental materials, proper modes of manipulation, necessary armamentarium used, and technical duties dental assistants can perform. Stresses clinical behavior of materials and biological factors of importance to dental assistant.

DEN 130 Clinical Practicum II
5 Credits

Prerequisites: All DEN Courses. An in-depth clinical learning experience that provides increased practical chairside dental assisting experience to be gained from private dental practices in general and specialty areas of dentistry. Opportunity for increased skill development in clinical support and business office procedures also provided. Weekly seminars are included as an integral part of the learning experience. Simulated exams are administered to review for the national certification exam.

DEN 131 Basic Integrated Science
2 Credits

Prerequisites: Admission to the Dental Assistant program. An introductory course that examines human body as integrated unit; includes anatomy, physiology and medical terminology.

DSN 103 CAD Fundamentals
3 Credits

Prerequisites: None. Provides students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands-on experience using CAD software. They will be expected to complete several projects (increasing in difficulty) relating to command topics covered on a weekly basis.

DSN 104 Mechanical Graphics
3 Credits

Prerequisites: DSN 103. Covers working drawings both in detailing and assembly. Presents fastening devices, thread symbols and nomenclature, surface texture symbols, classes of fits, and the use of parts lists, title blocks and revision blocks.

DSN 105 Architectural Design I
3 Credits

Prerequisites: TEC 102 and DSN 103. Presents a history and survey of architecture and focuses on creative design of buildings in a studio environment. Covers problems of site analysis, facilities programming, space planning, conceptual design, proper use of materials, selection of structure and construction techniques. Develops presentation drawings, and requires oral presentations and critiques. Generation of form and space is addressed through basic architectural theory, related architectural styles, design strategies, and a visual representation of the student's design process.

DSN 106 Descriptive Geometry
3 Credits

Prerequisites: TEC 102. Introduces fundamental principles in developing graphical solutions to engineering problems. Topics covered in this course include true length, piercing points on a plane, line intersections, true shapes, revolutions, and developments using successive auxiliary views.

DSN 107 History of Architecture
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Studies the ingenuity and imagination of the human spirit in shaping the built environment related to cultural, political, social, and technological history. Presents a survey of architectural styles, architects, design philosophies, and building materials used by time, period, country, region and city. Requires oral presentations, essays, term papers, research and small projects. Field trips to historical architectural sites are a part of this course.

DSN 108 Residential Design
3 Credits

Prerequisites: DSN 103. Covers residential design and drafting. Includes interior space planning, structural design and development of working drawings. Provides opportunity for students to design a residence using accepted building standards.

DSN 109 Construction Materials and Specifications
3 Credits

Prerequisites: None. Introduces various construction materials, composition and application. Studies specifications of materials, construction contracts, and applications required in the building industry.

DSN 110 Architectural Rendering
3 Credits

Prerequisites: TEC 102. Presents a survey and history of pictorial drawings. Studies light and color, rendering media, and application of different architectural rendering techniques and media through a series of exercises.

DSN 113 Intermediate CAD
3 Credits

Prerequisites: DSN 103. Improves the student's CAD ability by presenting intermediate CAD commands, which will lead to the creation of advanced prototype drawings, graphic manipulation of symbol libraries, the utilization of advanced dimensioning techniques, and application of data sharing techniques. Detailed plotting instruction will also be covered. Students will be expected to complete several projects relating to command topics covered on a weekly basis.

DSN 201 Schematics
3 Credits

Prerequisites: TEC 102 and DSN 103. Includes the layout of the various types of schematic drawings. Students will prepare finished drawings for the manufacture or installation of plumbing, heating, electrical, electronic and fluid power drawings.

DSN 202 CAD Customization and Programming
3 Credits

Prerequisites: DSN 103. Covers customizing of a CAD system. Covers methods used to make CAD system more efficient for the individual user.

DSN 204 Architectural Design II
3 Credits

Prerequisites: DSN 105. Presents advanced computer-aided design topics in architectural design. Utilizes current (UBC) information for project design. Includes all necessary drawings needed for the construction process.

DSN 206 Mechanical and Electrical Equipment
3 Credits

Prerequisites: DSN 103 and MAT 111. Focuses on mechanical and electrical requirements for buildings. Studies electrical load calculations, wire sizing and circuits, plumbing requirements, fixture units and pipe sizing. Includes heating systems, duct layout and sizing.

DSN 207 Die Design
3 Credits

Prerequisites: DSN 104 and TEC 101. Studies the detailing and design of blanking, piercing, and forming dies. Covers material reaction to shear, cutting clearances and net gauging.

DSN 208 Structural Design and Detailing
3 Credits

Prerequisites: DSN 109, DSN 103 and MAT 111. Focuses on the design and detailing of commercial structural members, their connections, materials and methods of construction. Concentrates on traditional materials such as reinforced concrete, masonry, steel, and timber. Develops understanding of element behavior, its significance to detailing, and establishes the ability to prepare working drawings for structural projects.

DSN 209 Estimating   **3 Credits**

Prerequisites: DSN 109. This course provides students with an understanding of building an estimate of the probable construction costs for any given project. To prepare an estimate of quantities, the student estimator must become familiar with working drawings, specifications, and various bid documents. While computerized estimating software is commonplace in industry, it is also essential that the student is able to apply the math theory behind quantification.

DSN 210 Surveying   **3 Credits**

Prerequisites: MAT 121 or MAT 131 or MAT 134. Provides students with a basic understanding of surveying equipment, procedures for performing measurements, turning angles, determining grades and other field applications. Surveying techniques and computations using the level, chain, and transit in calculating areas, lines, and grades will be covered in this course.

DSN 211 Commercial Structures I   **3 Credits**

Prerequisites: DSN 204 and MAT 111. Presents the design and drawing of commercial structures utilizing the Uniform Building Code (UBC). Focus is directed to structural systems and details of commercial structures including wood, steel, and concrete. Provides architecture students with essential skills to perform structural analysis of buildings.

DSN 212 Commercial Structures II   **3 Credits**

Prerequisites: DSN 211. Focuses on the planning and drawing of commercial structures. Uses working drawings for pre-engineered and concrete/steel structures. Applies lessons learned from DCT 211 to new structure(s).

DSN 213 CAD Mapping   **3 Credits**

Prerequisites: DSN 103 and DSN 210. Covers the concepts of map-making with CAD software and typical media found in the industry. Civil application of mapping procedures including profiles, topography, and site plans will also be discussed.

DSN 214 Kinematics of Machinery   **3 Credits**

Prerequisites: DSN 104 and MAT 121 or MAT 131 or MAT 134. This non-calculus based course studies the application of kinematics theories to real world machinery. Static and motion applications will be studied.

DSN 215 Electronic Schematics   **3 Credits**

Prerequisites: TEC 102 and DSN 103. Introduces students to electronic schematics, standardized symbols, and acceptable practices in creating various electrical and electronic drawings. Emphasizes the creation and manipulation of basic symbols, connection diagrams, block and logic diagrams, including the use of figure parts and data extraction. Introduction to analog and digital multimeters and other electronic measuring instruments.

DSN 216 Jig and Fixture Design   **3 Credits**

Prerequisites: DSN 104 and TEC 101. The processes of drafting and design as applied to tooling. Emphasizes tooling, locators, supports, holding devices, clearances and design as it pertains to jig and fixtures.

DSN 217 Design Process and Applications   **3 Credits**

Prerequisites: DSN 104. Corequisites: DSN 222. Provides the student an opportunity to apply all previously acquired knowledge in the design of a new or existing consumer product. Students will study the design processes with consideration given to the function, aesthetics, cost economics and marketability of the product. A research paper and product illustration is required in this course.

DSN 220 Advanced CAD   **3 Credits**

Prerequisites: TEC 102 and DSN 103. Focuses on advanced CAD features, including fundamentals of three-dimensional modeling for design. Includes overview of modeling, graphical manipulation, part structuring, coordinate system, and developing strategy of modeling. Advanced CAD will enable the student to make the transition from 2D drafting to 3D modeling.

DSN 221 Statics   **3 Credits**

Prerequisites: MAT 121 or MAT 131 or MAT 134. Studies applied mechanics dealing with bodies at rest without the use of calculus. Covers units, vectors, forces, equilibrium, moments and couples, planar force systems, distributed forces, analysis of structures, and friction.

DSN 222 Strength of Materials   3 Credits

Prerequisites: DSN 221. Studies internal stresses and physical deformations caused by externally applied loads to structural members. Covers stress and strain, shear stress, properties of areas, shearing force and bending moment, deformation of beams, columns and combined stresses. Studies various materials' physical and mechanical properties.

DSN 225 Portfolio Preparation   3 Credits

Prerequisites: Successful completion of 24 hours of coursework in the Design Program. Focuses on the student's final portfolio for graduation and preparation for the job interview. Finalizes design project work demonstrating the required knowledge and skills for degree achievements along with resume and cover letter preparation. A presentation for the portfolio is required in this class. Every student must submit a copy of the final portfolio for departmental archives upon graduation.

DSN 227 Geometric Dimensioning and Tolerancing   3 Credits

Prerequisites: TEC 102. Introduces the fundamental principles of geometric dimensioning and tolerancing according to the latest ANSI standards. Students will apply geometric dimensioning and tolerancing symbols along with tolerances of form, profile, orientation, run-out, and location to mechanical problems.

DSN 228 Civil I   3 Credits

Prerequisites: DSN 103 and MAT 111. Presents an overview of the basics of infrastructure related design topics, including the study of roadway and drainage systems. Emphasizes the preparation of drawings pertaining to infrastructure design and site development. Numerical calculations related to the design topics will be discussed.

DSN 229 Civil II   3 Credits

Prerequisites: DSN 228. Presents advanced infrastructure related design topics, including highway structures, pavement types and geotechnical considerations. Emphasizes the preparation of drawings pertaining to various types of bridges. Drawing presentation of geotechnical site studies and pavement designs is also reviewed. Numerical calculations related to the design topics will be explained.

DSN 230 Computer Modeling and Animation   3 Credits

Prerequisites: DSN 103. Contains an historical overview of the development of computer-generated imagery, including CADD, computer animation, computer art and visualization. This course will cover various aspects of 3-Dimensional modeling, lighting, and camera placement, as well as compositional and design aspects for presentation. Computer animation techniques such as keyframing, inverse kinematics, and simulation will be introduced. The course also includes an overview of storyboarding, scene composition, and lighting.

DSN 250 Vector Mechanics-Statics   3 Credits

Prerequisites: MAT 218. Includes resolution and composition of forces, moments, principles of equilibrium and application to trusses and jointed frames, friction, center of gravity and second moments of areas. Uses vector analysis throughout.

DSN 251 Dynamics   3 Credits

Prerequisites: DSN 250. Covers rectilinear and curvilinear motions, force, mass and acceleration, projectiles, pendulums, inertia forces in machines, work and energy, impulse and momentum and impact.

DSN 252 Mechanics of Solids   4 Credits

Prerequisites: DSN 250. Covers general principles of stress and strain, including elastic and inelastic behavior, shear, torsion, stresses in beams and deflection of beams and columns. The lab portion will be used to determine various materials' physical and mechanical properties.

DSN 280 Co-Op/Internship   3 Credits

Prerequisites: None. Gives students the opportunity to work at a job site that is specifically related to their career objectives. Provides on-the-job experience while earning credit towards an associate's degree.

ECE 100 Introduction to Early Childhood Education   3 Credits

Prerequisites: None. Entry level course for Early Care and Education teachers. Provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula and services available to young children. Opportunities to explore a variety of opportunities in the field through lecture, activities, and classroom observations.

ECE 101 Health, Safety, and Nutrition   3 Credits

Prerequisites: None. Examines basic principles of child development, Developmentally Appropriate Practices (DAP), importance of family, licensing, and elements of quality care of young children with an emphasis on the learning environment related to health, safety, and nutrition. Entry-level course for early care and education teachers.

ECE 103 Curriculum in Early Childhood Classroom   3 Credits

Prerequisites: None. Entry level course for Early Care and Education teachers. Examines Developmentally Appropriate environments and activities in various childcare settings. Explores the varying developmental levels and cultural backgrounds of children.

ECE 105 CDA Process   3 Credits

Prerequisites: Program Chair Approval. Prepares the student for the verification process for the Child Development Associate (CDA) credential. Students are provided opportunities for practical experience through supervised participation in early care and education settings.

ECE 107 Introduction to Teaching   3 Credits

Prerequisites: None. An introductory course which explores philosophical and historical foundations of the American educational system. Examines the ecological factors that impact the classroom. Defines the characteristics of the competent teacher. Provides opportunities for observations, hands on learning experiences and volunteer service.

ECE 110 Infant/Toddler Growth and Development   3 Credits

Prerequisites: None. Studies the physical, social, emotional, cognitive, and language development of infants and toddlers from conception through age three. Examines the crucial role of brain development and ecological systems during the first three years. Responsive care by adults is recognized as crucial to the development of the infants and toddlers. Quality child care is defined.

ECE 111 Environments for Infants and Toddlers   3 Credits

Prerequisites: None. Examines physical, human and time environmental factors essential for providing quality early care and education. Discovers and assesses the various settings for infants and toddlers from the perspectives of quality and family issues. Adult-child relationships and adult-adult relationships within the environments are explored. Community resources and child advocacy efforts are examined.

ECE 120 Child Growth and Development   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Studies the physical, social, emotional, cognitive, and moral development of children from conception to age twelve. Theories of child development, biological and environmental foundations, prenatal development, the birth process, and the newborn baby are discussed. Influences of family, community, media, and culture are considered.

ECE 130 Developmentally Appropriate Guidance in a Cultural Context   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Analyzes developmentally appropriate guidance, theory and implementation for various early care and education settings. Provide a basic understanding of the anti-bias/multicultural emphasis in the field of early childhood.

ECE 200 Family-Teacher Partnerships   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Examines the family/teacher partnership, recognizing the need to work as a team to enhance the child's development. Promotes awareness of the family as the child's first teacher, foundation, and framework for culture, language, attitudes, and values. Provides the structure for creating practices that establish active family participation. Explores issues and resources for families.

ECE 201 Skills for Parenting   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Focuses on skill development in parents that provides knowledge regarding healthy development in young children, building self-esteem, communicating with young children, setting appropriate boundaries and nurturing emotional and social development in children. Examines models of parent education, parenting styles, and the need for parent empowerment. Analyzes the effects of parent involvement in children's educational experiences.

ECE 204 Families in Transition   **3 Credits**

Prerequisites: ENG 111, SOC 111 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Examines the stages of the family life cycle and interpersonal relationships among family members. Recognizes the impact of context and culture on the family's ability to function.

ECE 205 Early Care Practicum   **3 Credits**

Prerequisites: Program Chair Approval. Provides opportunity for practical experience through observation and supervised participation in childcare settings. This practicum offers experiences with age's infant through school age and requires 144 hours of field experience in an approved early care setting.

ECE 210 Early Childhood Administration   **3 Credits**

Prerequisites: ECE 100, ECE 120, ENG 111 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Introduces principles of managing an early care and education program; emphasizes the role of the manager to include personnel and program administration and fiscal management. Explores client-community relations.

ECE 213 Infant and Toddler Programming   **3 Credits**

Prerequisites: ECE 110 or ECE 120. Studies the program planning and operation for quality infant and toddler care and education. The students examine the teacher's role in establishing positive and productive relationships with families. Exploration of essential skills and dispositions in managing an effective program are considered. The students will broaden their knowledge base of appropriate instructional strategies to enhance infant/toddler development. Students will develop activities to enhance the physical, social, emotional and cognitive development of the child, 0-36 months. Students will complete observations and field experiences with children of this age.

ECE 216 Curriculum Planning For Early Childhood Administrators   **3 Credits**

Prerequisites: ENG 111, demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050 and 18 credit hours of ECE coursework. Overview of cognitive and creative curriculum from a developmentally appropriate perspective. Examines early childhood curriculum models with an emphasis on planning and evaluating curriculum to meet the comprehensive needs of the young child. Course places emphasis on staff and family involvement in curriculum planning, implementation, and assessment.

ECE 218 Leadership and Mentoring in Early Childhood   **3 Credits**

Prerequisites: ENG 111, 9 credit hours of Early Childhood Education coursework and Program Chair approval. A basic introduction to the concept of leadership. Includes theories of leadership and teamwork and provides an opportunity for students to present a workshop to Early Childhood professional and to establish a relationship with a protégé.

ECE 220 Adolescent Growth and Development   **3 Credits**

Prerequisites: ECE 120. Examines the physical, social, emotional, cognitive, and moral development of the child age eight through adolescence. Influences of family, school, peers, community, media, and cultures are discussed. Issues such as health, puberty, school issues, peers and youth culture, and personal, including substance abuse, eating disorders, pregnancy, depression, and suicide is considered.

ECE 223 School Age Programming   **3 Credits**

Prerequisites: ENG 111. Examines environments, materials, methods and teaching styles for providing creative experiences for the school age child. Offers appropriate experiences in music, movement, art and drama as well as methods to assist students in identification and pursuit of specific personal interest areas in a school age child care setting. Review theories of adolescent growth and development, establishment of partnerships with families and positive guidance techniques for school age children.

ECE 225 Infant Toddler Practicum   **3 Credits**

Prerequisites: Program Chair Approval. Provides opportunity for practical experiences through observation, assessment and supervised participation in an infant/toddler setting. Students develop, implement and assess appropriate environments and activities for children 6 - 36 weeks. Requires 144 hours of field experience.

ECE 230 The Exceptional Child
3 Credits

Prerequisites: ECE 120 and ENG 111. Provides an introduction to caring for each exceptional child. Includes theories and practices for producing optimal developmental growth. Develops teaching techniques and explores public policy including legislative mandates. Explores the types of special needs and provides methods for assistance.

ECE 233 Emerging Literacy
3 Credits

Prerequisites: ECE 103 and ENG 111. Provides for understanding of the development of children's language arts behaviors, concepts, and skills that precede and can develop into literacy, which includes reading and writing skills. Provides understanding and skills on how the acquisition of language for young children develops into optimum literacy growth through the materials and the environments that are provided for the young children. Students will explore and evaluate literature for young children. The course introduces technology materials and techniques, which are utilized in early childhood programs. In the course the students will research, examine and evaluate various screening and assessment tools related to literacy in the early childhood.

ECE 235 Preschool Practicum
3 Credits

Prerequisites: Program Chair approval. Provides opportunity for practical experience through observation and supervised participation in early care and education setting with children ages 3-5. Students will develop and implement developmentally appropriate environments and activities.

ECE 243 Cognitive Curriculum
3 Credits

Prerequisites: ECE 103, ECE 120 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Review cognitive theories of development in relation to the domains of early learning. Analyze appropriate problem solving, math, science, and social studies curriculum in early childhood settings. Create and implement curriculum in the domains of early learning with appropriate child outcomes assessment. Reflect upon implementation of activities and assessment with children.

ECE 245 School Age Practicum
3 Credits

Prerequisites: Program Chair Approval. Provides opportunities for practical experience through observation and supervised participation and assessment in a school-age setting. Students will develop and implement appropriate environments and activities. Requires 144 hours of field experience.

ECE 255 Generalist Practicum
3 Credits

Prerequisites: Program Chair approval. Provides opportunity for practical experience through observation and supervised participation and assessments in an early childhood setting. Students will develop and implement appropriate program plans and activities. Requires 144 hours of field experience.

ECE 260 Early Childhood Professional
3 Credits

Prerequisites: Program Chair approval. Surveys and further examines early childhood philosophies, theories and theorist. Encourages students to form their own theories for learning, discipline, family involvement, and self-concept development. Guides students in the development of a professional graduation portfolio. This is a capstone course and requires program chair approval.

ECN 101 Economics Fundamentals
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Provides a survey of microeconomics, macroeconomics, international economics, comparative economic systems, historical development of economic thought, and their application to current economic problems. An introductory course intended primarily for students who need only one semester of economics.

ECN 201 Principles of Macroeconomics
3 Credits

Prerequisites: ENG 111 and MAT 111 or MAT 112. A descriptive and analytical study of fundamental concepts of national economics. It includes an analysis of the determination and fluctuations in national income and employment, monetary and fiscal policy, and international trade and finance. Economic analysis of monetary and fiscal policies is stressed.

ECN 202 Principles of Microeconomics
3 Credits

Prerequisites: ENG 111 and MAT 111 or MAT 112. A descriptive and analytical study of the market economy and how it allocates resources. Emphasis is placed on consumer behavior, market structure, pricing, and distribution and determination of wealth and income.

EDN 101 Design Theory 3 Credits

Prerequisites: None. Introduces theory and color dynamics as applied to compositional design. Includes exploration and application of three-dimensional concepts, human factors and the psychology and social influences of space.

EDN 102 Drafting and Construction 3 Credits

Prerequisites: None. Provides an understanding of building structures, residential construction techniques, building materials and blueprint reading. Includes building codes and the preparation of plans, elevations, sections, and details as they relate to construction drawings.

EDN 105 Design Presentations 3 Credits

Prerequisites: EDN 102. Presents the elements of two- and three- dimensional representational drawings and design concepts. Studies include basic drawing, drafting and perspective techniques; color rendering, material board preparation and client presentation.

EDN 203 Professional Practice 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduction to business principles and practices as they relate to the environmental design profession. Includes business formation and management, professional ethics and organizations, certification and licensing, design liability and project management. Special topics involving consumer behavior, sales techniques and fee structuring will also be addressed.

EDN 209 Portfolio Preparation/Internship 3 Credits

Prerequisites: Program Advisor Approval. Efforts are directed toward achieving a career in environmental design. Includes a comprehensive program assessment exam, the development of a quality portfolio and resume, and necessary field experience.

EDN 216 CAD for Environmental Designers 3 Credits

Prerequisites: EDN 102. Introduces fundamentals of CAD (Computer-Aided Drafting) for environmental graphics. Includes overview of CAD and systems, use of software and plotter applications. Each student will complete an individual project by the end of the semester.

EDN 224 Travel Study 3 Credits

Prerequisites: Program Advisor Approval. Offers the student an opportunity to study the culture and history of another region, with an emphasis on art, architecture, interior and garden design. Includes pre-trip meetings and lectures, trip journals and summary papers.

EDN 280 Co-op/Internship 1-6 Credits

Prerequisites: Program Advisor Approval. Students work at job sites that are specifically related to career objectives. Provides on-the-job experience while earning course credit.

ELT 120 Introduction to Electronics 3 Credits

Prerequisites: None. Corequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Provides the student with limited preparatory study an entry into program level content. Introduces the basics of electricity and electronics. Discusses atomic theory as related to electrical fundamentals, resistance, conductance, Ohms Law, series circuits, parallel circuits, and simple series-parallel circuits. Topics include laboratory skills, basic manipulative skills, interpretation of diagrams, and hand soldering techniques. Emphasis is placed upon the use of electronic circuit simulation software to model and analyze electronic components and circuits.

ELT 121 Circuits 1 3 Credits

Prerequisites: MAT 111 or demonstrated competency and ELT 120. Develops intermediate to advanced understanding of electricity and electronics relating to passive DC circuits. Discusses series-parallel circuits, voltage and current dividers, Kirchhoff's Laws, network analysis (superposition, Thevenin, etc.), loading effects, maximum power transfer, and magnetism. Uses lab work to reinforce course theory and stress the proper use of test equipment.

ELT 122 Circuits II 3 Credits

Prerequisites: ELT 121 and MAT 131 or MAT 134. Studies electrical principles and laws pertaining to alternating current and voltage. Covers characteristics of AC voltages and currents, capacitance, inductance, transformers, reactance, impedance, AC network theorems, j operator, phase relationships, phasors, resonance, filters, AC power, and polyphase circuits.

ELT 124 Digital I
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Introduces digital electronics, including logic gates and combinational logic circuits. Studies binary arithmetic, Boolean algebra, mapping techniques, digital encoders and decoders, multiplexers and demulitplexers, parity circuits, and arithmetic circuits. Uses SSI and MSI digital integrated circuits.

ELT 125 Digital II
3 Credits

Prerequisites: ELT 124. Offers advance study of digital systems, flip-flops, memory, digital-to-analog and analog-to-digital conversion. Covers construction of specified timing circuits, driver/display systems, shift registers, counters, the arithmetic logic unit, and validation of operation. Studies hardware and general microprocessor system organization.

ELT 126 Solid State I
3 Credits

Prerequisites: ELT 122 (may be corequisite) and MAT 131 or MAT 134. Studies characteristics and applications of semiconductor devices and circuits. Covers PN junction theory, signal and rectifying diodes, discrete power supplies, zener diodes, zener diode voltage regulators, special-purpose diodes, bipolar transistors, biasing techniques, load lines, single and multistage amplifiers, and equivalent circuits.

ELT 127 Industrial Electronics
3 Credits

Prerequisites: ELT 126. Presents an overview of electronics in the industrial setting. Instruct students in how electronics is applied to industrial systems. Introduces power machines, polyphase systems, solid-state controls, transducers and industrial computer systems.

ELT 128 Introduction to Lasers
3 Credits

Prerequisites: MAT 131 or MAT 134 or MAT 137. Introduces laser action, laser beam characteristics, types of lasers, safety considerations, general laser applications, laser and optical equipment. Teaches basics of laser systems and prepares beginning laser students for future courses. Includes an overview of lasers, physical basics, how lasers work, laser characteristics, laser accessories, gas lasers, solid-state lasers, semiconductor lasers, and other types of lasers. It also includes a brief overview of low-power laser and high-power applications.

ELT 130 Fiber Optics
3 Credits

Prerequisites: ELT 122. Presents overview of fiber optics. Studies uses for fiber optics, advantages, cable details, connectors, splices, sources, detectors and fiber optic systems.

ELT 140 Networking
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032 and MAT 050. Study of types of protocols used in data communication systems. Includes an overview of networking, networking control, and interfacing. Areas of emphasis includes protocols, packet switching systems, local area networks, and the OSI model.

ELT 203 Introduction to Industrial Controls
3 Credits

Prerequisites: ELT 221 and ELT 223. Studies basics of controls related to industrial electronics. Includes basic and pilot control devices such as circuit layouts, industrial schematics, reduced voltage starters, multi-speed controllers, and solid-state controls. Covers transformer hook-ups and circuit protection.

ELT 214 Industrial Instrumentation
3 Credits

Prerequisites: ELT 126. Provides a system view of manufacturing and automated production emphasizing the devices used in control and measurements. Areas covered include pressure, strain, force, flow, and level considerations. Principles of process control are introduced, incorporating the usage of probes, sensors, transducers, and various final control devices. Computer software, hardware, and interfacing are examined in regards to data acquisition, manufacturing control, and summarization of industrial data.

ELT 219 Biomedical Electronics I
3 Credits

Prerequisites: ANP 101 or BIO 130 and HHS 101 and ELT 126. Corequisite: ELT 221. Offers study of medical electronics equipment, including ECG, EEG, defibrillators, heart monitors and other monitoring and respiratory equipment.

ELT 220 Biomedical Electronics II
3 Credits

Prerequisites: ELT 219. Studies medical support systems including x-ray equipment, respirators and analyzers, and their maintenance. Studies medical ultrasound, electro surgery units and mechanical recorders. Prepares students for licensing and certification.

ELT 221 Solid State II   **3 Credits**

Prerequisites: ELT 126. Continues the study of bipolar transistors with additional circuit configurations including the emitter follower and the Darlington. Studies power amplifiers, amplifier classifications, unipolar transistors, and thyristors. Includes discreet FETs, SCRS, UJTs, oscillators, linear regulated power supplies, and switching regulators. Discusses frequency effects and response of amplifiers.

ELT 222 Microprocessors   **3 Credits**

Prerequisites: ELT 125. Introduces microprocessor system organization, operation, design, troubleshooting and programming. Investigates and analyzes a microprocessor instruction set for its operation. Includes programming and interfacing a microprocessor.

ELT 223 Electrical Machines   **3 Credits**

Prerequisites: ELT 122. Provides an overview of electrical machines and how they relate to industrial electronics. Gives industrial electronics technicians insight into electrical power generation, polyphase system, transformers, all types of electrical motors, power factor and power factor correction, back-up power and electrical power monitoring.

ELT 224 Linear Integrated Circuits   **3 Credits**

Prerequisites: ELT 126. Introduction to Operational Amplifiers, their characteristics, operation and application, to linear and non-linear circuits. Topics covered are the general introduction to Op Amp IC's, inverting and non-inverting amplifiers, comparators, frequency effects, differential, instrumentation and bridge amplifiers, and active filters.

ELT 225 Introduction to National Electrical Code   **3 Credits**

Prerequisites: None. Introduces the role and use of the National Electrical Code Book. Provides an overview of interpretation, calculations, and revisions of the codebook.

ELT 226 Computer Troubleshooting   **3 Credits**

Prerequisites: ELT 125. A study of techniques for logical troubleshooting of microcomputer systems. Emphasizes basic system components including power supplies, motherboards, memory, floppy and hard disk drives, operation of video displays, and keyboard and mouse connections. Emphasizes system-oriented troubleshooting procedures.

ELT 227 Peripherals   **3 Credits**

Prerequisites: ELT 226. Studies peripherals commonly used with computers and microcomputers and the interfacing with those peripherals. Includes printers, scanners, modems, NICs, video adapters and displays, keyboards and mouse, sound systems, and CD-ROM and DVD-ROM drives. Also includes a study of data communications hardware and techniques. Studies techniques for logical troubleshooting of microcomputer systems.

ELT 228 Communications Electronics   **3 Credits**

Prerequisites: None. Corequisites: ELT 221. Analyzes communication circuits with emphasis on AM, FM, SSB, transmitters and receivers, transmission lines, antennas, and wave propagation. Includes dB gain and attenuation, noise, modulation and demodulation principles, phase-locked loop, RF amplifiers, automatic gain control, detectors, limiters and discriminators. Offers hands-on lab exposure to analog circuits utilizing analysis and troubleshooting techniques.

ELT 229 Telecommunications   **3 Credits**

Prerequisites: ELT 125 and ELT 126. Presents an in-depth view of the telecommunication industry from the very beginning to today's cellular, Internet, and broadband technologies. Examines various methods in transmitting digital data from one location to another. Covers transmission medias, time and frequency multiplexing, modulation applications, routing networks, communications hardware, protocols, telephone networks, and Internet systems. Cellular, cable broadband, and emerging technologies are also introduced.

ELT 230 Advanced Communications Electronics   **3 Credits**

Prerequisites: None. Corequisites: ELT 228. The basics of antenna principles and wave propagation together with an in-depth study of matching techniques for transmission lines. Includes the Smith Chart and a thorough study of television operation. Radiation patterns will be measure with different antenna arrays. Signal tracing troubleshooting techniques will be practiced on a color TV set.

ELT 233 Industrial Motors and Controls 3 Credits

Prerequisites: ELT 122. Provides a complete understanding of basic ladder and wiring diagrams used in the control of electric motors. Includes the various electrical components and their functions as applied to motor controls. Topics include the various types of motors used in applying electro-mechanical power, ranging from small AC shaded-pole fan motors through larger three-phase motors. Motor starting components, protective devices, heat dissipation, motor slippage and frequency and multi-speed motors are discussed. Lab assignments allow the student a hands-on approach to wiring various control components in the operation of three-phase motors.

ELT 234 Advanced Problem Solving 3 Credits

Prerequisites: Program Advisor Approval. Introduces logical troubleshooting of electronic circuits and systems with emphasis on systematic diagnostic methods and technical reference research. Provides further experience in the use of test equipment and proper repair techniques. Includes job preparedness skills and preparation for appropriate certification testing.

ELT 235 Process Control 3 Credits

Prerequisites: ELT 224. Presents an in-depth view of process control theory and applications. Topics covered are open and closed loop systems, feedback concepts, signal conditioning, standards and terminology, controller principles and loop characteristics. Concepts of thermal, mechanical, optical sensor devices are emphasized as measurement control. Transducers and final control actuators are examined.

ELT 237 Calibration 3 Credits

Prerequisites: ELT 122. Provides an introductory overview of procedural calibration for instruments (electronic and pneumatic) found in today's controlling environments and industry. Instrument evaluation, installation, and calibration are the emphasis for this course. Dismantling and calibration of DP cells, gauges, valve positioners, thermocouple circuits, control elements, and other industrial instruments are incorporated throughout the course.

ELT 238 Process Instrumentation 3 Credits

Prerequisites: ELT 125 and ELT 221. Presents the concepts and fundamentals of measurement instrumentation and its application to industrial process control. Introduces basic device symbols and instrumentation terminology. Includes measurement principles and techniques involving temperature, pressure, flow, level, displacement, strain, load, torque, vibration, humidity, density/specific gravity, gas analysis, and conductivity. Discusses open versus closed loop control and the application of combinations of proportional, integral, and derivative control methods. Includes chart.

ELT 239 Troubleshooting Techniques 3 Credits

Prerequisites: ELT 125 and ELT 221. Introduces techniques of logical troubleshooting of electronic circuits and systems with emphasis on systematic diagnostic methods, signal tracing and signal injection methods. Provides further experience in the use of test equipment and proper repair techniques. Class sessions will consist of lecture, discussion, and problem recitation. Problem-solving and laboratory assignments will reinforce concepts in the reading and lecture experience.

ELT 251 Electrical Circuits I 4 Credits

Prerequisites: None. Provides an integrated lab/lecture sequence in which students are introduced to the fundamentals of circuit analysis. Topics include resistive, capacitive, and inductive circuit elements, nodal and mesh analysis, transient response of RLC circuits, steady state sinusoidal response, operational amplifiers, and an introduction to diodes and transistors.

ELT 252 Electrical Circuits II 4 Credits

Prerequisites: ELT 251. An integrated lab/lecture course which continues ELT 251. This course covers sinusoidal steady state analysis, LaPlace and Fourier analysis, transistors, diodes, op-amps, and three-phase systems. An introduction to computer aided design and analysis is provided.

ENG 001 Elementary English for Speakers of Other Languages 3 Credits

Prerequisites: Demonstrated ability to write and understand simple statements and questions on familiar topics. The suggested range on the English Placement Test is 20-35. Emphasizes writing elementary statements, reading and understanding elementary materials, and expanding competence in speaking and listening.

ENG 002 Intermediate English for Speakers of Other Languages   3 Credits

Prerequisites: Demonstrated intermediate competency in English with ability to read, write, and speak using basic language skills. The suggested range on the English Placement Test is 36-52. Emphasizes writing, reading and speaking with increasing competence in academic and social situations.

ENG 003 Pre-academic English for Speakers of Other Languages   3 Credits

Prerequisites: Demonstrate fair control of most sentence structure, expository materials, statement, and conversation in social and academic settings. The suggested range on the English Placement Test is 53-68. Emphasizes paragraph organization, reading and understanding expository and academic materials through vocabulary development. Develops comprehension of social and academic conversations and lectures.

ENG 004 Academic English for Speakers of Other Languages   3 Credits

Prerequisites: Demonstrate ability to write with some ease, understand expository and academic reading material, understand lectures, and converse in academic and social situations. The suggested range on the English Placement Test is 69-83. Emphasizes expository writing, finding main ideas and details in academic texts, and understanding and speaking in academic settings.

ENG 007 Spelling   1 Credit

Prerequisites: None. Improves basic spelling competencies through practice and attention to spelling rules and exceptions.

ENG 010 English for Speakers of Other Languages– Reading I   3 Credits

Prerequisites: CASAS/IRCA Pre-enrollment Appraisal. Develops basic reading skills in English using texts on subjects relating to life skills and cultural values. Emphasizes vocabulary acquisition, dictionary use, and reading strategies for basic comprehension and interpretation.

ENG 011 English for Speakers of Other Languages– Reading II   3 Credits .

Prerequisites: None. Stresses comprehension skills and reading strategies using materials which focus on personal and cultural values. Focuses on vocabulary expansion, comprehension and interpretation strategies, and experience with a variety of reading styles. Provides practice in increased reading proficiency.

ENG 012 English for Speakers of Other Languages – Reading III   3 Credits

Prerequisites: None. Stresses comprehension skills and reading strategies with academic materials. Focuses on vocabulary expansion, transitional development, and critical analysis of academic writing. Provides practice in increased reading proficiency.

ENG 013 English for Speakers of Other Languages – Listening/Speaking I   3 Credits

Prerequisites: CASAS/IRCA Pre-enrollment Appraisal. Focuses on listening and speaking strategies for comprehensible input. Provides practice recognizing and producing speech patterns of American English. Allows for conversational practice on topics of cultural values and behaviors.

ENG 014 English for Speakers of Other Languages-Listening/Speaking II   3 Credits

Prerequisites: Level I ESL Listening/Speaking Mastery. Provides practice in recognizing and producing speech patterns of American English. Allows for conversational practice with emphasis on cross-cultural values and behaviors and the use of idioms.

ENG 015 English for Speakers of Other Languages-Listening/Speaking III   3 Credits

Prerequisites: Level II ESL Listening/Speaking Mastery. Provides experience in recognizing and producing speech patterns of American English. Allows for conversational practice relating to academic and cultural subjects, with an emphasis on critical thinking skills expressed verbally. Gives the student ample exposure to language use from sources both in and out of the classroom. Language tasks which require problem solving by interpersonal communications.

ENG 016 English for Speakers of Other Languages – Grammar/Structure I   3 Credits

Prerequisites: CASAS/IRCA Pre-enrollment Appraisal. Focuses on the acquisition of basic patterns of structure and syntax for controlled communication. Emphasizes form, meaning, and usage of basic structures in American English. Provides practice through extensive and varied communicative activities.

ENG 017 English for Speakers of Other Languages – Grammar/Structure II   3 Credits

Prerequisites: Level I ESL Grammar/Structure Mastery. Focuses on the study and acquisition of patterns of advanced structure and syntax. Emphasizes the acquisition of sentence structure for verbal and written communication of ideas and their relationship.

ENG 018 English for Speakers of Other Languages-Grammar/Structure III   3 Credits

Prerequisites: ENG 017. Focuses on the acquisition of more advanced patterns of structure and syntax. Emphasizes the development of competent verbal and written expression in critical analysis for academic purposes.

ENG 019 English for Speakers of Other Languages – Writing I   3 Credits

Prerequisites: CASAS/IRCA Pre-enrollment Appraisal. Focuses on conventions for basic written communication in English, emphasizing sentence construction and paragraph development. Uses writing strategies to produce coherent expression in journals, free writing exercises, paragraphing, and short essays. Student collaboration is part of the learned writing process.

ENG 020 English for Speakers of Other Languages – Writing II   3 Credits

Prerequisites: Level I ESL Writing Mastery. Focuses on techniques of written communication for coherent expression of ideas, through paragraph development and essay writing. Emphasizes the writing process using strategies for pre-writing, development, and revision through peer collaboration. Highlights the structure and syntax of written expression for effective communication.

ENG 021 English for Speakers of Other Languages – Writing III   3 Credits

Prerequisites: Level II ESL Writing Mastery. Focuses on techniques of written communication for the analysis and elaboration of academic material through paragraph and essay writing. Emphasizes the strategies of the writing process through rhetorical modes of composition for varied purposes. Stresses the extended use of syntax and structure for thoroughly coherent expression.

ENG 024 Introduction to College Writing I   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment. Enables the beginning college writer to develop control of the writing process by focusing on paragraph development. Requires students to demonstrate proficiency in basic standard writing conventions, including grammar and mechanics. Prepares students for entry into ENG 025.

ENG 025 Introduction to College Writing II   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 024. Builds on the competencies learned in ENG 024 and prepares students for entry into college level composition by focusing on essay development. Enables beginning college writers to expand control of the writing process. Requires students to demonstrate increased proficiency in the use of standard writing conventions. Introduces the processes of research and documentation.

ENG 028 Vocabulary Building   1 Credit

Prerequisites: None. Focuses on developing general English vocabulary. Includes dictionary skills, context skill and word structure analysis.

ENG 031 Reading Strategies for College I   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment. Increases performance in reading flexibility, vocabulary, and comprehension. Introduces critical reading skills and study strategies and their applications.

ENG 032 Reading Strategies for College II   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031. Advances performance in reading flexibility, vocabulary, and comprehension. Emphasizes critical reading and strategies for effective study of college level text.

ENG 111 English Composition   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Designed to develop students' abilities to think, organize, and express their ideas clearly and effectively in writing. This course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison, analysis, persuasion, and argumentation. A research paper is required. Numerous in-class writing activities are required in addition to extended essays written outside of class.

ENG 112 Exposition and Persuasion   3 Credits

Prerequisites: A grade of "C" or better in ENG 111. Builds on the writing skills taught in ENG 111 and emphasizes research-based analytic and argumentative writing.

ENG 202 Creative Writing   3 Credits

Prerequisites: ENG 111. This course introduces students to opportunities for self-expression in one or more literary genres - fiction, poetry, drama, and the creative essay.

ENG 206 Introduction to Literature   3 Credits

Prerequisites: ENG 111. Development of basic strategies for critically reading and interpreting poetry, fiction, and drama; introduction to the premises and motives of literary analysis and critical methods associated with various literary concerns through class discussion and focused writing assignments.

ENG 211 Technical Writing   3 Credits

Prerequisites: A grade of "C" or better in ENG 111. Builds on the writing skills taught in ENG 111. Requires students to prepare technical reports and correspondence for various purposes using standard research techniques, documentation, and formatting as appropriate. May require students to demonstrate both written and oral competencies.

ENG 212 Western Literature I   3 Credits

Prerequisites: ENG 111. Introduces Western Classical Literature from Antiquity to Chaucer. Presents representative texts and stresses reflective and intensive reading from the major historical periods. Emphasizes aesthetic appreciation of literature, cultural and philosophical issues of its emergence.

ENG 213 Western Literature II   3 Credits

Prerequisites: ENG 111. Introduces Western Classical Literature from Shakespeare to the Modern Era. Presents representative texts and stresses reflective and intensive reading from the major historical periods. Emphasizes aesthetic appreciation of literature, and cultural and philosophical issues of its emergence.

ENG 214 Introduction to Poetry   3 Credits

Prerequisites: ENG 111. Provides an introduction to the art and history of poetry. Emphasizes a greater appreciation and understanding of the genre through critical analysis of various poetic forms and literary devices.

ENG 220 Introduction to World Literature I   3 Credits

Prerequisites: ENG 111. A survey of literature course designed to acquaint the student with influential works from the ancient Greeks to Shakespeare. Included in assigned readings will be epic poetry, the sonnet, drama, and the philosophic essay. Combines practice in advanced expository writing with literary study.

ENG 221 Introduction to World Literature II   3 Credits

Prerequisites: ENG 111. A survey of literature course designed to acquaint the student with influential works from Shakespeare to the present. Included in assigned readings will be work by the Eastern, Continental, British, and American authors. Instruction in research techniques and writing research papers is combined with literary study.

ENG 222 American Literature I   3 Credits

Prerequisites: ENG 111. This course is designed to survey major American poets and prose writers from the early Colonial period to the time of the Civil War. Included will be a discussion of the major historical, cultural, intellectual, and political events which influenced the authors.

ENG 223 American Literature II   3 Credits

Prerequisites: ENG 111. This course is designed to survey major American poets and prose writers from the Civil War to the present. Included will be a discussion of the major historical, cultural, intellectual, and political events which influenced the authors.

ENG 224 Survey of English Literature I
3 Credits

Prerequisites: ENG 111. Survey of English Literature I introduces the student to British literature from Beowulf to the eighteenth century. Included will be a discussion of the major historical, cultural, intellectual, and political events which influenced the development of British literature.

ENG 225 Survey of English Literature II
3 Credits

Prerequisites: ENG 111. Survey of English Literature II introduces the student to British literature from the Romantic, Victorian, and modern periods. Included will be a discussion of the major historical, cultural, intellectual, and political events which influenced the development of British literature.

ENG 227 Introduction to World Fiction
3 Credits

Prerequisites: ENG 111. This general survey course introduces the genre of fiction through a focus on world authors. It examines themes and literary devices present in novels and short stories.

ENG 240 Children's Literature
3 Credits

Prerequisites: ENG 111. This course provides a survey and analysis of classic and modern children's literature for students interested in understanding literature read to/by children preschool-middle school. The course focuses on different genres of literature and may include picture books, folk tales, poetry, short stories, and novels. In addition, the role of art, illustrations, and media adaptations will be examined in conjunction with children's literature throughout the years.

ENG 245 Literature of the Old Testament
3 Credits

Prerequisites: ENG 111. Surveys the Old Testament/Hebrew Scripture as a literary work. Emphasizes history, composition, structure, cultural context, and recognizing the contribution it has made to human development.

ENG 249 Linguistics
3 Credits

Prerequisites: ENG 111. Designed to introduce students to the various disciplines which comprise the scientific study of language. These include a survey of applied, comparative, descriptive, historical and linguistics. The course will primarily focus on the English language.

ENG 250 English Grammar
3 Credits

Prerequisites: ENG 111. A study of the grammatical structures of American English. A course designed to acquaint students with descriptions of modern English syntax.

ENV 101 Introduction to Environmental Technology
3 Credits

Prerequisites: None. Designed to introduce the student to environmental technology, the EPA, toxics, hazardous materials, and other waste topics. The course will touch on the subjects of weapons of mass destruction, chemistry, birth defects, and some other common ailments. Biological warfare topics will be discussed, protection for the hazardous materials situations, and protection for the fire fighting personnel in the event of an emergency.

ENV 102 Environmental Management
3 Credits

Prerequisites: None. Designed to introduce the student to environmental management, how the environmental regulations evolved, the EPA, OSHA, NIOSH, and ADA. Environmental crimes will be discussed, how the government is enforcing the rules, weapons of mass destruction, biological warfare, and treatment and disposal of the toxic wastes.

ENV 104 Plant Operations – Sanitary
3 Credits

Prerequisites: Advisor Approval. Provides the basic principles of aerobic and anaerobic biological treatment processes, including activated sludge, trickling filters, lagoons, sludge handling and disinfection. Reviews state and federal regulations related to wastewater plants.

ENV 105 Air Quality Management
3 Credits

Prerequisites: None. This course is designed to introduce the student to environmental air quality problems experienced, laws enforced and enacted by the EPA as well as others, toxicity, noise pollution, global air pollution, and a brief history of the EPA, and some of their accomplishments.

ENV 106 Water Quality Management   3 Credits

Prerequisites: CHM 101 or Advisor approval. This course is designed to introduce the student to water management, how the environmental regulations evolved, the EPA, OSHA, NIOSH, and ADA. Environmental crimes will be discussed, how the government is enforcing the rules, weapons of mass destruction, biological warfare, and treatment and disposal of the toxic wastes. Water resources, contamination, and what is happening to clean the water we drink.

ENV 110 Environmental Toxicology   3 Credits

Prerequisites: None. This course is designed to introduce the student to environmental toxicology, how it affects our bodies, our breathing, our environment we live in, the places we work, eat, and live. This course also tries to explain some of the conditions in industries, various laws that have been enacted and passed to protect the general population.

ENV 208 Plant Operations – Industrial   3 Credits

Prerequisites: Program Advisor Approval. Covers wastewater treatment processes including coagulation, sedimentation, activated sludge, neutralization, equalizations and cyanide and chromate removal. Presents instrumentation, maintenance and troubleshooting. Includes operations, laboratory testing and associated mathematics.

FIT 100 Lifetime Fitness and Wellness   2 Credits

Prerequisites: None. Educates students about the importance of fitness/wellness in their everyday lives. Students will have the opportunity to customize their own behavioral plans for fitness/wellness.

FRE 101 French Level I   4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces the French language and culture through communicative activities intended to develop oral communication and listening comprehension skills. Emphasis is placed on learning basic grammar and vocabulary necessary for successful communication while laying a foundation for further study.

FRE 102 French Level II   4 Credits

Prerequisites: FRE 101 or demonstrated competency in French through appropriate assessment; demonstrated competency in reading and writing through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Continued study of the French language and culture through communicative activities intended to develop oral communication and listening comprehension skills. Emphasis is placed on continuing to learn the basic grammar and vocabulary necessary for successful communication and to improve skills developed in French Level I.

FRE 201 French Level III   4 Credits

Prerequisites: FRE 102 or demonstrated competency in French through appropriate assessment; demonstrated competency in reading and writing through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. This course continues the development of the core skills (listening, speaking, reading and writing) in the target language, but shifts the emphasis toward further developing reading and writing skills through expanding the student's vocabulary and sharpening their grammatical competence. The course also seeks to develop an increased awareness of French and Francophone culture.

FRE 202 French Level IV   4 Credits

Prerequisites: FRE 201 or demonstrated competency in French through appropriate assessment; demonstrated competency in reading and writing through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. As with FRE 201, this course continues the development of the core skills (listening, speaking, reading and writing) in the target language, but shifts the emphasis toward further developing reading and writing skills through expanding the student's vocabulary and sharpening their grammatical competence. The course also seeks to develop an increased awareness of French and Francophone culture.

FRN 101 Introduction to Forensic Science   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050, ENG 025 and ENG 032. Introductory course dealing with the basic concepts in Forensic Science.

FRN 203 Crime Methods and Techniques   4 Credits

Prerequisites: FRN 101 and CHT 101. Advanced course addressing laboratory techniques used in Forensic Science.

GDN 110 Garden Horticulture
3 Credits

Prerequisites: None. Studies the horticulture principles of garden plant structure, growth and development and soil science. Includes cultural practices, propagation techniques, plant care, nutrition, maintenance, and disease and insect control.

GDN 111 Landscape Plantings
3 Credits

Prerequisites: None. Studies the identification, selection criteria, growth habits, growing conditions, installation techniques and maintenance requirements for evergreen and deciduous shade and ornamental trees, shrubs, vines, ornamental grasses, groundcovers and turfgrass. Introduces the function of annual and perennials in the landscape.

GDN 112 Garden Plantings
3 Credits

Prerequisites: None. Studies the identification, selection and design criteria for herbaceous ornamentals found in garden beds, borders and containers. Students will research the growing conditions, planting techniques and maintenance requirements for perennial and annual flower, vegetable and herb plantings. Also includes fruit and orchard planting criteria.

GDN 113 Grasses and Groundcovers
3 Credits

Prerequisites: None. Introduces the identification and selection criteria for grasses and groundcovers. Includes the growing conditions, installation techniques and maintenance requirements for a healthy lawn and landscape.

GDN 114 Introduction to Garden and Landscape Design
3 Credits

Prerequisites: None. Survey of basic garden landscape design. Includes topics on plant types and uses, client requirements, design concepts, site analysis, and garden planting plans and project presentation methods. Emphasizes the principles and techniques for designing outdoor gathering and living places.

GDN 115 History of Garden Design
3 Credits

Prerequisites: None. An overview of the history of garden design and landscape architecture from antiquities through the 21st century. Students will research influential garden designers, landscape architects, garden restoration and current trends.

GDN 116 Theme Gardening
3 Credits

Prerequisites: None. Introduction to garden styles and border design. Students will create theme gardens with an emphasis on plant combinations, color, function and aesthetics. Includes studies in water, shade, wildlife, native, low-maintenance and container gardens.

GDN 231 Garden and Landscape Design II
3 Credits

Prerequisites: EDN 102 and GDN 114. Continuation of GDN 114. An advanced study of design principles, concept development, creative problem solving and planning skills through a master plan approach. Emphasizes the formation of working drawings and contract documents, barrier-free applications, business practices, project facilitation and the relationship between individuals and their surroundings.

GDN 232 Garden and Landscape Design III
3 Credits

Prerequisites: EDN 105 and EDN 216 and GDN 231. Continuation of GDN 231. Students will define and develop a program for an advanced landscape design problem from concept development through professional presentation. Emphasis is on research methodology and project comprehension and management.

GDN 233 Sustainable Design
3 Credits

Prerequisites: GDN 114 or INT 103. Presents the concepts of sustainable and health-conscious design integrating the built and the natural environment. Topics include site analysis; "green" home design considerations, and the permaculture principles of soil building, multi-functional plantings, organic gardening, native species preservation, and ecological restoration.

GEO 207 World Geography
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. A geographical analysis of the major physical, cultural, political and economic divisions of the world along with their characteristics, locations, human activities, and inter-relationships.

GRA 101 Graphic Media Fundamentals   3 Credits

Prerequisites: None. Explores the fundamentals of graphic art production. Provides hands-on training in manual page layout, and an introduction to electronic layout. Presents the concepts and fundamentals of measurement and typography. Problem-solving and laboratory assignments will reinforce concepts in the reading and lecture experience.

GRA 102 Introduction to Machine Printing   3 Credits

Prerequisites: GRA 104 and GRA 201. Provides a history and overview of the interrelationship of various printing processes. Course offers instructions in basic press operations. Covers materials and techniques utilizing equipment and tools necessary to operate a basic offset press.

GRA 104 Art and Copy Preparation   3 Credits

Prerequisites: None. Corequisites: GRA 201. Provides a foundation in design, typographic and communications concepts. Presents traditional techniques as well as computer aided technologies in the consideration of color, format and use of visuals in illustration. Emphasizes problem solving with assignments executed through strip-up of the negative into a flat and proofing.

GRA 106 Introduction to Color Printing   3 Credits

Prerequisites: GRA 104 and GRA 201. Corequisites: GRA 102 and GRA 202. Studies basic color theory, materials and methods used in the reproduction of color in printed materials. Covers techniques and materials with assignments utilizing different processes including four-color as well as spot color. Pre-separated negatives, halftones, registration and runs are covered. Includes in depth study of inks and color inking systems. Also covers digital color separations.

GRA 201 Photomechanical Reproduction   3 Credits

Prerequisites: None. Corequisites: GRA 104. Introduces image conversion in black and white and color theory. Examines photo-chemistry, halftones, darkroom techniques and diffusion transfers. Uses large format stat cameras.

GRA 202 Science of Color   3 Credits

Prerequisites: GRA 101. Covers the physical properties of light and color and the psychological aspects of color perception and color relationships. It develops an acute awareness of the use of color and color theories in various visual and written terms. It covers primary, secondary and tertiary colors, their creation and use through a series of hands on projects.

GRA 213 Desktop Publishing   3 Credits

Prerequisites: VIS 115. This course covers computer techniques in pre-preparatory and preparatory composing procedures including electronic layout and typographic concepts. Emphasizes computer skills and output.

GRA 214 Screen Printing   3 Credits

Prerequisites: None. This course introduces the students to the basics of the Screen Printing process. Students will learn a process for reproducing graphic images on a wide variety of objects, from paper to wooden signs and ceramic objects. This course covers inking, substrates and transfer processes.

GRA 215 Computer Graphics II   3 Credits

Prerequisites: VIS 115. This course will showcase the design tricks and techniques of vector graphics use. It is assumed that students will already know computer basics and can take assigned projects from basic idea to completed artwork.

HEA 101 Heating Fundamentals   3 Credits

Prerequisites: None. Introduces fundamentals applicable to the heating phase of air conditioning. Includes types of units, parts, basic controls, functions, and applications. Emphasizes practices, tool and meter use, temperature measurement, heat flow, the combustion process and piping installation practices. Covers the basic sequence of operation for gas, oil and electric furnaces.

HEA 103 Refrigeration I   3 Credits

Prerequisites: None. Introduction to compression systems used in mechanical refrigeration including the refrigeration cycle and system components. Introduces safety procedures, proper use of tools used to install and service refrigeration equipment, refrigerant charging and recovery, system evacuation, calculating superheat and subcooling and using a refrigerant temperature/pressure chart.

HEA 104 Heating Service   3 Credits

Prerequisites: HEA 101 and MIT 113. Covers procedures used to analyze mechanical and electrical problems encountered when servicing heating systems. Covers electrical schematics and connection diagrams, combustion testing, venting and combustion air requirements, sequence of operation, heating controls, troubleshooting techniques, installation practices, basic codes applying to furnace codes, and service procedures.

HEA 106 Refrigeration II   3 Credits

Prerequisites: HEA 103 and MIT 113. Continues the study of air conditioning and refrigeration with further study of compressors, metering devices, system charging, refrigerant recovery, equipment installation and an introduction to troubleshooting procedures [electrical, mechanical and refrigeration]. Includes clean-up procedures following compressor burnout and analysis of how a single problem affects the rest of the system. Introduces electrical control systems and electrical motor basics as they apply to air conditioning and refrigeration including motor types, starting components, and motor troubleshooting basics.

HEA 107 Duct Fabrication and Installation   3 Credits

Prerequisites: None. Emphasizes reading blueprints common to the sheet metal trade, floor plans, elevations, section, detail and mechanical plans. Requires students to develop a layout of an air conditioning duct system and fittings. Fabrication of these parts, including proper use of hand-tools and shop equipment used to fabricate duct systems and fittings.

HEA 201 Cooling Service   3 Credits

Prerequisites: HEA 106. Covers procedures used to diagnose electrical, control, mechanical and refrigeration problems common to cooling systems. Familiarizes students with using the refrigeration cycle and temperature/pressure charts as diagnostic tools in troubleshooting refrigeration system problems. Includes various methods of checking refrigerant charges, methods for charging air conditioning and refrigeration systems, electrical and refrigeration system components, and schematic and pictorial diagrams.

HEA 202 Electrical Circuits and Controls   3 Credits

Prerequisites: HEA 101, HEA 103 and MIT 113. Studies heating, air conditioning and refrigeration controls typically found on residential and light commercial heating and air conditioning equipment. Includes gas, oil and electric heating controls, cooling controls, thermostats, humidistats, aquastats, and electronic controls. Covers operation of controls, integration of controls into controls systems, reading schematic and pictorial diagrams, and component troubleshooting and testing.

HEA 203 Heat Loss and Gain Calculation   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Introduces the student to calculating structural and other heat losses for winter heating, and structural and other heat gains for summer air conditioning using an industry standard method of heat loss and heat gain calculation. Discusses building construction techniques, energy consumption reduction methods and equipment selection.

HEA 204 Commercial Refrigeration   3 Credits

Prerequisites: HEA 106. Examines air conditioning and refrigeration systems for commercial use, including medium and low temperature applications. Includes specialized commercial refrigeration and A/C accessories, metering devices, setting pressure controls for direct temperature control, fan cycling and pump down, commercial ice production, methods of low ambient control, and advanced control arrangements.

HEA 205 Heat Pump Systems   3 Credits

Prerequisites: HEA 101 and HEA 106. Familiarizes students with the refrigeration cycle as it applies to the heat pump system and the different types of heat pump systems. Covers procedures used to diagnose electrical, control, mechanical and refrigeration problems common to heat pump. Includes sizing of heat pumps, specialized heat pump refrigeration components and electrical controls, the air-to-air heat pump defrost cycle, and schematic and pictorial diagrams.

HEA 206 Advanced Cooling Service   3 Credits

Prerequisites: HEA 106. Studies methods of troubleshooting electrical and mechanical components of air conditioning and refrigeration systems.

HEA 207 HVAC Codes   3 Credits

Prerequisites: HEA 104 and HEA 106. Study of state and local codes covering installation, repair, alteration, relocation, replacement and erection of heating, ventilation, cooling and refrigeration systems. Includes job-related costs of material and equipment, labor, warranty, taxes, permits and subcontracts. Students will estimate service and maintenance contracts.

HEA 209 Psychrometrics/Air Distribution   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Studies the properties of air during the operational variations of temperature and humidity. Discusses the atmospheric conditions and the impact of those conditions on the heating-cooling and ventilation processes and the design of systems for residential and commercial structures. Includes the sizing and configurations of air delivery duct systems and system design methods.

HEA 212 Advanced HVAC Controls   3 Credits

Prerequisites: HEA 202. Covers control systems beyond ordinary residential and single zone commercial applications. Includes solid state controls, 0-10 volt DC and 4-20 milliamp control signals, zoning controls, modulating controls, low ambient controls, heat recovery and energy management controls, economizer controls, 3-phase motor protection modules, variable frequency drives [VFDs], remote sensing electronic thermostats, electronically commutated DC motor control, Direct Digital Control [DDC] systems, multiple-stage heating/cooling controls, PLC control of HVAC/R equipment and pneumatic controls.

HEA 213 Sales and Service Management   3 Credits

Prerequisites: None. Encompasses the use of blueprints, specifications, application data sheets, bid forms and contracts in estimating materials and labor in the HVAC business. Includes advertising, direct labor, indirect labor, overhead, warranty costs, taxes, permits, subcontracts, margins, mark-ups and profit. Provides students with the opportunity to estimate service contracts and study service organization, service procedures, record keeping, parts inventory control, and liability insurance.

HEA 214 Applied Design   3 Credits

Prerequisites: None. Provides students with the opportunity to design and lay out complete HVAC systems.

HEA 220 Distribution Systems   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Covers methods used in calculating building heat loss and gain plus how to use this data in sizing equipment and duct systems for residential and light commercial applications. Includes discussion of methods to reduce building heating/cooling loads, air flow principles, air delivery system design methods, and introduces using a psychrometric chart to solve air mixture problems.

HEA 221 Heat Pumps and Cooling Service   3 Credits

Prerequisites: HEA 101 and HEA 106. Covers procedures used to diagnose electrical, control, mechanical and refrigeration problems common to heat pump and cooling systems. Familiarizes students with the refrigeration cycle as it applies to the heat pump and the various methods of charging heat pumps and air conditioning systems. Includes sizing of heat pumps, the different types of heat pumps, and specialized heat pump components.

HHS 100 Introduction to Health Careers   3 Credits

Prerequisites: None. Presents information on the health care system and employment opportunities at a variety of entry levels. Includes an overview of health care development, how health delivery systems are organized, legal and ethical considerations of health care delivery, and an overview of various health care professions. Students are encouraged to explore health professions through assignments, observations and interviews.

HHS 101 Medical Terminology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Addresses basic terminology required of the allied health professional and provides a basic knowledge of anatomy and physiology, pathology, special procedures, laboratory procedures, and pharmacology. Greek and Latin prefixes, suffixes, word roots, and combining forms are presented. Emphasis is on forming a foundation for a medical vocabulary including meaning, spelling, and pronunciation. Medical abbreviations, signs, and symbols are included.

HHS 103 Dosage Calculation   1 Credit

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 031 and MAT 050. Introduces the mathematical concepts required of the allied health professional to accurately administer medication.

HHS 104 CPR and Basic Health Awareness   1 Credit

Prerequisites: None. Provides students with information necessary to recognize the need for one and two-person cardiopulmonary resuscitation (CPR) as it relates to adults, children and infants. Requires students to safely perform CPR and the use of AED.

HHS 105 Medical Law and Ethics   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Provides an overview of law and ethics for allied health professionals functioning in a variety of settings. Topical areas include: the legal system, standards and scope of care and practice, physician patient relationships, standards of professional conduct, public duties, documentation, employment laws and practices, pertinent federal/state statutes, ethical codes, and bioethical issues. The content will provide an understanding of ethical and legal obligations to self, patients, and employer.

HHS 107 CNA Preparation   5 Credits

Prerequisites: Regulations per the Indiana State Department of Health and Program Advisor Approval. Prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. Presents information on the health care system and employment opportunities at a variety of entry levels. Includes an overview of the health care delivery systems, health care teams and legal and ethical considerations. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training.

HLT 125 Health Care Systems and Trends   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. An introduction to the health care industry emphasizing the systems approach to health care and the current trends facing the industry. Gives special attention to managed care organizations.

HLT 225 Finance and Budgeting for Health Care   3 Credits

Prerequisites: ACC 101. Importance is placed on the development and use of departmental budgets. Financial statements will be used to project future expenses and revenues for an organization and/or department. Emphasizes the reimbursement process for a managed care environment and purchasing procedures.

HLT 226 Organizational Development In Health Care   3 Credits

Prerequisites: BUS 105 and HLT 125. Examines organizational structure in health care organizations, including traditional structures and re-engineering of the health care industry. Covers staff development, training, job analysis and design, and departmental staffing. Discusses medical ethics.

HMS 101 Introduction to Human Services   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Explores the history of human services, career opportunities, and the role of the human service worker. Focuses on target populations and community agencies designed to meet the needs of various populations.

HMS 102 Helping Relationship Techniques   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Provides opportunities to increase effectiveness in helping people. Examines the helping process in terms of skills, helping stages, and issues involved in a helping relationship. Second in a series of three introductory human services courses.

HMS 103 Interviewing and Assessment   3 Credits

Prerequisites: HMS 101 and HMS 102 or CRJ 101 and CRJ 103. Introduces and develops basic interviewing skills. Includes assessment strategies and treatment planning. Third in a series of three introductory human services courses.

HMS 104 Crisis Intervention   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Provides beginning training for people who anticipate or are presently working with people in crisis situations.

HMS 105 Introduction to Correctional Rehabilitation Services   3 Credits

Prerequisites: HMS 101 or CRJ 101. Includes a study of crime and how society is affected.

HMS 106 Physiology of Aging
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Focuses on the physical changes and common pathologies associated with the aging process. Includes the psychological and social implications of changes for human behavior. Focuses on health promotion and disease prevention.

HMS 107 Human Services Topical Seminar
3 Credits

Prerequisites: Program Advisor approval. Discusses topics of current interest in human services. Focuses on special interest projects for students in human services. Utilizes field trips, guest speakers, audio-visual activities and seminars.

HMS 108 Psychology of Aging
3 Credits

Prerequisites: PSY 101. Covers the major behavioral changes in adulthood and aging. Students explore their own feelings about aging as well as the attitudes of society.

HMS 109 Understanding Diversity
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introductory course that encourages cultural awareness and appreciation of diversity. Focuses on cultural variations in attitudes, values, language, gestures, and customs. Includes information about major racial and ethnic groups in the United States.

HMS 110 Women's Issues
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Major issues and social problems related to women through an interdisciplinary analysis of social institutions and movements for social change as they affect women. Focus is on 21st century trends in institutions such as the family, law, medicine, education and other social interaction.

HMS 112 Recreation for Special Populations
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Studies the nature and etiology of impairments including developmental disabilities, mental illness, physical disabilities, and geriatrics and their potential impact upon an individual's ability to participate in recreational activities. Explores techniques needed to conduct a recreation program that allows successful participation by an individual with a disability.

HMS 113 Problems of Substance Abuse in Society
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introductory course that provides basic information about the problems of alcohol and other drug abuse. Explores symptoms and effects of abuse and dependence on individuals, families, and society. Class can be used toward ICAADA certification.

HMS 114 Social Services in Long-Term Care
3 Credits

Prerequisites: None. Provides practical and useful information about aging and institutionalization. Focuses on the role of social services within the long-term care facility. Indiana State Department of Health State Certification requires 48 hours of attendance.

HMS 116 Introduction to Mental Retardation/Developmental Disabilities
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Provides background knowledge of the field of mental retardation/developmental disabilities and issues pertaining to the field.

HMS 120 Health and Aging
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Presents an overview of the physical changes and common pathologies associated with the aging process. Focuses on the psychological and social implication of such changes for human behavior. Throughout the course there is a focus on health promotion and disease prevention during the later years.

HMS 122 Youth and Family Treatment
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Designed to allow the student exposure to applications of theories and practical solutions to the challenges facing residential childcare workers. Introduction of the impact of cultural differences within the residential setting. Introduction to the job performance expectations of residential childcare workers, including working with placing agencies and families of the residents in the facility.

HMS 124 Activity Director Basic
6 Credits

Prerequisites: None. Explores the philosophy and investigates the development of therapeutic activity programs for older persons. Focuses on activities that will meet the individual's physical, social, and emotional needs.

HMS 130 Social Aspects of Aging
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Covers major theories and patterns of aging in American society. Covers social institutions and cultural factors that affect the aging process.

HMS 140 Loss and Grief
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introductory course that provides practical and useful information for people who have experienced loss. Students have the opportunity to evaluate their own experiences and attitudes toward loss and grief.

HMS 201 Internship I
4 Credits

Prerequisites: HMS 101, HMS 102, and HMS 103. The first of two fieldwork experiences in approved human service agencies. The student will complete 160 hours under the supervision of an agency professional and a college faculty member. The classroom component will include small group discussion and analysis of the internship experience.

HMS 202 Internship II
4 Credits

Prerequisites: HMS 201, HMS 205 and HMS 206. The second of two fieldwork experiences in approved human service agencies. The student will complete 160 hours under the supervision of an agency professional and a college faculty member. The classroom component will include small group discussion and analysis of the internship experience.

HMS 205 Behavior Modification/Choice Theory
3 Credits

Prerequisites: HMS 103 or CRJ 255 and PSY 101. Advanced level course focusing on theories of behavioral and reality approaches. Develops understanding of terms and practical applications of the behavioral and reality approaches used in working with people.

HMS 206 Group Process and Skills
3 Credits

Prerequisites: HMS 101, HMS 102 and HMS 103. Studies group dynamics, issues and behavior. Includes group functioning and leadership, guidelines on working effectively with a co-leader, and practical ways of evaluating the group processes.

HMS 207 Program Planning and Policy Issues
3 Credits

Prerequisites: HMS 101, HMS 102, HMS 103 and demonstrated competency through appropriate assessment or earning a grade or "C" or better in MAT 050. Concentrates on the components of administration of human service agencies. Addresses practitioner skills needed by an administrator or supervisor. Discusses social policy and its impact on human services.

HMS 208 Treatment Models of Substance Abuse
3 Credits

Prerequisites: HMS 113. Describes the various treatment models used with chemically dependent clients. Discussion centers on intervention and treatment models for chemical dependency and their role in the recovery process. Course can be applied toward hours for ICAADA certification.

HMS 209 Counseling Issues in Substance Abuse
3 Credits

Prerequisites: HHS 113. Explores practice strategies for the worker who counsels chemically dependent clients. Course can be applied toward hours for ICAADA certification.

HMS 210 Issues of Substance Abuse in Family Systems
3 Credits

Prerequisites: HHS 113. Introduction to the characteristics and dynamics of families, couples, and significant others affected by substance abuse. Examines models of intervention and engagement in the treatment and recovery process. Explores the interaction between the family system and substance use behaviors.

HMS 212 Family and Child Welfare
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Examines contemporary problems facing families and children. Evaluates the adequacy of policies, programs, and services in the context of changing lifestyles and social forces impacting the quality of life.

HMS 215 Juvenile Delinquency
3 Credits

Prerequisites: HMS 101 or CRJ 105. Provides an overview of the concepts, definitions, and measurements of juvenile delinquency. Explores various theories that attempt to explain the causes of delinquency. Looks at the role of environmental influences (peers, gangs, school, drugs) as they contribute to delinquency. Discusses an overview of the history and philosophy of the juvenile justice system as well as ways to control and treat juvenile delinquents.

HMS 220 Issues and Ethics in Human Services
3 Credits

Prerequisites: HMS 101, HMS 102 and HMS 103. Advanced level course provides an overview of legal and ethical aspects in the field of human services with implications for the human service worker. Includes topics such as confidentiality, rights of clients, client records, equal protection for staff and clients, and discrimination. The Human Service Ethical Code and related codes are covered with an overview of ethical dimensions of practice.

HMT 100 OSHA Regulations
3 Credits

Prerequisites: None. This course provides a study of the U. S. Occupational Safety and Health Administration's (OSHA) regulations that pertain to protecting workers from exposure to occupational hazards. Students concentrate on researching, interpreting, summarizing, and applying the OSHA regulations.

HMT 200 EPA Regulations
3 Credits

Prerequisites: None. This course provides a detailed study of the U. S. Environmental Protection Agency (EPA) regulations pertaining to hazardous waste management, with an emphasis on the requirements of the Resource Conservation and Recovery Act of 1976, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986.

HMT 201 Contingency Planning
3 Credits

Prerequisites: None required; however, the following is recommended: HMT 100. How to develop an emergency response contingency plan for a facility or community. Preparedness includes analyzing the hazards, writing and implementing the contingency plans, training employees for an emergency, and evaluating the effectiveness of the contingency plan.

HMT 203 Sampling Procedures
3 Credits

Prerequisites: None. A variety of sampling procedures used in industrial settings for emergency response. Topics to be covered include: sampling and monitoring devices, industrial hygiene monitoring, water and waste stream monitoring, outside air sampling, soil and radiation sampling. Emphasis will be placed on collecting and preserving representative samples, interpreting laboratory results, and on complying with relevant federal regulations.

HMT 205 DOT Regulations
3 Credits

Prerequisites: HMT 100. A detailed study of the U. S. Department of Transportation (DOT) regulations. Students shall be introduced to certain Nuclear Regulatory Commission and Environmental Protection Agency regulations pertinent to hazardous materials transportation.

HMT 220 Hazardous Materials Recovery, Incineration and Disposal
3 Credits

Prerequisites: HMT 100. The methods of recovery, incineration and/or disposal of hazardous waste. Topics include contracting qualified disposal organizations, obtaining permits and ensuring regulatory compliance of hazardous waste. Topics include contracting qualified disposal organizations, obtaining permits and ensuring regulatory compliance of hazardous waste.

HOS 101 Sanitation and First Aid
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. This course will help students learn basic principles of sanitation and safety in order to maintain a safe and healthy food service environment. It presents laws and regulations related to safety, fire, and sanitation and how to adhere to them in the food service operation.

HOS 102 Basic Food Theory and Skills 3 Credits

Prerequisites: None. Corequisites: HOS 101. Fundamentals of food preparation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment. This course also provides a background and history of the hospitality industry and introduces the student to the broad spectrum of hospitality/food service organizations and career opportunities. Students will be familiarized with the organizational structure and basic functions of departments.

HOS 103 Soups, Stocks, and Sauces 3 Credits

Prerequisites: HOS 101 and HOS 102. How to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods.

HOS 104 Nutrition 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. The characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation.

HOS 105 Introduction to Baking 3 Credits

Prerequisites: None. Corequisites: HOS 101. Fundamentals of baking science, terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

HOS 106 Pantry and Breakfast 3 Credits

Prerequisites: HOS 101 and HOS 102. The techniques and skills needed in breakfast cookery as well as insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes and appetizers.

HOS 108 Human Relations Management 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. The necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

HOS 109 Hospitality Purchasing 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. A detailed study of major groups of food purchased by quantity buyers including fresh fruits and vegetables, dairy products, meats and seafood, processed products, beverages, and non-food items. The essentials of effective food and beverage control while establishing systems for sale values for food and beverages are outlined.

HOS 110 Meat Fabrication 3 Credits

Prerequisites: HOS 101 and HOS 102. An in-depth look at meats and poultry. An emphasis will be placed on recognizing and understanding meat types and cuts to allow them to be well and profitably prepared/cooked. The course will provide discussion of grading and inspection, basic cuts, purchasing and receiving, aging, classification, and appropriate cooking and storage methods. The student will be responsible for the fabrication of meats and poultry for final preparation.

HOS 111 Yeast Bread I 3 Credits

Prerequisites: HOS 105. The first of two courses which prepare students to produce a variety of yeast-raised breads and rolls using both straight dough and sponge dough methods. The course emphasizes proper mixing, fermentation, make-up proofing, and baking.

HOS 112 Yeast Bread II 3 Credits

Prerequisites: HOS 111. To advance the student in proficiency in the production of artisan yeast-raised products from around the world. The ingredients, methods, and equipment utilized in the production of these products will be emphasized.

HOS 113 Baking Science 3 Credits

Prerequisites: HOS 105. To help students understand the science of baking and the different reactions that take place based on the ingredients, temperatures, and equipment in relation to the final product.

HOS 114 Introduction to Hospitality
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Developing an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue.

HOS 115 Diet Therapy
4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. The basic principles of nutrition; the role nutrients play in maintaining good health as well as their affect on certain disease states. Students will learn to modify diets to meet various nutritional needs and to plan menus using modified diet principles.

HOS 116 Dietary Management I
4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. The basic principles of management and supervision. The course is designed to teach skills necessary to goals of a person wishing to become a dietary manager.

HOS 117 Dietary Management II
4 Credits

Prerequisites: HOS 116. The basic principles of management and supervision for the dietary professional. Skills learned through this course and included practice are applicable to management level positions.

HOS 118 Resident Clinical Assessment Practicum
4 Credits

Prerequisites: HOS 117. Developing an in-depth understanding of the principles of diet therapy. Students will learn to assess patients' nutritional needs, develop care plans, and implement a delivery system. Students will also learn documentation skills required by HCFA.

HOS 128 Quality Management in Food Service
3 Credits

Prerequisites: None. Provides students with practical knowledge and skills of restaurant operations through TQM. Emphasis is placed on forming an organizational team from traditional "front and back-of-the house" roles. In addition, various types of service for food and beverages are taught to demonstrate the versatility of the industry.

HOS 131 Techniques of Craps I
9 Credits

Prerequisites: None. Emphasizes fundamentals of dealing the game of Craps: Chip handling and cutting, call bets, procedures, accuracy, and game speed. The course requires the development of quick mental multiplication and game speed, and knowledge of all bets and procedures for payoffs. Special attention is paid to the managerial aspects of Craps.

HOS 132 Techniques of Blackjack I
6 Credits

Prerequisites: None. Emphasizes the fundamentals of dealing the game of Blackjack: chip handling and cutting, shuffling, card delivery, call bets, procedures, accuracy, and game speed. Special attention is paid to the managerial aspects of Blackjack.

HOS 133 Techniques of Casino Games: Roulette
6 Credits

Prerequisites: None. Emphasizes fundamentals of dealing the game of Roulette: chip handling and cutting, call bets, procedures, accuracy and game speed. Requires the development of quick mental multiplication and game speed, and knowledge of all bets and procedures for payoffs. Special attention is paid to the managerial aspects of Roulette.

HOS 141 Introduction to Casino Operations
3 Credits

Prerequisites: None. Concentrates on the basic rules, fundamentals, and procedures of all the revenue-producing areas of a modern casino. Topics covered include table games, slots, race and sports betting, bingo and keno. This course includes an overview of other pertinent casino areas such as casino cage and surveillance. Casino math along with game operations and protection is practiced.

HOS 144 Travel Management
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. A systematic overview of the travel industry. The class provides comprehensive and critical information on a broad range of travel services, products, and issues.

HOS 171 Introduction to Convention/Meeting Management   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. A comprehensive understanding of the convention/meeting management industry including the roles of various service providers, space requirements, and uses of convention facilities.

HOS 172 The Development and Management of Attractions   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. The process of developing visitor attractions and provides for a discussion of the issues involved in their management.

HOS 202 Fish and Seafood   **3 Credits**

Prerequisites: HOS 101, HOS 102, HOS 103 and HOS 109. Emphasizes the importance of fish and seafood in today's market. The student will become familiar with the different varieties and characteristics of fish and seafood. Students will learn the basic principles of structure, handling, and cooking to utilize the many varieties of seafood in a systematic way. The course will cover proper buying, storage, preparation and merchandising of fish and seafood. The course provides hands-on experience in boning, cutting, and cooking methods appropriate for seafood.

HOS 203 Menu, Design and Layout   **2 Credits**

Prerequisites: Program Advisor Approval. Applying the principles of menu planning, pricing, and layout to the development of menus for a variety of types of facilities and service. The major project will be to develop a menu, design and layout of a hospitality facility.

HOS 204 Food and Beverage Cost Control   **3 Credits**

Prerequisites: MAT 111 or MAT 112 and HOS 109. An introduction to food, beverage and labor cost controls that are essential to the success of hospitality operations. Part One covers a number of key terms and concepts and provides a foundation for the balance of the work towards understanding the complexities of controlling costs. Part Two addresses the application of the four-step control process to the primary phases of foodservice operations: purchasing, receiving, storing, issuing and production. The final section is an exposition of labor cost controls.

HOS 207 Table Service   **3 Credits**

Prerequisites: HOS 101, HOS 102, HOS 104 and HOS 204. Provides students with practical knowledge and skills of restaurant operations. Knowledge and appreciation of the relationship between "front" and "back" of the house is emphasized through operation of an actual food service environment. Quality of service is emphasized through management of the guest experience. Additional course work will include tableside cookery and the study of beverages and wines.

HOS 208 Cakes, Icings, and Fillings   **3 Credits**

Prerequisites: HOS 105. Requires students to produce and finish a variety of cakes. The course emphasizes application techniques, color coordination, and the flavor and texture of fillings. Students will practice the techniques of basic cake decorating.

HOS 209 Advanced Decorating and Candies   **3 Credits**

Prerequisites: HOS 208. The second in a series in decorating techniques and candy making. Students will construct classical and contemporary candy products including centerpieces and/or showpieces made with selected confectionery mediums.

HOS 210 Classical Cuisine   **3 Credits**

Prerequisites: Program Advisor Approval. Presents advanced and sophisticated classical culinary methods following the principles and techniques of Escoffier. Students will advance cooking techniques, timing, and presentation and learn history and terms pertaining to classical foods and menus with emphasis on French cuisines.

HOS 211 Specialized Cuisine   **3 Credits**

Prerequisites: HOS 106, HOS 110, and HOS 207. Students will be introduced to foods from various cultures. Students will gain a sense of the history of foods from various countries as well as develop skills in preparation of these foods. Students will advance skills in table service as well as tableside preparation.

HOS 212 Garde Manger
3 Credits

Prerequisites: HOS 106. Helps students develop skills in producing a variety of hot - served cold food products as it relates to the garde manger area. Students will prepare items appropriate for buffet presentation, including decorative pieces such as tallow and ice sculptures.

HOS 213 Classical Pastries and Chocolates
3 Credits

Prerequisites: 30 hours of program studies including HOS 105. This course address classical French and European desserts, including the preparation of goods such as Napoleons, Gateau St. Honoré, petit fours and petit fours sec, ganaches, pastry creams and fillings, sauces, flans and tarts, and European sponges. The course also includes instruction in tempering of chocolates, molding, and choco-late plastique, preparation of truffles, pastilage and marzipan, short doughs, and meringues. The student will be instructed in the latest preparation methods, innovative ideas for impressive plate presentations, and techniques that utilize specialized equipment and tools to make high-tech, novelle creations.

HOS 215 Front Office
3 Credits

Prerequisites: HOS 114 and MKT 101. Presents a systematic approach to front office procedures, detailing the flow of business through a hotel beginning with the reservation process and ending with billing and collection procedures within the context of the overall operation of a hotel. Students will examine front office management, the process of handling complaints and concerns regard-ing hotel safety and security. Students will become involved in the processes for forecasting future business, sales, and rate structure of the hotel as well as methods for budgeting hotel finances for success.

HOS 217 Housekeeping
3 Credits

Prerequisites: HOS 114 and MKT 101. Introduces the fundamentals of housekeeping operations. Emphasis is placed on employee development, management skills, OSHA standards and property maintenance and up-keep. Budgeting, cost controls, proper staffing and planning a fiscal budget are also emphasized in this course.

HOS 221 Catering Administration
3 Credits

Prerequisites: 30 hours of program studies. Provides instruction in the fundamentals of catering; including the business of supplying food, goods, and organized service for public and private functions. Subjects to be covered include staffing, equipment, transporta-tion, contracting, special arrangements, beverage service and menu planning. Students will practice techniques of setting up banquets and buffets. Students are required to plan, budget, cost, test recipes and formats, plan décor, service and entertainment for catered events.

HOS 231 Techniques of Craps II
7 Credits

Prerequisites: HOS 132 or HOS 133. Emphasizes the fundamentals of dealing the game of Craps: chip handling and cutting, call bets, procedures, accuracy and game speed. Students are expected to develop quick mental multiplication, game speed, and knowl-edge of all bets and procedures for payoffs. Special attention is paid to the managerial aspects of Craps.

HOS 232 Techniques of Blackjack II
5 Credits

Prerequisites: HOS 131 or HOS 133. Fundamentals of dealing the game of Blackjack: chip handling and cutting, shuffling, card delivery, call bets, procedures, accuracy and game speed. Special attention is paid to the managerial aspects of Blackjack.

HOS 233 Techniques of Roulette II
6 Credits

Prerequisites: HOS 133. Emphasizes fundamentals of dealing the game of Roulette: chip handling and cutting, call bets, procedures, accuracy and game speed. Students will be required to develop quick mental multiplication, game speed, and knowledge of all bets and procedures for payoffs. Special attention is paid to the managerial aspects of Roulette.

HOS 242 Casino Supervision
3 Credits

Prerequisites: None. Provides an in-depth study of casino management techniques used in gaming both locally and nationwide. The duties and responsibilities of the mid-level casino supervisor and the casino executive are emphasized. Duties of floor, pit and shift managers are included with emphasis on game protection, credit and marker control, cash and check control, and internal regulatory procedures.

HOS 243 Casino Cage Operations
3 Credits

Prerequisites: None. Focuses on the casino cashier cage, its operation and its interface operations with the various resort departments. Emphasizes basic cage procedures, federal monetary regulations, and controls and procedures, which are standardized, regardless of the size of the casino operation.

HOS 244 Slots Management
3 Credits

Prerequisites: None. Emphasizes basic slots managerial techniques including supervision of slot shift managers, mechanics, technicians, floor personnel, change persons, booth cashiers, carousel attendants, coin room operators, jackpot fills, and credits.

HOS 245 Casino Surveillance
3 Credits

Prerequisites: None. Studies all aspects of modern casino surveillance, including all table games, slots, cage, keno and all areas of the casino. Increases the students' familiarity with regulations, criminal laws, rules of evidence and game protection, fostering both knowledge and professionalism within the work place.

HOS 270 Bakery Merchandising
3 Credits

Prerequisites: HOS 105, HOS 111 and HOS 112. Education and practice in merchandising techniques with an emphasis on the baking and pasty field. The majority of a student's time will be spent in all pertinent phases of retail bakeshop operation or in the field observing merchandising in action.

HOS 271 The Mechanics of Meeting Planning
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 050. An in-depth examination of the meetings and conventions industry, this class will focus on the operational aspects of the various industry segments and the intra-industry interactions of each. The course will provide an in-depth study and application of the techniques used for successful meetings, conventions and expositions. The text used is one of the main components used to study for the Certified Meeting Professional (CMP) examination – the highest level of expertise in meetings management. Class activity will help prepare the student for the CMP examination.

HOS 272 The Tourism System
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Designed to develop an understanding of travel trends and modes and the social, environmental, and economic impact on destination areas. The course explores major concepts in tourism, what makes tourism possible, and how tourism can become an important factor in the wealth of any nation. Emphasis is given to local, regional, and national tourism.

HOS 280 Co-op/Internship
3 Credits

Prerequisites: 50 Credit Hours of Program Studies. A practical experience in a commercial/non-commercial foodservice or hotel establishment in order to build specialized skills. This work-based experience provides an opportunity for students to transfer their academic preparation into actual work-based learning by acquiring "real world" skills and building ties with the business/professional community. (Students should have a site in mind prior to registering for this course--coordinator will assist.)

HSY 101 Survey of American History I
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Covers major themes and events in history including exploration of the New World; the colonial period; causes and results of the American Revolution; the development of the federal system of government; the growth of democracy; early popular American culture; territorial expansion; slavery and its effect; reform movements, sectionalism; causes and effects of the Civil War.

HSY 102 Survey of American History II
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Covers major themes including the post Civil War period, western expansion, industrial growth of the nation and its effects, immigration and urban discontent and attempts at reform, World War I, the Roaring Twenties, social and governmental changes of the thirties, World War II and its consequences, the growth of the federal government, social upheaval in the sixties and seventies, and recent trends in conservatism, globalization, and cultural diversity.

HSY 125 History of American Technology   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Examines the technological development of the United States. Emphasis will be given not only to the inventions themselves but the reasons why such technology was needed and what influence the technology has had on American society.

HSY 235 World Civilization I   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Presents the key individuals, events and schools of thought, which have most greatly impacted societal development and world history up to 1650. The target civilizations of study include Oriental, the Middle East, Western Europe, Africa, and the Americas. Discusses the political, economic, social and cultural evolution of human civilization.

HSY 236 World Civilization II   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Presents the key individuals, events and schools of thought, which have most greatly impacted societal development and world history since 1500. Key movements and events of the periods will be studied. Discusses the political, economic, social and cultural evolution of civilization.

HUM 100 Theatre Appreciation   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Developing understanding, appreciation and critical perceptions of the theatrical event. The course will approach theatre as an art form, an entertainment medium and as a vehicle for self-expression. Emphasis will be placed on the history of theatre, acting, directing, playwriting, theatre technology, costume design, scenic design, and lighting design. Active participation in the playwriting, acting, directing and designing processes will be provided. The course will also require attendance at theatrical events to offer firsthand experience in theatre arts.

HUM 117 Introduction to Music Theory   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Emphasizes the practical learning of basic music skills and will cover fundamental music terminology, notation and structure. Sight singing and listening skills will also be developed through examples drawn from a wide variety of musical styles.

HUM 118 Music Appreciation   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces the student to music with an emphasis on critical listening. Surveys a variety of genres, composers and their compositions. No previous background in music required.

HUM 201 Introduction to Humanities I   3 Credits

Prerequisites: ENG 111. Introduces the student to a wide variety of unique creations of the individual imagination. The overall purpose of the course is to deepen and broaden the student's enjoyment of a work of art at both the level of feeling and the level of understanding. This course focuses on painting, sculpture, architecture, and drama.

HUM 202 Introduction to Humanities II   3 Credits

Prerequisites: ENG 111. Introduces the student to a wide variety of unique creations of the individual imagination. The overall purpose of the course is to deepen and broaden the student's enjoyment of a work of art at both the level of feeling and the level of understanding. This course focuses on dance, literature, music, and film.

IDS 105 Industrial Solid State Fundamentals   3 Credits

Prerequisites: MIT 103 and MIT 113. Studies the fundamentals of solid-state active devices that are used in automated systems. Introduces the student to the theory of basic solid-state devices such as diodes, transistors, and SCR's and applications such as amplifiers, op amps, and switching power supplies. Prepares students to diagnose, repair, verify, and install electronic circuits and systems.

IDS 110 Basic Carpentry and Building Maintenance   3 Credits

Prerequisites: None. Includes carpentry basics, power tool and hand tool safety and use, framing, trim, hanging doors and windows, installing cabinets and counter tops, screen repair, lock replacement, cutting keys, drywall basics, painting, basic masonry, an overview or floor and wall coverings, environmental concerns such as lead-based paint, asbestos and radon, and basic architectural blueprint reading.

IDS 120 Basic Carpentry and Building Maintenance   3 Credits

Prerequisites: None. Includes carpentry basics, power tool and hand tool safety and use, framing, hanging doors and windows, trim basics, drywall basics, and painting basics.

IDS 122 General Maintenance   3 Credits

Prerequisites: None. Corequisite: MIT 113. Covers required record keeping, plumbing basics (fixture repair and replacement, piping, basic plumbing code, etc.), major appliance installation and repair, chemical usage and storage, MSDS files, ADA compliance and safety and liability topics.

IMT 105 Heating and Air Conditioning Basics   3 Credits

Prerequisites: None. Presents fundamentals of heating and compression systems used in mechanical refrigeration. Includes combustion process, heat flow, temperature measurement, gas laws, heating and refrigeration cycles and components used in systems.

IMT 106 Millwright I   3 Credits

Prerequisites: Program Advisor Approval. Introduces the proper use of hand and power tools and measuring instruments in carpentry, blacksmithing, rigging and equipment, machinist and general shop. Includes structural steel and fabricating terms.

IMT 107 Preventative Maintenance   3 Credits

Prerequisites: None. Introduces the major purpose of preventive maintenance: to save time and to cut costs. The course will study goals such as, reducing losses, improving product quality, boosting production efficiency, and increasing profits. Includes an introduction to sound planning, effective scheduling, competent inspection, control and actions at the worksite, and follow-up reporting. Lab projects will be designed to organize materials, tool control, transportation of equipment, sizing up labor requirements.

IMT 108 Measure and Calibration   3 Credits

Prerequisites: MIT 113. Provides instruction in the purpose, function and application of oscilloscopes and related instruments.

IMT 110 Coupling and Alignment   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 044. Introduces the concepts of correct alignment of industrial process machinery. Provides instruction in troubleshooting and repair of coupled machines.

IMT 111 Rigging   3 Credits

Prerequisites: None. Introduces the proper techniques of moving industrial machinery and equipment. Emphasis is placed on proper installation, inspection, safety requirements, and load calculations.

IMT 112 Sheet Metal Layout and Design   3 Credits

Prerequisites: None. Examines the procedures used to layout sheet metal components. Presents the proper use of hand and machine tools to fabricate sheet metal projects.

IMT 121 Industrial Safety   3 Credits

Prerequisites: None. Introduces occupational safety and health standards and codes with emphasis on applications of codes to typical work situations and MSDS requirements. Includes emergency first aid, safety protection, eye protection and chemicals handling. Covers employer and employee rights as well as violations, citations, penalties, variances, appeals and record keeping.

IMT 122 Electrical Wiring Fund   3 Credits

Prerequisites: MIT 113. Introduces the student to the National Electrical Code and its application in designing and installing electrical circuits, selecting wiring materials and devices, and choosing wiring methods. Includes electrical safety, terminology, interpretation of electrical symbols used in construction blueprints, branch circuit layout, over current protection, conductor sizing, grounding, GFCI & AFCI protection, tool usage, and material/device selection.

IMT 201 Fluid Power Systems (Hydraulics/Pneumatics)   3 Credits

Prerequisites: MIT 104. Introduces the student to more complex fluid power circuits. Requires students to design, analyze and troubleshoot complex circuits using schematic diagrams. Studies detailed construction of typical industrial fluid power components. Teaches students to disassemble and evaluate fluid power components in the lab.

IMT 203 Machine Maintenance/ Installation   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Examines the procedures for the removal, repair and installation of machine components. The methods of installation, lubrication practices, and maintenance procedures for industrial machinery are analyzed. Also presented are the techniques involved in the calibration and repair of mechanical devices and the practice in computations pertaining to industrial machinery.

IMT 207 Electrical Circuits   3 Credits

Prerequisites: MIT 113. This course is designed to provide an understanding of circuits using alternating current and the motor operation. Provides fundamentals of single- and three-phase alternating current. Analysis of series and parallel circuits, containing resistance, inductance, and capacitance will be covered. Transformer applications both single phase and three-phase along with power distribution will be covered. This course will give each student a general understanding of common types of electric motors, extending from the small shaded pole fan motors to the large three-phase motors. Direct current motors will also be covered. The student will receive an education in motor theory, magnetism and how it affects motor rotation, and how capacitors affect a motor circuit will be included.

IMT 210 Pumps   3 Credits

Prerequisites: MIT 104. Covers the construction and operation of centrifugal, reciprocating, metering, special, and rotary pumps and their components. Includes procedures of troubleshooting, installation and maintenance.

IMT 211 Advanced Industrial Mechanics I   3 Credits

Prerequisites: IMT 203. Examines the operation and design of mechanical systems including belt drives, chain drives, gearboxes, and bearings. Includes the proper use of portable tools and the study of different metals.

IMT 212 Advanced Industrial Mechanics II   3 Credits

Prerequisites: IMT 203 and MIT 103. Teaches advanced mechanical maintenance skills which specifically include vibration analysis, laser shaft alignment, lubrication oil analysis, pumps, seals, gaskets, and couplings. Half of the semester is also devoted to teaching the basics of heating and air conditioning.

IMT 213 Pipe Fitting Basics   3 Credits

Prerequisites: MIT 102. Acquaints the maintenance technician with a basic foundation and pipe fitting skills necessary to make repairs or layout new pipe. Includes determination of the type and quantity of material needed to complete a task and joining those materials in the proper manner with a minimum of supervision.

IMT 215 Power Plant Mechanics   3 Credits

Prerequisites: IMT 207 and MAT 111. Presents the basic elements in the power plant, the function, their mode of operation, and the mechanics, with emphasis on the construction and repair of power plant mechanics. The student selects, troubleshoots, and repairs power plant mechanics.

IMT 216 Industrial Automation   3 Credits

Prerequisites: IDS 105, IMT 207 and TEC 104. Covers the field of industrial automation. Introduces the principles of control systems both analog and digital based. Covers instrumentation and sensors; position, speed, thermal, pressure, flow, and level. Develop an understanding of analog and digital signal conditioning as applied to automated systems. Covers the principles of process controllers both analog and digital. Understand control loop characteristics and tuning.

IMT 217 Advanced Motor Drives   3 Credits

Prerequisites: MIT 103 and IDS 105. Covers the field of industrial motor drives, dc, ac, servo and stepper motors. Introduces students to variable voltage dc drives and variable frequency ac drives. Topics covered will include installation, setup, maintenance, and trouble-shooting of drive systems.

INT 103 Introduction to Interior Design   3 Credits

Prerequisites: None. An introductory course, which provides students with an overview of the field of interior design. Exercises include small scale space analysis and functional planning based on user needs, application of the principles of design, furniture arrangement and selection, interior finish considerations and presentation techniques.

INT 104 Textiles for Interiors
3 Credits

Prerequisites: None. An intensive study of textiles from fiber identification and classification to finish. Also introduces the study of interior textile fabrications including window treatments, upholstery, carpet and wall coverings.

INT 108 Interior Design II
3 Credits

Prerequisites: EDN 102 and EDN 105 and INT 103. Presents concept development, programming and space planning of the interior environment. Exercises reinforce creativity and problem solving skills. Emphasizes the relationship between individuals and their surroundings, including studies in human scale, proxemics and design considerations for special populations.

INT 109 History of Interiors I
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Survey of the development of the interrelationship of architecture, interiors, furniture, and decorative arts from antiquity through the ages.

INT 200 Lighting and Building Systems
3 Credits

Prerequisites: EDN 102 and EDN 216. Presents the integration of commercial and institutional interior design and architectural detailing. Includes the impact of mechanical and electrical systems, acoustics and codes. Special emphasis will be placed on lighting technology and application.

INT 201 Interior Materials
3 Credits

Prerequisites: INT 104. Examines the physical properties and characteristics of various furniture and decorative materials, finishes, and architectural detailing including floor and wall treatments. Addresses environmental issues and problems in specifying, estimating, and installing these materials.

INT 202 Contract Design
3 Credits

Prerequisites: EDN 216 and INT 108. Studies include commercial technological and base building requirements, barrier-free, building and life safety codes, analysis of existing conditions, client interview, and square footage and space planning standards. Emphasis is on task analysis and workstation design, systems and equipment manufacturers and finish selections within the office.

INT 204 Interior Design III
3 Credits

Prerequisites: Program Advisor Approval. Students will research and develop creative project solutions for commercial interiors in visual merchandising, hospitality, adaptive reuse and special population projects. Students will define, research, and develop a program for an advanced design problem including concept development, space planning, all necessary working drawings and specifications and appropriate presentation materials.

INT 211 Kitchen and Bath Design
3 Credits

Prerequisites: EDN 102 and INT 201. Involves the requirements and space planning for kitchens and baths, utilizing both standard and custom cabinetry and fixtures. Topics also include casework for media and conference centers.

INT 212 Historic Preservation
3 Credits

Prerequisites: EDN 102 and INT 109. Introduces the process of establishing historic properties. Preservation, restoration and adaptive reuse will be differentiated as applied to both public and private properties. Includes appropriate exterior and interior color and finish selections, and architectural detailing.

INT 223 History of Interiors II
3 Credits

Prerequisites: INT 109 or ARH 101. A continuation of INT 109 course. An in-depth exploration of the movements in architecture and interior design from the late 19th century to the present.

IVY 070 College and Life Success
3 Credits

Prerequisites: Minimum entry assessment scores for reading and writing. Enhances success in college by assisting students in obtaining skills necessary to reach their educational, career, and life objectives. Topics include time management, memory techniques, textbook usage, note taking, test taking, problem solving and decision making, group interaction, communication skills, and resource and technology utilization.

IVY 071 Study Skills Survey   **1 Credit**

Prerequisites: Minimum entry assessment at the ENG 024 and ENG 031 level. Enhances success in college by assisting students in obtaining skills necessary to reach their educational, career, and life objectives. Topics include memory, reading, note-taking, test-taking techniques, strategies for scheduling time to study, and dealing with test anxiety.

IVY 072 Research Strategies   **1 Credit**

Prerequisites: Minimum entry assessment at the ENG 024 and ENG 031 level. Enhances success in college by assisting students in obtaining skills necessary to reach their educational, career, and life objectives, specifically in the area of information literacy. Students will learn how to use an email account and a variety of on-line resource information databases. Students will learn how to gather required information for source citation when summarizing, paraphrasing, and quoting resources. The course also addresses basic issues concerning informational integrity.

IVY 073 Styles of Learning   **1 Credit**

Prerequisites: Minimum entry assessment at the ENG 024 and ENG 031 level. Enhances success in college by assisting students in obtaining skills necessary to reach their educational, career, and life objectives. Students will learn a holistic, integrated, principle-centered approach for solving academic challenges. This course represents a step-by-step learning process which provides effective tools that help students adapt to change.

IVY 101 College Orientation   **1 Credit**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Provides students with specific skills and strategies necessary to reach their educational, career, and life objectives. Topics include time management, study skills, learning styles, campus and community resources, critical thinking, utilization of technology, career skills, and diversity in society.

LEG 101 Introduction to Paralegal Studies   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Corequisite: CIS 101. A survey of the American legal system, the substantive and procedural law of Indiana, and the role of the paralegal in the legal profession. Topics include professional ethics, trial and appellate courts, civil and criminal procedure, constitutional law, and basic legal analysis. This entry-level course is a prerequisite for all other paralegal courses in the program.

LEG 102 Legal Research   **3 Credits**

Prerequisites: CIS 101 and LEG 101. Introduces the student to legal research resources including cases reporters and digest indexes, statutory codes, constitutions, administrative codes and registers, legal encyclopedias, treatises, legal periodicals, and practice manuals and form books. Instruction is also delivered on proper legal citation form, citation services, and research strategy. Projects include a series of law library research projects that teaches the student the descriptive word method of research, basic legal analysis, and the structure of a legal research memorandum of law. 20 hours of law library attendance required in this course.

LEG 103 Civil Procedure   **3 Credits**

Prerequisites: CIS 101 and LEG 101. The first of two semesters devoted to the study of the Indiana Trial rules, small claims, court rules, and local rules. (The second course is LEG 202) Topics include filing requirements, the rules regarding service of process, and calculation of deadlines. Projects include drafting summonses, complaints, answers, and various motions.

LEG 106 Tort Law   **3 Credits**

Prerequisites: CIS 101 and LEG 101. Concerns the law of non-criminal injuries to persons or property. Topics include negligence, strict liability, product liability, intentional torts, affirmative defenses, basic evidence law, and pre-trial investigation techniques and resources.

LEG 107 Contracts and Commercial Law   **3 Credits**

Prerequisites: CIS 101 and LEG 101. Examines the nature of contracts and commercial law under both the common law and the Commercial Code of Indiana. Topics include contracts for sales of goods (UCC Article 2), the Statute of Frauds, performance, remedies, warranties, assignment law, negotiable instruments law (UCC Article 3), and secured transactions law (UCC Article 9).

LEG 108 Property Law 3 Credits

Prerequisites: CIS 101 and LEG 101. A survey of the law of real and personal property in Indiana. Property law concepts are analyzed. Topics include the different types of property generally, estates in land, concurrent ownership, legal descriptions and deeds, easements, encumbrances on title, title searches and title insurance, real estate purchase agreements, closings, mortgages and UCC Article 9 security interests, foreclosures, landlord-tenant law, and personal property law topics such as bailments, lost property, and intellectual property. This is an introductory course in real and personal property law for paralegal majors.

LEG 202 Litigation 3 Credits

Prerequisites: LEG 102, LEG 103, LEG 106 and LEG 107 or LEG 108. The study of Indiana trial rules pertaining to actual trial. Topics include the discovery process and discovery tools, litigation support—including organization and retrieval of trial documents—techniques in preparing witnesses for trial, and preparing jury instructions. The main project is compiling a trial notebook.

LEG 203 Law Office Technology 3 Credits

Prerequisites: CIS 101, LEG 101, and LEG 102. A hands-on survey of software support available to the law practitioner, including word processing, electronic spreadsheets, database management, presentation software, docket control, litigation support, timekeeping, and billing. Also included is information on computer-assisted legal research services, web based research, and electronic filing.

LEG 204 Legal Writing 3 Credits

Prerequisites: CIS 101, LEG 101, LEG 102 and LEG 103. Further develop the legal writing skills the students touched upon in Legal Research. The student will be exposed to various legal writing techniques that are used in drafting a wide variety of legal documents. Throughout the semester, a strong emphasis is placed on proper writing methodology and formatting. Projects include drafting research, correspondence, litigation and transactional documents.

LEG 205 Business Associations 3 Credits

Prerequisites: CIS 101 and LEG 101. Introduces the student to the various forms of business entities, including sole proprietorships, general and limited partnerships, limited liability companies (LLC's), and business corporations. Topics include key concepts of law (the relationship between principals and agents), the scope of employment doctrine, and respondeat superior, the distinguishing characteristics of common business entities, the formal requirements for establishing and doing business in various types of business organizations in Indiana, respective advantages and disadvantages of each type, and relevant tax issues. Students will review sample business formation documents and will draft a general partnership agreement.

LEG 206 Advanced Tort Law 3 Credits

Prerequisites: CIS 101, LEG 101 and LEG 106. A continuation of the principles and issues discussed in Tort Law class, including res ipsa loquitur, attractive nuisance, premises liability and wrongful death. Litigation support and strategy will also be discussed.

LEG 209 Family Law 3 Credits

Prerequisites: CIS 101, LEG 101 and LEG 108. An introduction to the Indiana law of marriage, dissolution, custody (including UC-CJA), visitation, support (including URESA), adoption, and guardianship of minors. Students will review many pleadings and intake forms and will draft a divorce petition, a financial statement, a summary decree with child support worksheet.

LEG 210 Wills, Trust, and Estates 3 Credits

Prerequisites: CIS 101, LEG 101 and LEG 108. Concerns the law of wills and trusts, the administration of estates, and guardianships according to Indiana common law and the provisions of Titles 29, 30 and Title 6 (death taxes) of the Indiana Code. Students study the intestate succession, the elements of a valid will, of a valid trust, and laws of will construction.

LEG 211 Criminal Law and Procedure 3 Credits

Prerequisites: LEG 101 or CRJ 101. A theoretical and practical survey of the statutory law of crimes, evidence, and criminal procedure in Indiana, including an examination of sample pleadings and motions. Topics include the elements of specific crimes, formal procedures from pre-trial to post-trial, actual courtroom strategies, and the practical concerns involved in both the prosecution and defense of criminal cases.

LEG 212 Bankruptcy Law 3 Credits

Prerequisites: CIS 101, LEG 101 and LEG 108. A survey of the Federal Bankruptcy Act, including the various bankruptcy proceedings. There under emphasizes how to accumulate the debtor's financial information, compile initial schedules, prepare the list of creditors, collect and organize data for the first meeting of creditors, complete proofs of claim, and pursue creditors rights. Including preparation of a Chapter 13 bankruptcy case.

LEG 280 Internship
3 Credits

Prerequisites: CIS 101, LEG 101, LEG 102, LEG 103 and LEG 106. An opportunity for the intermediate paralegal student to acquire valuable field experience by working under attorney supervision. The student keeps a journal and prepares a report of his or her experience at the end of the semester.

LIB 101 Introduction to Libraries and Library Services
3 Credits

Prerequisites: None. Surveys the history, organization, services, and functions of libraries. Provides Library Technical Assistant students with an introduction to and overview of the Library field and the different types of libraries.

LIB 102 Introduction to Reference Sources and Services
3 Credits

Prerequisites: None. This course gives an overview of the reference function with emphasis on the role of the LTA. Emphasis is placed on developing a working knowledge of basic reference tools and sources, both print and online. An awareness of the reference interview techniques and process is also gained.

LIB 103 Introduction to Libraries Public Services
3 Credits

Prerequisites: None. Overview of the role of the Library Technical Assistant (LTA) in library public service areas such as reference, circulation, interlibrary loan, bibliographic instruction, children and young adult services, and public relations and promotions, with in depth coverage of circulation and interlibrary loan. The course will also focus on the development of customer service and effective communication skills.

LIB 201 Cataloging and Classification
3 Credits

Prerequisites: None. Introduces students to the basic concepts of classification and cataloging within a library setting. Emphasis is placed on the development of a working knowledge of both descriptive and subject cataloging resources, Library of Congress and Dewey Decimal classification systems, copy cataloging, and MARC format.

LIB 202 Electronic Resources and Online Searching
3 Credits

Prerequisites: None. This course introduces students to essential electronic information sources (library catalogs, digital libraries, academic or gated databases, government resources, and the Internet) used in a variety of library environments, along with the online searching skills needed to effectively use them. The course emphasizes hands-on training with resources available in Indiana (through INSPIRE and Ivy Tech's Virtual Library), Boolean logic and other search strategies, copyright issues regarding digital information, retrieving, evaluating and citing information.

LND 101 Landscape Trees
3 Credits

Prerequisites: None. The identification of shade, ornamental, and evergreen trees. Including evaluating species quality, growth habits, and site adaptability; covers 125 species important to landscaping tree care.

LND 102 Shrubs and Other Plants
3 Credits

Prerequisites: None. The identification of 125 shrubs, vines, ground covers, and herbaceous plants important to landscaping including evaluation of growth habits, species quality, and site adaptability.

LND 103 Landscape Management I
3 Credits

Prerequisites: LND 101. Methods in the practice of landscaping, tree care, and turf management are briefly introduced through lectures, slides, videos, and field trips. Weed problems and their control are studied. A large segment of the course is devoted to the study of non-pathogenic problems of landscape plants and turf as well as their pathogenic diseases, and management of these problems.

LND 104 Turf Management
3 Credits

Prerequisites: LND 103. A study of the particular growth characteristics of the grass species used in lawn areas in the Midwest and Great Lakes area. Also covers the competitive influences and how to control these problems and promote good turf.

LND 105 Landscape Botany
3 Credits

Prerequisites: Program Chair Approval. The study of the life of a plant; cell structure; the structure and function of roots, stems, leaves, flowers, and seeds; the assimilation of water and nutrients in the plants growth and the stages of development as well as the place and importance of soils. This class is important to one seeking qualification as a licensed pesticide applicator.

LND 106 Landscape Design I
3 Credits

Prerequisites: LND 101 and LND 102. Landscape drafting techniques and basic landscape planning for residential and small business settings utilizing the proper selection of ornamental plants consistent with design and environmental requirements. Included are lectures, slide and film presentations, and lab work with drafting tools and equipment.

LND 201 Landscape Management II
3 Credits

Prerequisites: LND 103. Takes advantage of growing season experiences to reinforce what is taught in the prerequisite course by textbook and lecture. Actual on-site observation, as well as hands on experience is planned. Actual practice in the monitoring of pest problems given.

LND 202 Landscape Design II
3 Credits

Prerequisites: LND 106. A follow up to Landscape Design I to show and give practice in somewhat more sophisticated techniques such as enhancement of drawing by color-use. Also, guidance and practice in making elevation drawings is given. Some introduction to the use of computer-aided drawings is given to the student.

LND 203 Insect Pests of Ornamentals
3 Credits

Prerequisites: Program Chair Approval. Covers insect identification, structure, and life history; pest management of insects important to landscaping and tree care.

LND 204 Herbaceous Ornamentals and Grasses
3 Credits

Prerequisites: Program Chair Approval. The identification of 125 annuals, perennials, and grasses that is important to landscape management. Slides and videos are used to introduce a list of non-woody plants which students may encounter in operating a landscape business. Bed principles, for effective landscape displays will be covered. Cultural practices propagation technique, foliage, and flower descriptions, watering, disease and insects are discussed.

LND 205 Tree Care Practices
3 Credits

Prerequisites: LND 101. Covers the basic knowledge and techniques used by one employed as an arborist in the care of larger mature trees. Includes climbing, pruning, takedowns, removals, soil relationships and fertilization, tools and equipment, and safety procedures.

LND 206 Fundamentals of Horticulture
3 Credits

Prerequisites: Program Chair Approval. Studies the basic horticulture of plant structure, growth, function, and development, including propagation, maintenance, and selection. Studies will include use of fertilization and pesticides for the control of diseases and pests.

LND 207 Soils
3 Credits

Prerequisites: LND 105. Studies the growth habits and culture of plants not particularly ornamental or frequently used in the landscape. However, knowledge of these plants will be useful to one employed in a garden center or service organization where this person is frequently expected to know answers to questions pertaining to gardening and horticulture.

LOG 101 Introduction to Materials Management
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032. Studies factors influencing the flow of materials in a manufacturing enterprise. Covers basics of production planning and control, purchasing, forecasting, inventory and distribution issues. Concludes with an overview of just-in time theory and practices.

LOG 202 Physical Distribution
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Focuses on the major concepts and rationale for utilizing warehouse inventories to lower costs of transportation, improve customer service, avoid stockouts, improve purchasing economics and seasonal variability.

MAT 040 Basic Mathematics Skills
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment. Concentrates on basic operations with whole numbers, fractions, decimals and their applications. Introduces a variety of math learning strategies. Includes United States Customary Measurement System.

MAT 044 Mathematics
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 040. Reviews basic operations with fractions, decimals and their applications. Concentrates on ratio, proportion, percents, measurement, geometric concepts, signed numbers, interpreting and constructing graphs, basic linear equations, and applications. A developmental mathematics course.

MAT 050 Basic Algebra
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 044. Reviews signed numbers and basic linear equations. Concentrates on integer exponents, scientific notation, linear equations and inequalities, literal equations, polynomial operations, polynomial factoring, graphing linear equations, and applications. A developmental algebra course.

MAT 111 Intermediate Algebra
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or a grade of "C" or better in MAT 050. Reviews basic operations of polynomials, scientific notation, linear equations and inequalities, graphing linear equations, and factoring algebraic expressions. Concentrates on properties of integer and rational exponents, rational expressions and equations, systems of linear equations, radicals, radical equations, quadratic equations, functions and their graphs, and applications. A standard college level intermediate algebra course.

MAT 112 Functional Mathematics
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Through real-world approaches, presents mathematical concepts of measurement, proportion, geometry, equations and inequalities, probability and statistics. Brief survey of college mathematics.

MAT 115 Statistics
3 Credits

Prerequisites: MAT 111. Provides study in the collection, interpretation and presentation of descriptive and inferential statistics, including measures of central tendency, probability, binomial and normal distributions, hypothesis testing of one-and two-sample populations, confidence intervals, chi-square testing, correlation, data description and graphical representations. An introductory statistics course.

MAT 121 Geometry-Trigonometry
3 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Includes polygons, similar figures, geometric solids, properties of circles, constructions, right triangles, angle measurements in radians and degrees, trigonometric functions and their application to right triangles, Pythagorean Theorem, laws of sine and cosine, graphing of trigonometric functions, trigonometric identities, vectors and polar coordinates. Introductory study of geometry and trigonometry.

MAT 131 Algebra/Trigonometry I
3 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, right triangle trigonometry, oblique triangles, vectors, and graphs of sine and cosine functions. First in a series of two courses of College Algebra/Trigonometry.

MAT 132 Algebra/Trigonometry II
3 Credits

Prerequisites: MAT 131. Continues study of algebra and trigonometry including systems of equations, matrices, graphing of trigonometric functions, trigonometric equations and identities, rectangular and polar coordinates, complex numbers, exponential and logarithmic functions and conics. Second in a series of two courses of College Algebra/Trigonometry.

MAT 133 College Algebra with Analytic Geometry
4 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, systems of equations, matrices, exponential and logarithmic functions, and conics. A standard College Algebra course.

MAT 134 Trigonometry
2 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Presents an in-depth study of right triangle trigonometry, oblique triangles, vectors, graphs of trigonometric functions, trigonometric identities and equations and complex numbers in rectangular and polar/trigonometric forms, rectangular and polar coordinates. A standard college trigonometry course.

MAT 135 Finite Math   3 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Surveys solving and graphing linear equations and inequalities, elementary set theory, matrices and their applications, linear programming, and elementary probability. A standard finite mathematics course.

MAT 136 College Algebra   3 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Presents an in-depth study of functions, quadratic, polynomial, radical, and rational equations, radicals, complex numbers, systems of equations, matrices, and exponential and logarithmic functions. MAT 136 and MAT 137 together comprise a standard two-semester college algebra and trigonometry course.

MAT 137 Trigonometry with Analytic Geometry   3 Credits

Prerequisites: Successful completion of MAT 111 or demonstrated competency through appropriate assessment. Presents an in-depth study of right triangle trigonometry, oblique triangles, vectors, graphs of trigonometric functions, trigonometric identities and equations and complex numbers in rectangular and polar/trigonometric forms, rectangular and polar coordinates, rational functions and conics.

MAT 141 Mathematics for Elementary Teachers   4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or MAT 111 or MAT 112. An in-depth treatment of common topics underlying an elementary mathematics curriculum. Students in the course will gain an appreciation for mathematics and will add to their pedagogical expertise by gaining conceptual understanding of elementary mathematics through the use of selected modes, materials, and problem solving situations. The course is designed to connect knowledge of the real number system to other subjects. The selection of topics presented in this course is based upon standards and recommendations for the mathematical content knowledge essential for prospective teachers made by the National Council of Teachers of Mathematics, the Mathematical Association of America, and the Indiana Professional Standards Board.

MAT 201 Brief Calculus 1   3 Credits

Prerequisites: Successful completion with a "C" or better in MAT 131, MAT 133 or MAT 136. An introductory course in calculus. Fundamental concepts and operations of calculus including algebraic, exponential and logarithmic functions: limits, continuity, derivatives, points-of-inflection, first-derivative test, concavity, second-derivative test, optimization, antiderivatives, integration by substitution, and elementary applications of the derivative and of the definite integral.

MAT 202 Brief Calculus II   3 Credits

Prerequisites: MAT 201. Covers topics in elementary differential equations, calculus of functions of several variables and infinite series.

MAT 211 Calculus I   4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or MAT 131 and MAT 132 or MAT 133 and MAT 134 or MAT 136 and MAT 137. Reviews the concepts of exponential, logarithmic and inverse functions. Studies in depth the fundamental concepts and operations of calculus including limits, continuity, differentiation including implicit and logarithmic differentiation. Applies differential calculus to solve problems in the natural and social sciences, to solve estimation problems and to solve optimization problems. Applies differential calculus to sketch curves and to identify local and global extrema, inflection points, increasing/decreasing behavior, concavity, behavior at infinity, horizontal and vertical tangents and asymptotes, and slant asymptotes. Applies the concept of Riemann sums and antiderivatives to find Riemann integrals. Applies the fundamental theorem of calculus to solve initial value problems, and to find areas and volumes and the average values of a function.

MAT 212 Calculus II   4 Credits

Prerequisites: MAT 211. Studies the techniques of substitution, integration by parts, trigonometric integrals, partial fractions and trigonometric substitution to evaluate integrals. Applies Simpson's rule and other elementary numerical quadrature methods to approximate integrals. Applies the integral calculus to find arc lengths, areas of surfaces of revolution and to solve force and work problems. Applies the direction field technique to find graphical solutions of differential equations. Applies Euler's technique to approximate the solution of initial value problems. Studies techniques of solving separable differential equations. Studies techniques to determine convergence of sequences and series. Studies techniques to determine the power series representation of functions.

MAT 218 Calculus with Analytic Geometry I   5 Credits

Prerequisites: Demonstrated competency through appropriate assessment or MAT 131 and MAT 132 or MAT 133 and MAT 134 or MAT 136 and MAT 137. Topics from analytic geometry, concept and properties of limits, concept of mathematical continuity definition and procedures for differentiation, and definition and procedures for anti-differentiation.

MAT 219 Calculus with Analytic Geometry II   5 Credits

Prerequisites: MAT 218. Topics from Calculus and Analytic Geometry I, calculus to hyperbolic and inverse trigonometric functions, first and second order differential equations, integration by parts and partial fractions, convergence, Taylor and Maclaurin series expansions, and L'Hôpital's rule.

MAT 261 Multivariate Calculus   4 Credits

Prerequisites: MAT 212 or MAT 219. Solid analytic geometry, partial differentiation, multiple integrals.

MAT 264 Differential Equations   3 Credits

Prerequisites: MAT 261. A first course in ordinary differential equations. The course will develop topics from a dynamical systems perspective and use technology to treat these topics graphically, numerically, and analytically. In addition to the skills of logical analysis and creative problem solving, this course will enhance the student's ability to analyze problems orally and in writing, in addition to mastering the mathematical skills used in this analysis.

MAT 265 Linear Algebra   3 Credits

Prerequisites: MAT 212. An introduction to linear algebra. Systems of linear equations, matrix algebra, vector spaces, determinants, eigenvalues, eigenvectors, diagonalization of matrices, applications.

MEA 102 First Aid and CPR   2 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Provides students with information necessary to recognize emergency situations, know the proper course of action with different types of emergencies, and apply appropriate first aid including CPR.

MEA 105 Office Administration with Computer Applications   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or a grade of "C" or better in ENG 025 and ENG 032. Provides a basic understanding of the administrative duties and responsibilities pertinent to medical offices. Includes instruction in medical correspondence and records, case histories of patients, filing, telephone procedures, appointment scheduling, receptionist duties, and processing mail. Familiarizes the student with computer applications in the health care setting. Provides the student with basics of operations and application of computer usage within the health care provider office. Includes simulated data entry for patient's record, and appointment scheduling.

MEA 106 Medical Financial Management with Computer Application   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 044, ENG 025 and ENG 032. Provides instruction in medical office financial administration, bookkeeping, materials management, with computer applications.

MEA 135 Medical Word Processing and Transcription   3 Credits

Prerequisites: HHS 101 and OAD 019. Develops skills and knowledge of medical dictation, machine transcription, and word processing software. Includes typing and transcription of medical correspondence and a variety of medical reports.

MEA 137 Medical Insurance and Basic Coding with Computer Applications   3 Credits

Prerequisites: HHS 101. Provides an overview of medical insurance programs and the skills needed in handling insurance forms, CPT and ICD 9-CM coding and insurance reports as applied to the medical office. Includes simulated computer data entry for patient records, procedure and diagnostic codes, insurance processing and electronic transmission of claims.

MEA 151 Pharmacy Technician 1   3 Credits

Prerequisites: HHS 101 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Corequisites: MEA 152. Introduces basic skills and information needed for a career as a Pharmacy Technician in the state of Indiana.

MEA 152 Pharmacy Technician II   **3 Credits**

Prerequisites: None. Corequisites: MEA 151. Theory is applied through performance of competency levels of the technical pharmacy task including: properly preparing, documenting and processing prescriptions according to pharmacy policy and regulations; preparation of intravenous and special solutions; proper preparation and maintenance of records appropriate to the pharmacy, including quality control records, controlled substances (narcotic drug distribution), prescription data and records; application of basic principles of microbiology; aseptic techniques; and the operation and maintenance of the laminar hood. The student will utilize proper communication skills (both written and verbal). Identification and adherence to check points will be emphasized. Current national and Indiana Law and administrative rules as they relate to the practice of the pharmacy technician will be presented. The importance of adherence to universal precautions will be discussed.

MEA 160 Massage Technician Training I   **3 Credits**

Prerequisites: ANP 101. Explores in detail the history of massage, professional and legal issues of massage, sanitation, professional touch, and massage equipment and products. Coursework will include the anatomy, physiology and psychology of the body, by systems, and the effects of massage on each. Disease conditions will be discussed in terms of indications and contraindications for massage. Medical terminology will be introduced and used to prepare SOAP note documentation of massages performed. Students will perform circulatory massage techniques, body mechanics, and draping skills for full body relaxation massage.

MEA 161 Massage Technician Training II   **3 Credits**

Prerequisites: MEA 160 and ANP 101. Client consultations, conditions, and treatment plans are discussed. Emotional transference and psychological effects of massage will be addressed. Additional techniques and modalities addressed include deep friction, trigger point release, unwinding, PNF techniques, positional release, and intro to therapeutic exercise. Corporate (chair) massage is introduced. Guidelines for setting up a practice, including compliance with local state regulations, are discussed. Together these courses provide training for entry-level technicians into massage therapy.

MEA 163 Holistic Approach to Massage Therapy   **3 Credits**

Prerequisites: None. Considers the holistic approach to wellness with discussion including the connection of disease, the autonomic nervous system, and the emotions. Explores the importance of the mind-body connection.

MEA 164 Human Energies   **3 Credits**

Prerequisites: None. Helps the student develop an understanding of the human energy system and how this system impacts and reflects the physical, emotional, mental, and spiritual aspects of health. The techniques of several energy therapists will be taught, as well as professional practitioner/client interactions and the importance of self-care. These techniques are useful to aid relaxation, reduce pain, lessen anxiety, and accelerate wound healing, both for oneself and others.

MEA 165 Acupressure Theory and Methods   **3 Credits**

Prerequisites: ANP 101. Introduces the student to information and treatments designed around the approach of Asian medicine including energy systems, meridians, and the five elements theory. The basics of Shiatsu are included.

MEA 167 Deep Tissue/ Muscle Release   **3 Credits**

Prerequisites: MEA 160, MEA 161 and ANP 101. Helps practitioners apply deeper techniques in the body therapy releasing chronically held tissue from past trauma, illness, or recent injury. Discusses the use of various treatment modalities. Deep tissue techniques include compression and compression with stroke.

MEA 170 Business Development   **3 Credits**

Prerequisites: All Technical and Specialty Core Courses and Legal Massage Applications and Massage Financial Management. Provides a basic understanding of the administrative responsibilities pertinent to massage therapy. Addresses computer usage, marketing, and office skills that will allow students to create, promote, and maintain their own business. Students prepare a business plan and define their goals for massage therapy.

MEA 205 Introduction to Electrocardiography   **3 Credits**

Prerequisites: ANP 102 and HHS 101. Presents the rationale for obtaining an electrocardiogram as well as related theory including anatomy and physiology, procedural technique and equipment utilized. Students will be introduced to basic rhythm analysis including recognizing standard electrical waves and accurately measuring each normal sinus rhythm and basic arrhythmias.

MEA 206 Advanced Electrocardiograph Technique   3 Credits

Prerequisites: MEA 205. Discusses related anatomy and physiology of the cardiovascular system, identification of cardiac arrhythmias, their rhythm strip appearance and common treatment modalities. Also includes event and Holter monitoring.

MEA 212 Phlebotomy   3 Credits

Prerequisites: HHS 101. Presents the principles and practices of laboratory specimen collection and processing. Also covers medical terminology, infection control, patient identification, anatomy and physiology, anticoagulants, blood collection, specimen processing and interpersonal skills.

MEA 213 Advanced Insurance Coding   3 Credits

Prerequisites: MEA 137. Comprehensive coding skills and guidelines for both ICD-9 and HCPCS Levels I and II coding systems necessary to ensure accurate coding and maximize reimbursement for medical claim processing.

MEA 215 Advanced Medical Terminology   3 Credits

Prerequisites: HHS 101. A more detailed and advanced study of the derivatives of medical terms, symbols and signs. It presents an in-depth study of the correlation between medical vocabulary and the application of those terms in the anatomy and physiology of the body, related diseases, conditions and treatment.

MEA 218 Pharmacology   3 Credits

Prerequisites: ANP 101, HHS 101 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Discusses the most common medications in current use with emphasis on classifications, uses, routes or administration, dosages, interactions, incompatibilities, and side effects. Emphasizes the current 50 most commonly prescribed drugs. Addresses special precautions, legal aspects, and patient education and preparation and administration of medications.

MEA 219 Medical Assisting Laboratory Techniques   3 Credits

Prerequisites: HHS 101 and ANP 101. Prepares students to understand and perform entry-level basic laboratory procedures. This includes fundamental principles of medical lab practice, disposal of biohazard materials, specimen collection, use of methods of quality control, urinalysis testing, chemistry testing, hematology testing, immunology testing, microbiology testing, and discussion of follow-up testing results.

MEA 220 Advanced Insurance Claims Processing   3 Credits

Prerequisites: MEA 137. Introduces additional instruction in medical record extraction and various aspects of insurance processing and follow-up. Provides discussion and additional information in the various insurance programs and in related insurance coding competencies.

MEA 221 Seminar I   1 Credit

Prerequisites: None. Discusses topics of current interest in the medical assisting profession. Focuses on special interest project for students in the Medical Assisting Program. Uses field trips, guest speakers, audio-visual activities and seminars.

MEA 224 Hospital Coding   3 Credits

Prerequisites: HHS 101 and MEA 137. Introduces additional instruction in diagnostic related groups (DRG's) and medical record extraction. Provides discussion and performance opportunities in related insurance coding competencies.

MEA 227 Medical Office Management   3 Credits

Prerequisites: MEA 105, MEA 106, MEA 135 and MEA 137. An in-depth study of various influences on office functions providing a background for organization and management of a physician's office. Includes government and professional sources for consultation.

MEA 235 Advanced Transcription   3 Credits

Prerequisites: MEA 135. Improves accuracy and speed of the medical transcriptionist utilizing various formats for medical transcription.

MEA 238 Clinical I   3 Credits

Prerequisites: HHS 101 and MEA Program Chair approval. Presents theory and lab related to clinical aspects of the medical office. Provides students with information necessary to recognize emergency situations, know the proper course of action with different types of emergencies, and apply appropriate first aid. Allows students to become familiar with clinical duties and to gain the skills needed to perform them. Includes vital signs, asepsis, sterilization, nutrition, and treatment room procedures.

MEA 239 Clinical II 3 Credits

Prerequisites: MEA 238 and MEA Program Chair approval. Presents a continuation of clinical skills and theory, and allows the student to become familiar with the following clinical duties: Medications, EKG's, X-ray, physical therapy, respiratory testing and other technical skills needed to assist the physician.

MEA 240 Advanced Clinical Procedures 3 Credits

Prerequisites: MEA 238 and MEA 239. Advances the knowledge and skills enabling the student to assist in clinical management in the medical and surgical specialties. Addresses health services in the community which are directed toward prevention of disease and maintenance and restoration of health.

MEA 242 Disease Conditions 3 Credits

Prerequisites: ANP 102 and HHS 101. Presents the basic concepts of diseases, their courses and functional disturbances as they relate to body systems. Includes the precipitating risk factors and appropriate methods of patient education regarding various disease processes.

MEA 254 Pharmacy Externship 3 Credits

Prerequisites: MEA 152, Professional CPR/AED certification and MEA Program Chair approval. Provides the opportunity to discuss and perform clinical procedures under supervision, with learning experiences obtained in selected retail pharmacies and/or hospitals.

MEA 256 Insurance Coding Externship 3 Credits

Prerequisites: MEA 213, Professional CPR/AED certification and MEA Program Chair approval. Provides opportunities to observe, perform and discuss various insurance related competencies under supervision in selected physician offices, clinics or hospitals.

MEA 257 Phlebotomy Externship 3 Credits

Prerequisites: MEA 212, Professional CPR/AED certification and MEA Program Chair approval. Provides the opportunity to discuss and perform phlebotomy procedures under supervision with learning experiences obtained in selected laboratories, physician offices, clinics, or hospitals.

MEA 258 Medical Assisting Clinical Externship 3 Credits

Prerequisites: MEA 218, MEA 219, MEA 238, MEA 239, Professional CPR/AED certification, and MEA Program Chair approval. Provides opportunities to observe, perform, and discuss various clinical competencies under supervision, with learning experiences obtained in selected physician offices, clinics or hospitals. Course will also review the following basic principles of psychology as they apply to the medical assistant: developmental stages of the life cycle, hereditary, cultural and environmental influences on behavior, mental health and applied psychology.

MEA 259 Medical Assisting Administrative Externship 3 Credits

Prerequisites: MEA 105, MEA 106, MEA 137, Professional CPR/AED certification and MEA Program Chair approval. Provides opportunities to observe, perform, and discuss various administrative competencies under supervision, with learning experiences obtained in selected physician offices, clinics or hospitals.

MEA 261 Hand and Foot Reflexes 3 Credits

Prerequisites: None. Teaches the different aspects and points on the foot and hand relating to other areas of the body. Can be integrated into massage practice or can be an independent approach. An introduction to the musculoskeletal, cardiovascular, and nervous systems and their relationship to the zones on the feet are included. Systems disorders, including the sensory and endocrine, are also identified and discussed. The relationship of the five zones of the foot are identified as are the areas of the spine with spinal nerve innovation and intervention.

MEA 265 Advanced Techniques and Hygiene 3 Credits

Prerequisites: All Specialty Core Courses, ANP 101, ANP 102, and 80 completed SOAP Notes. Provides the student with advanced training focusing on more techniques, body mechanics, and client management. It also addresses hygiene factors for both the therapist and the client. This course includes thorough client assessment techniques and is designed to expand the therapist into the medical field. The relationship of various illnesses and conditions to massage is discussed.

MEA 268 Massage Through the Lifespan   3 Credits

Prerequisites: ANP 101 and MEA 160. Teaches the therapist to work with pregnant mothers to help ease the discomforts and stress that accompany pregnancy. Techniques to help with delivery are also addressed. It also addresses massage of infants and children to enhance bonding, relaxation, and comfort of the infant and child. Massage aspects of geriatric and disabled clients are addressed.

MEA 269 Sports Massage, Injuries and Hydrotherapies   3 Credits

Prerequisites: MEA 160, MEA 161 and ANP 101. Presents a specific application of massage therapy designed to train the therapist in the treatment of athletes. Includes: pre-event and post-event techniques, general maintenance massage, and therapeutic exercises. First aid for sports injuries and the use of hydrotherapies will be explored.

MIT 102 Introduction to Print Reading   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 044. Provides an introduction to reading and interpreting machine shop symbols, welding blueprints and working drawings used in trades and crafts. Focuses on dimension, shape, fabrication and assembly. Applies basic mathematics to the solution of print and performance problems.

MIT 103 Motors and Motor Controls   3 Credits

Prerequisites: MIT 113. A general understanding of common types of electric motors, extending from the small shaded pole fan motors to the large three-phase motors. The student will receive an education in motor theory, magnetism and how it affects motor rotation. Motor starting components and protective devices for motor circuits will be explained and shown in detail. Heat dissipation from a motor, motor slippage, how they are wired to obtain different speeds, and how capacitors affect a motor circuit will be included.

MIT 104 Fluid Power Basics   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Introduces the student to fluid power principles and components. Teaches basic circuit design through the use of symbols and schematic diagrams to build a foundation for career work in fluid power technology.

MIT 106 Introduction to the Workplace and Safety   3 Credits

Prerequisites: None. Introduces basic safety instruction including OSHA requirements and other concerns (MSDS, confined space, lock out/tag out, zero energy state, hazardous materials, storage of flammable materials, storage of fuel gas and high pressure gas cylinders, portable powered tool safety, hand tool safety, record keeping, training, employer enforcement of safety regulations, right to know, etc.). Includes an introduction to measuring instruments, hand tools, portable powered tools, and procedures that are pertinent to the mix of specialties on the campus. Lab projects will be designed to reinforce safety procedures and develop competency levels in using the measuring instruments, hand tools and portable powered tools introduced in the course.

MIT 113 Basic Electricity   3 Credits

Prerequisites: None. Corequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. The study of electrical laws and principles pertaining to DC and AC circuits is the focus of the course. This includes current, voltage, resistance, power, inductance, capacitance, and transformers. Stresses the use of standard electrical tests, electrical equipment, and troubleshooting procedures. Safety procedures and practices are emphasized.

MIT 114 Introductory Welding   3 Credits

Prerequisites: None. Provides basic skills and fundamental knowledge in oxy-fuel welding, cutting and brazing, Shield Metal Arc welding, Gas Metal Arc welding and Gas Tungsten Arc welding. This course is designed for beginning welders, auto service and body technicians, and individuals in the HVAC industry. Emphasizes safe practices in oxy-fuel and Arc welding processes.

MIT 115 Iron and Steelmaking I   3 Credits

Prerequisites: None. Covers the processes of iron making and its conversion to steel and miscellaneous finished products. The course studies the history of steel making from its roots of the steel industry and the emergence of the United Steelworkers of America. The course will examine the integrated steel industry as well as the emergences of mini-mills. It will cover the making of iron from its basic materials, coke production and the use of sinter. The student will understand the conversion of iron to steel from the basic oxygen furnace to the production of caster slabs. Also covered will be the production of steel scrap in a mini-mill process. A visit to a local steel company will be an integral part of the class.

MIT 116 Iron and Steelmaking II   3 Credits

Prerequisites: MIT 115. Covers the conversion of caster slabs to finished plate, coils, or flat rolled products. Study of the history of the steel marketplace and the changing marketplace in which both the integrated mills and mini-mills compete. Covers the numerous steel processors and the services they provide to the steel industry. Students will learn who the steel customers are, both internal and external. OSHA and EPA requirements that steel industry must adhere to will also be studied. Visits to a finishing mill facility, a local processor, and end-use customers will be part of this class.

MIT 120 Metallurgy Fundamentals   3 Credits

Prerequisites: None. Studies the fundamentals of thermodynamics and reactions occurring in metals subjected to various kinds of heat treatment. Includes classification and properties of metals, chemical and physical metallurgy, theory of alloys, heat treatment principles as applied to ferrous and non-ferrous materials, test to determine uses, heat treatment for steels, special steels, and cast iron, powder metallurgy, and use of gas and electric furnaces and their controls.

MIT 205 Programmable Controllers I   3 Credits

Prerequisites: TEC 104 and MIT 113. Introduces the basic theory, operation and programming of programmable logic controllers. Demonstrates programming examples, set-up examples and troubleshooting, as well as PLC timing, counting, arithmetic and logic and sequencers.

MIT 206 Programmable Controllers II   3 Credits

Prerequisites: MIT 205. Serves as a further introduction to the field of industrial controls. Students will learn the principles of control systems and how they are applied to a production system to achieve automation. Systems included in the courses are stepper motors, programmable logic controllers, microprocessors, computers and feedback systems. Emphasis is placed on programmable logic controllers and the local area network.

MIT 207 Process Control and Automation I   3 Credits

Prerequisites: CIM 102, MAT 111, MIT 102, MIT 103, MIT 113, IMT 203, IMT 207, MIT 205 and MIT 206. Introduces the student to Process Control and Automation, combining the elements of the prerequisite classes into a culmination of a complete manufacturing process. Basic elements of the automation system and programming fundamentals are studied and individual systems are examined.

MIT 208 Process Control and Automation II   3 Credits

Prerequisites: MIT 207. Continues to explore the Process Control and Automation system combining the new elements with previous classes into the culmination of a more complex manufacturing process. The student will study hardware elements of the automation system and intermediate programming fundamentals for individual systems.

MIT 209 Process Control and Automation III   3 Credits

Prerequisites: MIT 208. Finalizes the Process Control and Automation system by employing new hardware and software elements to complete process. The student will build, operate and troubleshoot the process system to stimulate manufacturing procedures.

MIT 210 Rotating Machinery   3 Credits

Prerequisites: MAT 111, MIT 102, MIT 103, MIT 113, IMT 203, and IMT 207. Advanced motor and motor control course designed to apply the knowledge accrued in basic electricity, motors and motor controls, print reading, electrical circuits, and machine maintenance and installation. The theory and practical application of different types of motors and how they are used with other types of machinery, i.e., pumps, conveyors, etc., will be explored and examined in detail.

MIT 260 Problem Solving and Teamwork   3 Credits

Prerequisites: Completion of 45 credit hours in the program including ENG 111 and MAT 111. Covers critical thinking skills, collection and analyzing data, and quality control overview, teamwork, problem solving and decision making techniques as they apply to a technological environment. As a capstone course for the Manufacturing and Industrial Technology program, this course is designed to reinforce and apply the knowledge and skills learned in previous communication, mathematics and technical courses and foster team and individual skills through experiments, case studies, problem solving projects, and a writing project.

MKT 101 Principles of Marketing   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Introduces the marketing role in society and how it affects the marketing strategy. Emphasizes the marketing mix, product planning, and the effects of the demographic dimension on the consumer market.

MKT 102 Principles of Selling
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Provides an overview of the selling process. Includes the psychology of selling and develops skills through a series of selling situations.

MKT 104 Promotion Management
3 Credits

Prerequisites: BUS 101. Presents management planning and oversight techniques for effectively communicating the results of the marketing strategy to customers. Provides a comprehensive overview of promotion methods as they interact in the marketing mix, which includes price, channel of distribution, and product.

MKT 110 Consumer Behavior
3 Credits

Prerequisites: BUS 101. Study of the basic principles of consumer behavior which offers insight into the buyer-seller relationship. Application of theories from psychology, social psychology and economics are examined. Course examines concepts that have implications for marketing management decisions.

MKT 201 Introduction to Market Research
3 Credits

Prerequisites: MKT 101 and MAT 111. Presents basic research methods entailing procedures, questionnaire design, data analysis, and effectively communicating research results.

MKT 204 Marketing Management
3 Credits

Prerequisites: ACC 101, BUS 105 and MKT 101. Focuses on the analysis, implementation and control of marketing strategy. Emphasizes the major decisions management faces in its effort to harmonize the objectives and resources of the organization with the needs and opportunities of the marketplace.

MKT 205 Principles of Insurance
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 050. Introduces the risks faced by business firms including property, liability and personal losses, and how they are handled. Presents insurance contracts and their uses. Includes an overview of life insurance, health and pension insurance, public policy, government regulations and social insurance.

MKT 220 Principles of Retailing
3 Credits

Prerequisites: MKT 101 and MAT 050. Studies retailing concepts and practices, including retail merchandise planning, buying, pricing, promotion, and control in established retail operations. Attention is given to managerial and operational skills.

MKT 221 Real Estate Broker
3 Credits

Prerequisites: One-year experience as an active licensed Indiana Real Estate Salesperson associated with a licensed Indiana Real Estate Broker. Mathematical competency as stipulated in Indiana Administrative Code (876 IAC 2-11 through 876 IAC 2-14). To prepare the student for taking the State of Indiana real estate broker licensing examination.

MKT 222 Real Estate Sales
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. To prepare the student for taking the State of Indiana Real Estate Salesperson licensing examination.

MKT 223 Residential Appraising
5 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. It is recommended but not required that the student complete MKT 222 before enrolling in MKT 223. To substantially prepare the student for taking the State of Indiana licensed trainee residential appraiser examination. After taking this 75-hour classroom hour course the student must take an additional 15 classroom hours in Uniform Standards (USPAP) before being eligible to sit for the State Trainee examination.

MKT 224 Uniform Standards of Professional Appraisal Practice (USPAP)
1 Credit

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. It is not a requirement to hold a real estate license of any kind. A real estate broker without an appraiser's license must comply with Rule 6 – Standards of Practice to do appraising. Preparation for taking the State of Indiana licensed residential appraiser trainee examination. This supplements MKT 223, in meeting the 90-classroom hour prerequisite for being eligible to sit for the trainee examination.

MKT 240 Internet Marketing   **3 Credits**

Prerequisites: CIS 101 and MKT 101. Provides an introduction to the Internet as a marketing strategy including product, pricing, communications, and distribution considerations. Profiles Internet users and market segments and reviews the Internet as a primary and secondary marketing research tool as well as a relationship-marketing tool.

MLT 101 Fundamentals of Laboratory Techniques   **3 Credits**

Prerequisites: Current enrollment in the MLT Program. Introduces the elementary skills required in the medical laboratory. Subjects covered include: Laboratory math, quality control, pipetting skills, venipuncture techniques, microscopic skills, and infection control.

MLT 102 Routine Analysis Techniques   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Corequisites: Current enrollment in MLT Program and in good standing. This course deals with the principles, practices and clinical laboratory techniques associated with the routine analysis of urine and other body fluids.

MLT 196 Introduction to Patient Care and Phlebotomy   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces the student to the health care delivery system, instruction in specimen collection techniques, infection control and safety and applications of communication concepts and stress management.

MLT 197 Clinical Phlebotomy Experience   **3 Credits**

Prerequisites: None. Covers the practice and demonstration of clinical applications of phlebotomy in the clinical setting.

MLT 198 Clinical Phlebotomy Discussion   **1 Credit**

Prerequisites: Student must be currently enrolled in Phlebotomy Program. Designed for students to develop the professional socialization process that is necessary for functioning in a health care setting as well as review routine and special phlebotomy procedure in light of phlebotomist-patient interaction.

MLT 201 Immunology Techniques   **3 Credits**

Prerequisites: Student is in good standing and currently enrolled in the MLT program. Provides the student with a basic understanding of the principles of the human immunologic system as well as an understanding of, and experience in, routine testing.

MLT 202 Immunohematology Techniques   **3 Credits**

Prerequisites: Student is in good standing and currently enrolled in MLT Program. Provides instruction on the principles, practice, and procedures used for blood banking in the clinical laboratory.

MLT 205 Hematology Techniques I   **3 Credits**

Prerequisites: Student is in good standing and currently in MLT Program. Presents theory of blood formation and function and routine hematologic procedures, with emphasis upon differentiation of normal and commonly encountered abnormal blood cells. Includes basic theory of hemostasis and associated routine coagulation procedures. Also presents clinicopathologic correlations.

MLT 206 Hematology Techniques II   **3 Credits**

Prerequisites: MLT 205. Corequisites: Student is in good standing and currently enrolled in MLT Program. Continues the study of principles and procedures in hematology and hemostasis. It introduces procedures which lie outside those routinely performed. Continues cell differentiation, with emphasis upon early and less commonly encountered abnormal cells, with associated special stains. Includes clinicopathologic correlations.

MLT 207 Chemistry Techniques I   **3 Credits**

Prerequisites: CHM 101. Presents principles, procedures and clinicopathologic correlations in routine chemical analysis of the blood and other body fluids. Provides laboratory experiences in basic methods, selected to develop routine analytical abilities and to promote the ability to recognize sources of error.

MLT 209 Routine Analysis Applications   **1 Credit**

Prerequisites: MLT 102. Provides the student with study of the clinical applications of routine analysis in the hospital laboratory including physical, chemical, and microscopic examination of urine.

MLT 210 Hematology Applications   3 Credits

Prerequisites: MLT 205 and MLT 206. Knowledge and skill development pertaining to the principles and techniques of hematology in the hospital laboratory.

MLT 212 Immunology Applications   1 Credit

Prerequisites: MLT 201. Studies and practices the clinical application of serology in the hospital laboratory.

MLT 213 Immunohematology Applications   3 Credits

Prerequisites: MLT 202. Applications of principles and procedures used in blood banking in the hospital laboratory are taught in the clinical laboratory setting.

MLT 215 Parasitology and Mycology   1 Credits

Prerequisites: Student must be in good standing and currently enrolled in MLT Program. Examines the isolation, identification, life cycles and disease processes of pathogenic and opportunistic fungi and parasites.

MLT 218 Clinical Pathology   3 Credits

Prerequisites: Student must be enrolled in the MLT program and be in good standing. Examines various disease conditions, diagnosis, etiologies, and clinical symptoms and related laboratory findings.

MLT 221 Clinical Microbiology Applications   3 Credits

Prerequisites: MLT 204. Provides the student with the study of applications and clinical practices of microbiology found in a clinical laboratory.

MLT 222 Microbiology Techniques   3 Credits

Prerequisites: Student is in good standing and currently in MLT Program. Instructs the student in the principles of bacteriology including: gram-negative and gram-positive bacilli and cocci; fastidious organisms; and an overview of anaerobic organisms and acid-fast bacteria. Instruction in basic laboratory techniques in clinical bacteriology will also be included. A brief overview of parasitology and micrology will be included.

MLT 224 Chemistry Applications   3 Credits

Prerequisites: MLT 207. Corequisites: MLT 208. Study and practice of the analytical aspects of clinical chemistry in the hospital laboratory.

MLT 227 Chemistry Techniques II   2 Credits

Prerequisites: Student is in good standing and currently enrolled in the MLT Program. Continues the study of principles, procedures and clinicopathologic correlations in the chemical analysis of blood and other body fluids. Introduces procedures which lie outside those routinely performed in the clinical chemistry laboratory, including clinicopathologic correlations.

MOR 100 Orientation to Funeral Service   3 Credits

Prerequisites: Students must be accepted into and enrolled in the Mortuary Science Program. An introduction to funeral service, ancient history, historical development, present funeral practices, values of funeral service, personal qualifications, ethics. Field trips to investigate current problem areas in funeral service are required.

MOR 101 Grief Psychology for Funeral Service   3 Credits

Prerequisites: Students must be accepted into and enrolled in the Mortuary Science Program. An examination of theory and management of grief, the process of mourning, and the value of the funeral service in bereavement. Grief reactions according to age and special types of loss will be examined. In addition, the course will cover the funeral director's professional responsibilities to the families he or she serves.

MOR 102 Mortuary Law   3 Credits

Prerequisites: Students must be accepted into and enrolled in the Mortuary Science Program. Principles of mortuary law; duties, rights and liabilities for final disposition. Business law; public and personal liability; business organization; licensing and zoning regulations. Probate proceedings, social security, and life insurance benefits, and ethical standards relating to funeral service.

MOR 103 Embalming Chemistry   3 Credits

Prerequisites: Students must be accepted into and enrolled in the Mortuary Science Program. Fundamentals of inorganic, organic, and biochemistry. Also chemistry of the human body, chemistry changes following death, toxicology, disinfection, and embalming chemicals. Basic principles of chemistry related to funeral service.

MOR 104 Funeral Service Equipment   3 Credits

Prerequisites: None. Designed to give the student a working knowledge of equipment items, manufacturing and use of such items. Presents a thorough study of caskets and vaults. Uses field trips and guest lecturers as learning tools. The curriculum is divided into two sections. The first covers construction and features of caskets, outer burial containers, and other funeral related products. The second section of the curriculum examines methods of purchasing, pricing, display, and sale of funeral merchandise as well as funeral services.

MOR 202 Funeral Management   3 Credits

Prerequisites: MAT 111 and MOR 104. Corequisites: ACC 101, BUS 101 and COM 102. Current practices and procedures, funeral direction, psychological and sociological aspects of funeral service, funeral home operation, professional overview and image, professional regulations and effective personnel management.

MOR 206 Embalming Theory   3 Credits

Prerequisites: None. Corequisites: MOR 207 and MOR 209. An introduction of basic vocabulary utilized by the professional embalmer. The purposes of embalming, as well as responsibilities, conduct, qualities of the professional embalmer is discussed. An inventory of typical preparation room instruments and supplies is examined. All aspects of embalming are studied including contemporary methods and techniques.

MOR 207 Embalming Practicum   3 Credits

Prerequisites: None. Corequisites: MOR 206 and MOR 209. One laboratory session per week for one semester in an appropriate mortuary setting. Practical experience in all phases of funeral service including embalming, funeral directing, and funeral home operation. Students are placed in local funeral homes to work under the direct supervision of a qualified licensed embalmer to gain knowledge of procedures used in embalming human remains for funeral services. MOR 206 will work in conjunction with the practical experience.

MOR 208 Pathology for Funeral Service   3 Credits

Prerequisites: None. Divisions and importance of pathology, nature and causes of disease, to include inflammation, repair and recuperation of tissue, tumors, disease of the heart, respiratory and digestive systems are covered as well as microscopic examination of autopsy and surgical specimens, with particular emphasis on those conditions which relate to or affect the embalming or restorative art process.

MOR 209 Restorative Art   3 Credits

Prerequisites: None. Corequisites: MOR 206 and MOR 207. The study of facial anatomy, color relationships, and restorations. Development of skills in anatomical modeling and cosmetics.

MOR 210 Mortuary Science   2 Credits

Prerequisites: ANP 101, ANP 102, MOR 103 and BIO 211. A survey of the basic principles of chemistry and microbiology which relates these disciplines to Mortuary Science especially as they pertain to sanitation, disinfection, public health, and embalming practice. The development and use of personal, professional, and community hygiene and sanitary practice is encouraged.

MTT 101 Introduction to Machining   3 Credits

Prerequisites: None. Instructs the student in shop safety, industrial terminology, tools and machine tooling, measurement and layout. Includes laboratory exercises to begin project completion of turning, milling, and grinding applications.

MTT 102 Turning Processes I   3 Credits

Prerequisites: None. Instructs students in shop safety, industrial terminology, and provide laboratory experience toward project completion on the conventional lathe.

MTT 103 Milling Processes 1   3 Credits

Prerequisites: None. Instructs students in shop safety and industrial terminology and provides laboratory experience toward project completion on the vertical and/or horizontal milling machine.

MTT 104 Machinery Handbook   3 Credits

Prerequisites: None. Explores the intent and use of the machinery handbook. Applies principles and concepts in the machinery handbook to projects in the industry.

MTT 106 Advanced Print Interpretation   3 Credits

Prerequisites: MTT 101. Applies mathematics in solving engineering and design related problems in the areas of die design, fabrication, assembly, special machinery, die casting and molds. Emphasizes GDT tolerancing.

MTT 110 Turning and Milling Processes   3 Credits

Prerequisites: None. Provides shop safety, industrial terminology and laboratory experiences on conventional lathe and milling machines.

MTT 202 Advanced Turning Processes II   3 Credits

Prerequisites: MTT 102 or MTT 110. Advanced training in shop safety and industrial terminology utilizing the conventional engine lathe.

MTT 203 Milling Processes II   3 Credits

Prerequisites: MTT 103 or MTT 110. Covers shop safety, industrial terminology, and provide advanced laboratory experience towards project completion on the vertical and/or horizontal milling machine.

MTT 204 Abrasive Processes I   3 Credits

Prerequisites: None. Provides shop safety, industrial terminology, and laboratory experiences on abrasive processing machines. Includes super abrasives technology processes.

MTT 205 Abrasive Processes II   3 Credits

Prerequisites: MTT 204. Continuing emphasis on shop safety, industrial terminology, and advanced laboratory experience towards project completion on a variety of abrasive processing machines.

MTT 206 Tooling Design I   3 Credits

Prerequisites: MTT 110 and MTT 204 or MTT 102 and MTT 103 and MTT 204. Introduces concepts of tooling design, assembly, and standards of fabrication. Emphasizes jig and fixture design/components, application and operational characteristics.

MTT 208 CNC Programming I   3 Credits

Prerequisites: MAT 121 or MAT 131 or MAT 134. Introduces two and three axis CNC machining. Develops the theory of programming in the classroom with applications of the program accomplished on industry-type machines. Studies terminology of coordinates, cutter paths, angle cutting, and linear and circular interpolation.

MTT 209 CNC Programming II   3 Credits

Prerequisites: MTT 208. Provides further study in computer-aided numerical control programming. Focuses on canned cycles, loops, macros, thread cycles, drilling, and pocket milling cycles.

MTT 210 Interactive CNC   3 Credits

Prerequisites: MTT 208. Introduces advanced applications of computer assisted part programming and simulation, language codes setup and operation, troubleshooting, and problem solving in a CNC turning center and CNC machining center. Includes related mathematical sills.

MTT 211 Advanced Programming Techniques   3 Credits

Prerequisites: MTT 210. Includes the application of advanced CNC programming techniques to industrial machining. Using down loading and up loading techniques utilized through advanced projects.

MTT 220 CAD/CAM I
3 Credits

Prerequisites: MTT 208. Covers the development of various machine routines. Introduces computer-assisted machining as it relates to automated milling and machining centers. Emphasizes proper programming techniques, control familiarity, file data and machining functions.

MTT 221 CAD/CAM II
3 Credits

Prerequisites: MTT 220. Covers the development of 3-D shapes and the codes necessary to produce parts. Requires student to design a new product or modify an existing design. Includes creating surface curves. Focuses on creating tool paths for complex 3-D surfaces.

MTT 240 Machine Operations I
3 Credits

Prerequisites: MTT 101 and TEC 101. This course is designed as a continuation of MTT 101. Students will gain additional classroom experience concerning band saws, engine lathes, vertical mills, surface grinders, Harig® Grinding Fixture, and jig grinder. Measurement and layout will be performed at an advanced level. Classroom activities will concentrate on heat-treatment of tool steels, classes of ANSI fits and tolerances, electrical discharge machining, carbide tooling and basic metal stamping die theory. Experience will also be gained in the calculation of labor and material costs. In addition, students will also be introduced to metal stamping die construction and conversational programming on CNC vertical mills. Students will also be required to create a comprehensive notebook due at the end of the semester.

MTT 241 Machine Operations II
3 Credits

Prerequisites: MTT 240. Emphasizes basic tool construction and close tolerance machining. Using the various types of equipment found in the laboratory, students rough machine, heat treat and precision grind detail parts to tolerance within 0.0005 consistently. Classroom activities concentrate on precision setup, inspection work and basic tool construction. Experience is gained in basic conversational CNC programming.

MTT 242 CNC Machining
3 Credits

Prerequisites: MTT 208. Introduces and instructs the student in all aspects of Computer Numeric Control (CNC) machining. The student will program, set up and operate CNC mills and lathes utilizing CAD/CAM for fixture and part design and verification. Students continually improve programming, set up and cycle time efficiency. Students inspect and document the quality of production parts and compare their performance with an industry benchmark for each project.

MTT 243 Tool and Die Making I
3 Credits

Prerequisites: MTT 101 and MTT 110 and MTT 208 or MTT 101 and MTT 102 and MTT 103 and MTT 208. Focuses on construction of a two-stage progressive die that incorporates interchangeable details. Each student manufactures a die that incorporates the parting principle and performs the following operations: Forming, Piercing, and Parting. In addition lecture material covers computations on blank lengths, and diameters, blanking and piercing operations, drawing, progression, and timing. Experience is gained in CNC machining and progressive die troubleshooting.

MTT 250 Introduction to Machining Practicum
3 Credits

Prerequisites: None. Provides machining laboratory and application activities to coordinate with the classroom and laboratory learning for MTT 101. Students work on advanced project completion using a variety of ship equipment in a systems approach.

MTT 251 Machine Operations I Practicum
3 Credits

Prerequisites: MTT 101. Corequisite: MTT 240. Provides machining laboratory and application activities to coordinate with the classroom and laboratory learning for MTT 240. Students work on advanced project completion using a variety of ship equipment in a systems approach.

MTT 252 Machine Operations II Practicum
3 Credits

Prerequisites: MTT 240. Corequisite: MTT 241. Provides machining laboratory and application activities to coordinate with the classroom and laboratory learning for MTT 241. Students work in advanced project completion using a variety of shop equipment in a systems approach.

MTT 253 CNC Machining Practicum **3 Credits**

Prerequisites: MTT 208. Corequisite: MTT 242. Provides machining laboratory and application activities to coordinate with the classroom and laboratory learning for MTT 242. Students work in advanced project completion using a variety of shop equipment in a systems approach.

NUR 150 Nursing and Universal Needs **4 Credits**

Prerequisites: Admission to Associate of Science in Nursing Program. Corequisite: NUR 151. Provides fundamental facts, concepts, principles, and rationales necessary to meet universal healthcare needs. Introduces the five components of nursing process and the roles of the associate degree nurse.

NUR 151 Nursing and Universal Needs Practicum **4 Credits**

Prerequisites: Admission to Associate of Science in Nursing Program. Corequisite: NUR 150. Simulated and actual patient care situations provide an opportunity to develop interpersonal and psychomotor skills. Initiates a beginning level of assessing, analyzing, planning, implementing, and evaluating therapeutic measures in meeting basic universal healthcare needs. Provides an opportunity in the laboratory and clinical setting to explore the role of the associate degree nurse.

NUR 152 Nursing Related to Health Deviation I **5 Credits**

Prerequisites: NUR 150 and NUR 151. Corequisite: NUR 153. Defines the role of the associate degree nurse in assisting adult clients experiencing health deviation related to nutrition/elimination, rest/activity, safety, and homeostasis. Utilizes the nursing process to describe promotion, maintenance, and restoration of health or the support of death with dignity.

NUR 153 Nursing Related to Health Deviation I Practicum **5 Credits**

Prerequisites: NUR 150 and NUR 151. Corequisite: NUR 152. Provides experience that enables the student to progress in the role of the associate degree nurse when providing care to adult clients experiencing health deviation. The nursing process guides the application of scientific facts, concepts, principles and rationales in the delivery of nursing care. Advanced psychomotor skills and appropriate therapeutic communication are also emphasized.

NUR 154 Pharmacotherapeutics **2 Credits**

Prerequisites: Program Advisor Approval. Introduces the student to the fundamental principles of drug action, the classification of drugs and the appropriate nursing actions to achieve the desired outcomes of therapy. The nursing process as a framework for learning is integrated throughout the course.

NUR 246 Paramedic Transition to Associate of Science Nursing **6 Credits**

Prerequisites: Program Advisor Approval. Corequisites: NUR 247 and NUR 154. Examines the role of the associate degree nurse. Identifies components of the ASN program philosophy. Outlines the facts, concepts, and principles underlying the nursing process. Utilizes the nursing process to describe promotion, maintenance, and restoration of health or support death with dignity.

NUR 247 Paramedic Transition to Associate of Science Nursing Practicum **4 Credits**

Prerequisites: Admission to Associate of Science in Nursing Program. Corequisites: NUR 246 and NUR 154. Laboratory and clinical experience is provided to facilitate an understanding of and psychomotor comfort with basic nursing skills beyond the emergent assessments and interventions used in the role of Paramedic. Initiates a beginning level of assessing, analyzing, planning, implementing and evaluating therapeutic measures in meeting basic universal and health deviation needs.

NUR 248 Transition to ASN Nursing **5 Credits**

Prerequisites: Program Advisor Approval. Examines the role of the Associate Degree nurse. Identifies components of the ASN program philosophy. Reviews the facts, concepts and principles and rationales underlying the nursing process. Laboratory and clinical experience is provided to perform basic nursing skills and assist the student in identifying appropriate nursing responses to health deviation needs.

NUR 250 Nursing Related to Health Deviation II **5 Credits**

Prerequisites: NUR 152 and NUR 153 or NUR 248. Corequisite: NUR 251. Defines the role of the associate degree nurse in assisting clients experiencing health deviation related to oxygenation, social interaction/solitude and continued health deviation of safety and homeostasis. The nursing process with emphasis on planning, intervention, and evaluation is utilized to promote, maintain, and restore health or support death with dignity in the adult client. Leadership skills and advanced therapeutic communication are also emphasized.

NUR 251 Nursing Related to Health Deviation II Practicum   **5 Credits**

Prerequisites: NUR 152 and NUR 153 or NUR 248. Corequisite: NUR 250. Provides experiences that allow the student to further refine the role of the associate degree nurse when providing care to clients experiencing health deviation. The nursing process guides the application of scientific facts, concepts, principles and rationales in the delivery of nursing care. Leadership skills and advanced therapeutic communication are also applied.

NUR 252 Nursing Related to Developmental Needs   **4 Credits**

Prerequisites: NUR 152 and NUR 153 or NUR 248. Corequisite: NUR 253. Identifies the role of the associate degree nurse in assisting childbearing and childrearing families to meet their developmental needs which include the maintenance of conditions to support life processes and maturation. Utilizes the nursing process to describe promotion, maintenance, and restoration of health or the support of death with dignity.

NUR 253 Nursing Related to Developmental Needs Practicum   **4 Credits**

Prerequisites: NUR 152 and NUR 153 or NUR 248. Corequisite: NUR 252. Provides experiences that allow the student to further refine the role of the associate degree nurse when providing care to meet the developmental needs of childbearing and childrearing families including the maintenance of conditions to support life processes and maturation. The nursing process guides the application of scientific facts, concepts, principles, and rationales in the delivery of nursing care. Decision making and therapeutic communication are also emphasized.

NUR 254 Professional Nursing Issues   **2 Credits**

Prerequisites: Program Advisor Approval. Examines issues and nursing's responsibility to meet changing needs of persons in their environment. Historical aspects, current developments, future trends, improvement of nursing practice, legal/ethical considerations, and personal/professional growth are integrated into the examination of the role of the associate degree nurse.

OAD 009 Introduction to Keyboarding   **3 Credits**

Prerequisites: None. Introduces the use of the keyboard. Touch-typing skills, manual dexterity, and speed development are cultivated using computers.

OAD 019 Keyboarding   **3 Credits**

Prerequisites: None. Provides students with the fundamentals of keyboarding using the touch method. Emphasizes mastery of the keyboard, development of formatting skills, and development of speed and accuracy on a personal computer using an up-to-date software package.

OAD 029 Speed and Accuracy Development   **1 Credit**

Prerequisites: OAD 019. Designed to diagnose individual keyboarding speed and accuracy skills and bring those skills to an employable level.

OAD 103 Word Processing Applications   **3 Credits**

Prerequisites: Typing proficiency of 30 gwam and basic formatting. Introduces the concepts of word processing systems. Offers hands-on experience in the operation of a specific word processing software package.

OAD 108 Shorthand/Notetaking I   **3 Credits**

Prerequisites: None. Introduces basic principles of a note-taking system. Emphasis is placed on note-taking techniques, legibility, and mastery of the basic vocabulary. Dictation and transcription of material is included.

OAD 110 Presentation Graphics   **3 Credits**

Prerequisites: CIS 101. Provides hands-on experience and familiarizes students with specific advanced design and layout techniques and practical applications of business presentations.

OAD 114 Desktop Publishing   **3 Credits**

Prerequisites: CIS 101. Emphasizes the production of publication-quality documents. Attention is given to design and layout principles and production techniques. Fonts, graphics, and page composition are integrated into camera-ready documents using computer software and hardware.

OAD 116 Essentials of Business Correspondence   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025. An intensive, competency-based business correspondence course that involves grammar, word usage, pronunciation, punctuation, proofreading, spelling, vocabulary building, and other language skills that is essential to good workplace communication.

OAD 119 Document Processing   3 Credits

Prerequisites: Entry-level proficiency of 35 gross words per minute on a three-minute timed writing with three or fewer errors or OAD 019. Emphasis is placed on increasing speed, improving accuracy, developing and applying formatting skills, applying communication and language arts skills, and developing document production techniques on a personal computer using an up-to-date word processing software package.

OAD 121 Office Procedures   3 Credits

Prerequisites: CIS 101. Prepares the student to understand and carry out responsibilities assigned in a business office. Topics include telephone techniques, office equipment, travel and conference arrangements, professional development, research techniques, time and stress management, and business ethics.

OAD 207 Integrated Applications   3 Credits

Prerequisites: CIS 101 or equivalent experience. Explore the advanced features of an integrated office software package using word processing, spreadsheets, database, and presentation graphics.

OAD 208 Shorthand/Notetaking II   3 Credits

Prerequisites: None. Develop dictation, notetaking and transcription skills through drills and tests. Emphasizes speed, accuracy and use of correct English. Reinforces and builds on principles and skills learned in Shorthand/Notetaking I.

OAD 211 Medical Transcription I   3 Credits

Prerequisites: HHS 101 and OAD 119 with an entry level speed of 40 GWAM on a 5-minute timed writing with a 5 error limit. Develop skills and knowledge of medical transcription, utilizing medical reports, terminology, and correspondence.

OAD 212 Medical Transcription II   3 Credits

Prerequisites: MEA 135 or OAD 211 with an average of 45 WPM on five minute timed writings with one error per minute, HHS 101 and knowledge of word processing software. Develops transcription skills using medical documents such as office chart notes, letters, initial office evaluations, history and physicals, consultations, emergency room reports, and discharge summaries for various medical specialties.

OAD 214 Multimedia Design   3 Credits

Prerequisites: CIS 101. Create multimedia presentations for primary delivery via the Internet. Attention is given to design and layout principles and production techniques. Color and editing graphics and photographs will be introduced. Students will also apply their design skills to preparing documents for electronic publishing on the World Wide Web.

OAD 215 Legal Transcription   3 Credits

Prerequisites: OAD 119, with an entry-level speed of 40 gross words a minute on a 5-minute timed writing with a five-error limit. Provides hands-on training in formatting legal correspondence and court documents in the basic areas of law. Students will learn specialized rules of punctuation, terminology, and standards for legal documents. In a laboratory setting, students will learn how to use a transcribing machine to produce legal documents from tape dictation.

OAD 216 Business Communications   3 Credits

Prerequisites: ENG 111 and CIS 101. Emphasizes analysis of business communication environments-cultural, organizational, technological, international, and interpersonal-and the use of communications standards to direct the choice of oral and written communication methods and techniques. It includes practice in writing a variety of messages used to communicate in business and industry with an emphasis on the potential impact of the message on the receiver as a basis for planning and delivering effective business communications.

OAD 217 Problem Solving for Computer Users   3 Credits

Prerequisites: CIS 101. Introduces the organization, structure, and functions necessary for managing and maintaining information systems within a business organization. Presents the student with basic computer system concepts such as file and resource management, device drivers, file structures, hard disk organization, software installation, upgrading and maintenance, and fundamental data security techniques. These concepts will be incorporated into practical applications.

OAD 218 Spreadsheets   3 Credits

Prerequisites: CIS 101. Provides an in-depth understanding of worksheet design, charting, what-if analysis, worksheet database creation and manipulation, and OLE. Knowledge and use of a spreadsheet will be applied to various business applications. Integration of spreadsheets in other applications will be addressed.

OAD 219 Advanced Document Processing   3 Credits

Prerequisites: Entry-level proficiency of 45 gross words per minute on a five-minute timed writing with five or fewer errors and OAD 119 or equivalent. Emphasis on a high degree of competency in an office-like environment processing documents on a personal computer using an up-to-date word processing software package.

OAD 220 Records and Database Management   3 Credits

Prerequisites: CIS 101. Focuses on the management and control of documents from creation to disposition using manual, automated, and electronic media. Examines filing procedures, records management personnel, and equipment. Uses database software to create, modify, query, and report information from a database.

OAD 221 Office Administration and Supervision   3 Credits

Prerequisites: OAD 216 and completion of a minimum of 45 credit hours toward degree. Emphasizes management of office functions. Key topics include personnel, team building, ergonomics, project management, and leadership styles. Case studies and role-playing projects are included. Students will also complete the program and College outcomes assessment tools.

OAD 222 Database Applications   3 Credits

Prerequisites: CIS 101. Provides "hands-on" experience and familiarizes students with the creation and management of a database.

OAD 226 Advanced Electronic Spreadsheets   3 Credits

Prerequisites: OAD 218. Continues the study of electronic spreadsheets in business. Emphasizes the advanced application of electronic spreadsheets.

OPM 102 Techniques of Supervision   3 Credits

Prerequisites: None. Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces basic employee development with emphasis on the responsibilities of a newly-appointed supervisor. Emphasizes organizational structure, motivation, delegation of authority, interviews, orientation and induction of new employees, employee performance evaluations and dealing with employee conflict.

OPM 205 Techniques of Leadership   3 Credits

Prerequisites: OPM 102. Identifies approaches to effective leadership and discovers an appropriate personal leadership style. Explores specific qualities and skills needed for conference leadership (organizing, facilitating, controlling, summarizing, speaking, and problem defining and solving).

OPM 211 Labor Relations   3 Credits

Prerequisites: BUS 102 and OPM 102. This is a second-year elective course in labor-management relations. Examines labor history, major labor legislation, collective bargaining, grievance procedure/arbitration, wage issues and economic supplements e.g. "fringe benefits." Students will obtain the knowledge and skills necessary for functioning effectively in an organized - particularly an industrial – environment.

OPM 224 Operations Management   3 Credits

Prerequisites: MAT 111 or higher. A study of the efficient production of goods and services that will satisfy the wants and needs of identified customer groups. The course begins with a more detailed description of what Operations Management is, then moves to an examination of the customer and methods for determining customer demand.

PAR 102 Emergency Medical Technician - Basic Training   **7.5 Credits**

Prerequisites: Completion of the ASSET or COMPASS, 18 years of age prior to course completion, copy of high school diploma or GED must be supplied by course completion, completion of the College Health Examination Form and required immunizations and tests, regionally determined, current Health Care Provider CPR card. Based on the training program developed by the Department of Transportation and the Emergency Medical Services Commission of Indiana. Covers theories, techniques and operational aspects of pre-hospital emergency care within the scope and responsibility of the basic emergency medical technician (EMT-B). Requires laboratory practice and clinical observation in a hospital emergency room and ambulance. Successful completion of the course meets Indiana requirements to test for certification as an EMT-B.

PAR 113 Preparatory I   **2.5 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, MAT 050, certification, or pending, as an EMT – B, course application and physical exam on file, completion of the College Health Examination Form and regionally required immunizations and tests, successful completion of entrance requirements as determined by regional affiliates. The legal, moral and ethical responsibilities of the health care Professional are introduced. An overview of the Emergency Medical Services System and its components and their relationships is presented. The essential principles of the standard of care, medical liability, areas of potential medical liability and medical liability protection are introduced. An overview of stress, reactions to stress, anxiety, paramedic job stress and dealing with death and dying is discussed. The essentials of Pathophysiology and how the understanding of disease processes will improve upon the level of care provided by the paramedic are explained.

PAR 114 Preparatory II   **3.5 Credits**

Prerequisites: PAR 113. The introduction of drug information, action of drugs, weights and measures and the administration and techniques of administering drugs. The essentials of venous access, therapeutic communications and lifespan development are also included.

PAR 115 Airway, Patient Assessment   **3.5 Credits**

Prerequisites: PAR 114 and ANP 101. The fundamentals of airway management including airway anatomy and physiology, assessment, management, ventilation, and suction are emphasized. General patient assessment, initial management including scene survey, initial assessment, resuscitation, focused/detailed exam, history, definitive field management, and re-evaluation are also introduced.

PAR 116 Clinical I   **1.5 Credits**

Prerequisites: PAR 114. Provides experiences in a hospital environment or other medical setting under supervision. Provides the opportunity to practice and perform patient assessment, endotracheal intubation, intravenous access techniques, and therapeutic communication techniques in the emergency department, surgery, and other appropriate clinical areas.

PAR 210 Medical I   **6 Credits**

Prerequisites: PAR 200. Pulmonology, respiratory management and pharmacological interventions are covered in detail. Cardiology and dysrhythmia recognition relative to pre-hospital intervention are emphasized. Advanced Cardiac Life Support (ACLS) certification must be earned during this course.

PAR 213 Medical II   **5 Credits**

Prerequisites: PAR 210 and ANP 102. Etiology and treatment of medical emergencies associated with the nervous, endocrine and reproductive systems are reviewed. The course includes presentation of allergies and anaphylaxis, gastroenterology, toxicology, infectious and communicable diseases, environmental conditions and behavioral and psychiatric disorder.

PAR 215 Special Considerations   **3.5 Credits**

Prerequisites: PAR 213. Pediatrics, geriatrics and interventions for the chronic care patient and assessment based management are covered. Neonatal Resuscitation Provider (NRP) certification and Pediatrics Advanced Life Support (PALS) certification must be earned during this class.

PAR 216 Clinical II   **1.5 Credits**

Prerequisites: PAR 116. Provides experiences in a hospital environment or other medical setting under supervision. Provides the opportunity to practice and perform patient assessment, endotracheal intubation, suctioning of upper and lower airway, delivery of aerosolized medications, administration of medications via various enteral and parenteral routes, intravenous access techniques, interpretation of electrocardiogram tracings, and therapeutic communication techniques in the emergency department, critical care units, behavioral units, and other appropriate clinical areas.

PAR 219 Clinical III
1.5 Credits

Prerequisites: PAR 216. Provides experiences in a hospital environment or other medical setting under supervision. The emphasis is on gaining experience in the management of neonatal, pediatric, and obstetric patients. Provides opportunities to practice assessment, communication and management with patients ranging from neonate to young adult and opportunities to observe live births and perform assessment of obstetric patients are also available. Assessing the critically ill patient and assisting with care in specialty intensive care units and the burn unit is included.

PAR 220 Operations
2.5 Credits

Prerequisites: PAR 215. An awareness of the concepts of rescue and the preparation for a response to a scene/incident is provided. The essentials of crime scene awareness, medical incident command and hazardous materials operations are presented.

PAR 221 Ambulance Internship
6 Credits

Prerequisites: PAR 219. Students will participate in a field internship that provides on the job experience in all phases of pre-hospital advanced life support. All skills tested by the National Registry Exam will be formally reviewed and practiced. A general review of the total paramedic curriculum will be presented. This is the capstone course of the paramedic curriculum. Student's practical skills experienced through Clinical I, Clinical II, Clinical III, and this course must demonstrate competency in the objectives listed as required by the National Standard Curriculum, DOT, 1998.

PHL 071 Critical Thinking
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 024 and ENG 031. Assists students in developing critical thinking strategies with academic and workplace applications.

PHL 101 Introduction to Philosophy
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces the student to recurring ideas and thought systems represented in the literature and lives of great thinkers and examines philosophical principles such as foundations of morality, skepticism, the nature of knowledge, the nature of mind, free will and determinism, and the existence of God. Emphasizes the evaluation of arguments and analysis of concepts.

PHL 102 Introduction to Ethics
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces the student to the ethical domain as a field of philosophy by examining major concepts such as happiness, virtues and rules and applies them to practical moral problems.

PHL 213 Logic
3 Credits

Prerequisites: ENG 111. Introduces the student to logic as a field of philosophy by examining the structure of argument and applying critical thinking skills.

PHL 220 Philosophy of Religion
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Analyzes issues basic to understanding religion, including the problem of evil, free will and divine foreknowledge, arguments for the existence of God, relationship of faith and reason, and arguments for personal immortality.

PHO 100 Photography for Non-Majors
3 Credits

Prerequisites: None. Covers basic black and white photographic theory and technique. Includes basic black and white darkroom processes and physics of light and filters. Studies camera and lenses, characteristics of films and papers and the chemistry of emulsions, exposure, and development.

PHO 104 Basic Photography
3 Credits

Prerequisites: None. Covers basic black and white photographic theory and technique. Includes basic black and white darkroom processes and physics of light and filters. Study of camera and lenses, characteristics of films and papers and the chemistry of emulsions, exposure, and development.

PHO 106 Studio Practices
3 Credits

Prerequisites: PHO 104. Introduction to studio work in black and white photography using continuous light sources. Basic set-up techniques and lighting methods for a variety of subject matter. Practice with photoflood lamps and quartz lamps, both floods and spots, and a variety of equipment used to modify light.

PHO 107 Intermediate Photography
3 Credits

Prerequisites: PHO 104. Further develops advanced camera skills and black and white photographic vision. Special attention is placed on the practice and theory of the zone system. The course introduces special darkroom techniques and processes and refines black and white printing and processing skills. It will also emphasize good composition and the use of photography as a communications tool.

PHO 109 Studio Lighting Techniques
3 Credits

Prerequisites: PHO 106 and VIS 115. Further explores multiple lighting set-ups, studio electronic flash, location lighting, and special effects. Emphasis will be put on conceptualizing the photograph from start to finish.

PHO 201 Principles of Color Photography
3 Credits

Prerequisites: PHO 104 and VIS 102. Develops camera and laboratory skills needed for color negative and color positive processes through work with state-of-the-art equipment and techniques. Encompasses color psychology and aesthetics as well as the physics of light in color photography. Color photographic theory will be emphasized.

PHO 203 Professional Portraiture
3 Credits

Prerequisites: PHO 109, PHO 201 and VIS 101. Explores approaches and methods in traditional and alternative portraiture in studio and on-location photography. Emphasizes creative approaches to commercial portraiture as well as lighting and posing for corrective portraiture.

PHO 204 Commercial Photography Techniques
3 Credits

Prerequisites: PHO 109. Introduces more advanced studio and lab techniques used in advertising and industrial photography. Emphasizes creative problem solving applications toward advanced commercial photographic assignments.

PHO 208 Independent Study I
3 Credits

Prerequisites: PHO 104 and PHO106. Provides advanced students with opportunities to research and design projects for specified areas of interest. Requires the project plan to be approved by the instructor. Restricts work to student program area and requires it to be portfolio quality.

PHO 214 Journalistic and Editorial Photography
3 Credits

Prerequisites: PHO 104. Gives students the opportunity to photograph events and human interest features to gain experience in contributions to various publications. Emphasizes establishing visual relationships in the photo essay.

PHO 216 Advanced Processes and Production Techniques
3 Credits

Prerequisites: PHO 107, PHO 201, VIS 101 and VIS 201. Introduces specialized lab/alternative process techniques in traditional and digital formats. Works with contemporary experimental darkroom and digital techniques. Covers issues in prepress production as they relate to the photographer.

PHO 218 Fine Art Photography
3 Credits

Prerequisites: None. Examines current issues in non-commercial photography. Explores attitudes of photographers and critics on a wide range of topics through directed reading, class discussion, and gallery visits.

PHO 222 Digital Photography
3 Credits

Prerequisites: VIS 201. Introduces students to digital imaging techniques in photography. Digital imaging software will be used as a tool to manipulate photographs and scanned imagery. Provides experience with digital studio setting. Provides experience with the digital darkroom environment including editing processes, manipulation of images and working with various output devices.

PHY 100 Technical Physics
4 Credits

Prerequisites: MAT 111. Corequisites: MAT 121 or MAT 131 or MAT 134 or MAT 137. Introduces the concepts and applications of physics. Leads students to develop an integrated understanding of the theory and applications of measuring (or unit) systems, scalars, vectors, force, work, rates, energy, momentum, power, force transformers (simple machines), vibrations and waves, and time constants. Emphasizes understanding concepts, factual knowledge, computation, and application.

PHY 101 Physics I
4 Credits

Prerequisites: MAT 121 or MAT 131, or MAT 134 or MAT 137. Introduces the basic concepts of mechanics, including force and torque, linear and rotational motion, work, energy and power, fluids, and the physics of heat.

PHY 102 Physics II
4 Credits

Prerequisites: PHY 101. Introduces the physics of light, periodic and wave motion, electricity and magnetism, and concepts of modern and current physics.

PMT 101 Introduction to Plastics
3 Credits

Prerequisites: None. Introduction to the main plastic processing industries, techniques, and commonly used polymers.

PMT 106 Plastic Materials and Testing
3 Credits

Prerequisites: PMT 101. Introduces structure, properties, and processing characteristics of plastic polymers and additives.

PMT 107 Injection Molding
3 Credits

Prerequisites: PMT 101. Expands the student's knowledge of injection molding process, components, and industry.

PMT 108 Extrusion Process
3 Credits

Prerequisites: PMT 101. Introduces the extrusion processes, equipment and industrial applications.

PMT 201 Advanced Injection Molding
3 Credits

Prerequisites: PMT 107. Covers the procedures and techniques necessary to fully utilize the capabilities of modern injection molding equipment to properly process thermoplastic materials.

PMT 202 Advanced Extrusion
3 Credits

Prerequisites: PMT 108. Expands the student's knowledge of extrusion processes, equipment and industrial application.

PMT 208 Computer Applications in Plastics
3 Credits

Prerequisites: PMT 107 and PMT 108. Introduces the computer products and services available to aid in the design and manufacturing of plastic products.

PMT 209 Manufacturing of Plastics Products
3 Credits

Prerequisites: PMT 107 and PMT 108. Covers the economic, organizational, and quality control strategies employed by production technicians to maximize efficiency in plastics manufacturing operations.

PNU 114 Nursing Issues and Trends
1 Credit

Prerequisites: PNU 122. Focuses on nursing history, ethical and legal issues. Examines the organizational patterns and roles of the practical nurse in the health care delivery system. Emphasizes lifelong learning.

PNU 121 Introduction to Nursing I
4 Credits

Prerequisites: Admission to the Practical Nursing Program. Introduces the role of the practical nurse as a member of the health care team. The nursing process is the basis for providing care within the wellness/illness continuum. Focuses on the application of basic nursing skills essential in meeting biological, psychosocial, cultural and spiritual needs of individuals in preventative, therapeutic and rehabilitative environments.

PNU 122 Introduction to Nursing II
6 Credits

Prerequisites: PNU 121. Focuses on the progression of learning nursing skills. Emphasizes application of safe nursing practice in the clinical setting. Drug administration, dosage calculation and mental health concepts are introduced.

PNU 123 Pharmacology 3 Credits

Prerequisites: Program Advisor Approval. Pharmacology is the study of pharmacological agents including classifications, actions, side effects, interactions and nursing implications.

PNU 126 Integrated Life Science 5 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032 and MAT 050. Examines physical/chemical factors that enable man to maintain homeostasis of the internal environment. Emphasis is placed on anatomy and physiology. Concepts of chemistry, nutrition and microbiology are integrated.

PNU 127 Care of the Adult I 5 Credits

Prerequisites: PNU 122. Focuses on the application of the nursing process in understanding the pathophysiology and nursing care of clients with circulatory, ventilation and immunity dysfunction. Emphasis will be on meeting biological, psychosocial, cultural and spiritual needs in selected environments. Theory is applied in the clinical component.

PNU 128 Care of the Adult II 5 Credits

Prerequisites: PNU 127. Focuses on the application of the nursing process in understanding the pathophysiology and nursing care of clients with nutrition, elimination, male reproduction, and hormone dysfunctions. Emphasis will be on meeting biological, psychosocial, cultural and spiritual needs in selected environments. Theory is applied in the clinical component.

PNU 129 Care of the Adult III 5 Credits

Prerequisites: PNU 128. Focuses on the application of the nursing process in understanding the pathophysiology and nursing care of clients with mobility, sensory, and dermatological dysfunctions. Emphasis will be on meeting biological, psychosocial, cultural and spiritual needs in selected environments. Theory is applied in the clinical component.

PNU 131 Care of the Childbearing Family 6 Credits

Prerequisites: PNU 122. Emphasis is on the normal reproductive cycle and normal growth and development of the child within the wellness/illness continuum. Examines conditions and selected interventions based on the nursing process, in providing preventative, therapeutic and rehabilitative care for the mother and child. The role of the Practical Nurse is identified in providing holistic care to the childbearing family within the clinical setting.

PNU 132 IV Therapy 1 Credit

Prerequisites: PNU 122. Corequisites: PNU 123. An introductory study of IV therapy. Emphasis is placed on types of IV fluids, methods for calculating flow rate and venipuncture techniques. Complications of intravenous therapy, mixtures of IV fluids and various types of intravenous equipment will also be explored.

PNU 133 Care of Older Adult 4 Credits

Prerequisites: PNU 122. Focuses on the application of the nursing process in meeting biological, psychosocial, cultural and spiritual needs of older adults in selected environments. Preventative, therapeutic, rehabilitative care and support of death with dignity are major components. Theory is applied in the clinical setting.

POL 101 Introduction to American Government and Politics 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Studies federalism, theories of the origins and purposes of government and other aspects of the American government including interest groups, political parties, and the electoral process. Emphasis is placed on constitutional backgrounds and the organization and functions of the executive, legislative, and judicial segments of the national government, civil liberties and civil rights, public opinion, media, bureaucracies, and domestic and foreign policy.

POL 112 State and Local Government 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Covers the basic organization and operation of state and local governments. Topics include federalism, state constitutions, courts, governors, legislatures, elections, campaign finance, interest groups, local governments, budgets and taxes, education and law enforcement.

POL 201 Introduction to Political Science
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces students to the basic principles of political science, government and its institutions, international relations, political philosophy, and political theory. Emphasis on the impact of economy, culture, history, and environment on political behavior/events.

POL 210 Personal Law
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Examines the basis and principles of our legal system, how legal decisions are made and how they affect citizens' lives. Topics to be covered include federal and stare jurisdictions, criminal and civil law and procedures, freedom of speech, press and religion, privacy rights, workplace rights, property rights, the role of juries in our legal system and the death penalty.

POL 211 Introduction World Politics
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Investigates the interaction of modern international political institutions, leaders, and events. Further discussion includes comparative analysis from a global perspective and the impact of international relations on individual lives.

POL 220 Public Administration
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Focuses on bureaucracy in the federal government and its relation to local and state agencies.

PST 116 Hazardous Materials Control
3 Credits

Prerequisites: CHM 101. Introduces hazardous material, managing the hazardous material incident, explosive and gas emergencies, shipping containers, cylinder safety devices, responding to flammable and combustible liquids, oxidizer, poison, and corrosive and radioactive emergencies. Emphasizes chemical identification, marking, storage, shipping and handling of hazardous substances. Uses basic monitoring instruments for hazardous areas to protect workers and first responders. Covers protective clothing and equipment. Emphasizes safety procedures and practices.

PST 120 First Responder
3 Credits

Prerequisites: None. Provides students with information necessary to recognize emergency situations, know the proper course of action with different types of emergencies and apply appropriate first aid. Addresses handling of victims of hazardous materials accidents. Covers CPR, including one and two rescuer; and adult, infant and child resuscitation.

PST 121 Risk Management
3 Credits

Prerequisites: None. This course will provide the student with an introduction to industrial safety, OSHA, various OSHA standards, workplace inspections, citations and penalties. Employee and employer responsibilities, right-to-know laws and safety awareness programs are examined. Safety motivation and knowledge, creating a healthy work environment and health hazards and issues are also studied. Areas such as the role of the supervisor, employee assistance programs, management of stress helps students understand the role employer's play in creating a healthy workforce. In addition, the contributions of safety committees and other governmental agencies responsible for safety are examined.

PST 220 Incident Management System
3 Credits

Prerequisites: Advisor Approval. Emphasizes command and control of major department operations at an advanced level, linking operations and safety. Areas of study include: Incident Management System, Pre-Incident, Size-up, command Systems, Sectoring Functions, Staging, Safety Officer, Command Post, Communications, News Media, Computer Aided Resources.

PST 221 Computer Design and Planning
3 Credits

Prerequisites: TEC 104. Focuses on the needs and uses of the computer in the public safety. Includes computed-aided dispatch, advanced levels of cameo, I-Chiefs, computer-aided design of equipment, generation of incident reports, application of computers for the budgetary process, computer-aided resource and materials, maintenance, test records of vehicles and the GIS program.

PSY 101 Introduction to Psychology
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032, and MAT 044. Surveys behavior and cognitive processes as they affect the individual. The course focuses on biological foundations, learning processes, research methodologies, personality, human development and abnormal and social psychology.

PSY 180 Ethics in Helping Professions 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introductory level course provides an overview of legal and ethical aspects in the field of workers in social service settings. Includes topics such as personal schema and how it influences working with others, confidentiality, and laws regarding reporting of neglect and abuse.

PSY 201 Lifespan Development 3 Credits

Prerequisites: PSY 101 and ENG 111. Examines human growth and development through the prenatal, child, adolescent, and adult stages of life. Physical, emotional, psychosocial, and cognitive influences from conception to death will be addressed.

PSY 205 Abnormal Psychology 3 Credits

Prerequisites: PSY 101 and ENG 111. Examines theories and research related to abnormal behavior with primary emphasis on symptoms, etiology, and treatment of psychological disorders.

PSY 210 Drugs and Human Behavior 3 Credits

Prerequisites: PSY 101 and ENG 111. Examines theories and research related to human drug use and abuse. Drug pharmacology; physiological effects of drugs on the nervous system; social and psychological issues affecting drug abuse; the treatment, effects, prevention of substance abuse; and therapeutic uses of drugs in mental illness will be addressed.

PSY 240 Human Sexuality 3 Credits

Prerequisites: PSY 101. Considers sexuality from an historic, scientific, evolutionary and psychosocial perspective including sex research and methods, the biological bases of sexuality, sexual behavior, sexuality and the life cycle, sexual problems, and social issues.

PSY 242 Educational Psychology 3 Credits

Prerequisites: ENG 111 and PSY 101. Designed for students interested in the educational process at all levels. Included will be topics related to student motivation, assessment and achievement. Successful students will understand the importance of the application of knowledge, as well as the acquisition of knowledge. The course provides a basic understanding of the psychology of teaching and education. Problem solving in the educational setting will be stressed.

PSY 253 Introduction to Social Psychology 3 Credits

Prerequisites: PSY 101 and SOC 111. The study of social psychology as a science, and how social psychologists study the interactions within and between individuals, social groups and institutions.

PSY 280 Health Psychology 3 Credits

Prerequisites: PSY 101. An introduction to health and emphasizing mind-body issues, the biopsychosocial model and cognitive behavioral theory. The course will emphasize research methods and current practice related to stress and pain, as well as health related behaviors. Within the course, treatment approaches, behavioral risk factors and public health issues will be addressed.

PTA 101 Introduction to Physical Therapist Assisting 3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Explores the history and concepts of physical therapy, physical therapist assisting and rehabilitative medicine. Introduces fundamentals of patient care including universal precautions; body substance isolation; OSHA guidelines, patient assessment including vital signs; body mechanics; and patient handling with applications of physics principles. Includes preparation of patients, treatment areas and equipment.

PTA 102 Diseases, Trauma and Terminology 3 Credits

Prerequisites: PTA 101. Explores diseases and trauma which necessitate physical therapy for the client. Medical terminology, anatomy, physiology, psychology, disabilities and physics related to these conditions are discussed along with instrumentation, implants and fixation devices. Provides students with the opportunity to explore their own reactions to illness and disability and to discuss how to recognize patients' and families' reactions to illness and disability.

PTA 103 Administrative Aspects of Physical Therapist Assisting   3 Credits

Prerequisites: None. Addresses the legal and ethical aspects of physical therapist assisting and patient care along with charting, documentation, report writing, patient history procurement, record keeping, charges, insurance information including diagnostic and procedure coding, third party reimbursement, Medicare, Medicaid, electronic claims and patient rights including American Disabilities Act policy and architectural barriers identification. Discusses current issues in health care provision. Explores patient, family, and professional communication techniques, body language and electronic communication as well as techniques in patient teaching. Includes performing within the limitations of scope of skills, basic principles of levels of authority and responsibility, planning, time management, supervisory process, performance evaluations, policies and procedures.

PTA 106 PTA Treatment Modalities I   5 Credits

Prerequisites: PTA 101. Continues concentration on the fundamentals of patient care including universal precautions, assessment of vital signs, body mechanics and patient positioning. Includes lectures, demonstrations and simulated patient problems in the laboratory portion of the course. Studies new techniques in depth, such as gait training, gait device selection, goniometry range of motion exercises and measuring. Introduces various modalities including hydrotherapy, thermo-therapy, massage, traction and intermittent compression techniques. Safety factors are emphasized in both the lectures and the laboratories. The laboratory provides the setting for the practice and implementation of theories and techniques of PTA 106. Students practice assessments and treatment methods on themselves and one another under the guidance and supervision of the laboratory instructor.

PTA 107 Kinesiology   5 Credits

Prerequisites: PTA 101 and ANP 101. Introduces the physical therapist assistant student to the science of kinesiology. By definition, kinesiology is the study of movement. Studies human movement and brings together the fields of anatomy, physiology, physics and geometry. Prerequisite knowledge of skeletal and muscular anatomy and physiology is necessary. Class will consist of equal parts of lectures, demonstration and student participation in locating, observing and palpating various bony prominences and musculatures. Much of kinesiology requires independent study to memorize origin, insertion, action and innervation of all muscles. The knowledge gained in this course is an integral part of the students' background preparation for the practice of physical therapy.

PTA 115 Clinical I   2 Credits

Prerequisites: PTA 101, PTA 102, PTA 103 and PTA 106. Requires the student to perform in a clinical environment with patients, using applications of theory and techniques of PTA 106, under the guidance of a registered physical therapist.

PTA 205 Clinical II   5 Credits

Prerequisites: PTA 106, PTA 107 and PTA 207. Requires the student to perform in a clinical environment with patients using applications of theories and techniques of PTA 207 under the guidance of a registered physical therapist.

PTA 207 Treatment Modalities II   5 Credits

Prerequisites: PTA 106 and PTA 107. Reviews joint structure, muscle origins, insertions, innervations, actions and physiology. Covers normal and abnormal gait, orthotics and prostheses, arthritis and joint replacement and postural correcting exercise along with treatment principles and therapeutic exercises for the neck, back, and peripheral joints. Discusses general exercise principles and progression of the orthopedic patient through an exercise program. Addresses appropriate applications of principles of physics and kinesiology.

PTA 215 Clinical III   5 Credits

Prerequisites: PTA 207 and PTA 106. Requires the student to perform in a clinical environment with patients using applications of theory and techniques of PTA 217 under the guidance of a registered physical therapist.

PTA 217 Treatment Modalities III   5 Credits

Prerequisites: PTA 106 and PTA 207. Provides an in-depth approach to therapeutic exercise as performed by the physical therapy assistant. Covers basic anatomy and physiology of the central and peripheral nervous systems and activities of daily living. Includes exercise physiology and neurophysiology and advanced principles and procedures of therapeutic exercise appropriate for cardiopulmonary, cardiovascular, orthopedic and neurologic conditions, stroke, spinal cord and peripheral nerve injuries. Discusses prevention measures, specialized techniques and the utilization of specialized therapeutic equipment and correlates them to exercise applications. Addresses appropriate applications of kinesiology and principles of physics. Provides practice and implementation of theories and techniques of PTA 106 and PTA 207 in the lab setting.

PTA 224 Current Issues and Review
1 Credit

Prerequisites: PTA 205 and PTA 215. Teaches the sources of physical therapy research and discusses the recognition of the roles and responsibilities of physical therapy assistants. Requires completion and presentation of an independent project. Includes a comprehensive review of the course to prepare the student for licensure exam.

QSC 101 Quality Control Concepts and Techniques 1
3 Credits

Prerequisites: MAT 111. Covers current quality control concepts and techniques in industry with emphasis on modern manufacturing requirements. Studies the fundamental tools of statistical process control which are used in industry to reduce costs and increase productivity at a predictable quality level. Emphasizes principles and techniques of SPC to ensure prevention instead of detection of problems is practiced. Includes basic statistical and probability theory, sampling techniques, process control charts, the nature of variation, histograms, attributes and variable charts.

QSC 102 Statistical Process Control
3 Credits

Prerequisites: None. Studies the fundamental tools of statistical process control which are used in industry to reduce costs and increase productivity at a predictable quality level. Emphasizes principles and techniques of statistical process control to ensure that prevention instead of detection of problems is practiced. Includes basic statistical and probability theory, sampling techniques, process control charts, the nature of variation, histograms, and attribute and variable charts.

QSC 105 Non-Destructive Testing Applications
3 Credits

Prerequisites: None. Presents an overview of the relationship of non-destructive testing to the total quality function. Includes advantages and limitations of various test methods including liquid penetrate, magnetic particle, ultrasound, and eddy current.

QSC 201 Advanced Statistical Process Control
3 Credits

Prerequisites: QSC 101. Builds on the basic principles of QSC 101 with advanced techniques by industry to ensure economic production of goods based on defect prevention rather than defect detection. Covers the various decisions to modify, change or adjust the process based on statistical evidence. Stresses interpretation of statistical data and distinguishing between common and special causes of problems. Emphasizes appropriate use of control charts, trend analysis, assessing process and machine capability, evaluating the measurement process, using computers, and implementation techniques.

QSC 202 Quality Control Concepts and Techniques II
3 Credits

Prerequisites: QSC 101. Acquaints students with quality control systems. Emphasizes the systems approach to quality, establishing the quality system and applying total quality control in the company.

QSC 203 Metrology
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Instructs a student in mechanical precision measurement techniques and applications. Provides instruction and laboratory experiences in surface plate inspections, optical comparators, hardness testing, and coordinate measuring machines (CMM). Discusses calibration and measurement system analysis.

QSC 204 Total Quality Management
3 Credits

Prerequisites: QSC 101. Teaches the philosophy of total quality management. Focuses on improving processes and reducing variation in systems. Covers management's role in improving aspects of manufacturing and service organization to achieve quality improvement.

QSC 206 ISO/QS International Standards
3 Credits

Prerequisites: None. Teaches the basic principles of ISO 9000 standards, QS 9000 standard, ISO 14000 standard. Includes instruction on internal auditing with emphasis on the role of the internal auditor in regard to the maintenance of the quality systems.

QSC 210 Quality Management Principles
3 Credits

Prerequisites: None. Stresses the management concept relating to employee attitudes, motivation and job satisfaction, as well as philosophies, styles of leadership, and team building as they relate to quality objectives.

RAD 111 Orientation and Patient Care   **4 Credits**

Prerequisites: Acceptance into the program through appropriate assessment. Introduces the profession of radiology and the practitioner's role in the health care system. It also provides students with the basic concepts of patient care dealing with the emotional and physical needs of the patients including infection control and standard precautions.

RAD 112 Image Production and Evaluation I   **3 Credits**

Prerequisites: RAD 117. Content is designed to establish a knowledge base in factors that govern and influence the production and recording of radiologic images. Film and electronic imaging with related accessories will be emphasized. The mathematical calculations of x-ray technique will be taught along with the operations of darkrooms and developing equipment commonly used in the field.

RAD 113 Radiographic Positioning I   **3 Credits**

Prerequisites: Acceptance into the program through appropriate assessment. An introduction to and familiarize the student with the basic routines of radiographic positioning, shielding techniques, and related terminology. Actual radiographs are included for analysis of proper positioning and overall image quality.

RAD 114 Radiographic Clinical Education I   **3 Credits**

Prerequisites: Acceptance into the program through appropriate assessment. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences shall be designed to provide patient care and assessment, competent performance of Radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well being of the patient preparatory to, during and following the radiologic procedure.

RAD 115 Radiographic Positioning II and Lab   **3 Credits**

Prerequisites: RAD 113. Content is designed to provide a knowledge base necessary to perform standard radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. Laboratory experience should be used to complement the didactic portion.

RAD 116 Radiographic Clinical Education II   **4 Credits**

Prerequisites: RAD 114. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences shall be designed to provide patient care and assessment, competent performance of Radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well being of the patient preparatory to, during and following the radiologic procedure.

RAD 117 Radiation Physics and Equipment Operation   **3 Credits**

Prerequisites: Admission to the program through appropriate assessment. Designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter.

RAD 121 Anatomy and Positioning I and Lab   **3 Credits**

Prerequisites: None. Covers basic positioning terminology plus the routine positions for PA and Lateral Chest exam, non-contrast abdomen exam, and exams of the upper extremity. Anatomy and physiology pertinent to the body parts presented in class are also discussed.

RAD 122 Limited General Radiation Physics/Protection   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Fundamentals of x-ray tube construction, basic circuitry of x-ray machine atomic structure, properties of x-rays. Also the basic principles of radiation protection for the radiographer and the patient including technical exposure factors and the effects of radiation on living tissue are discussed.

RAD 123 Anatomy and Positioning II and Lab   **3 Credits**

Prerequisites: RAD 121. Covers pertinent anatomy, physiology and positioning exams of the lower extremity, vertebral column, and bony thorax.

RAD 124 Radiographic Exposure
3 Credits

Prerequisites: RAD 121. Presents fundamentals of x-ray film and intensifying screen construction and the fundamentals of x-ray film processing. Also presents and discusses the interactions of the technical factors which contributes to radiographic quality. Manipulation of technical factors to achieve changes in radiographs is also presented.

RAD 125 General Exam Review
3 Credits

Prerequisites: RAD 121, RAD 122, RAD 123, and RAD 124. Utilizes mock certification tests and review of selected topics presented in previous courses to prepare the student to take the Indiana Certification Exam for Limited Radiographers.

RAD 126 Limited General Radiology Clinical I
4 Credits

Prerequisites: None. Students are assigned to a clinical education facility to gain experience of the procedures presented in the lectures and labs.

RAD 127 Limited General Radiology Clinical II
4 Credits

Prerequisites: RAD 126. Students are assigned to a clinical education facility to gain experience of the procedures presented in the lectures and labs.

RAD 128 Limited General Radiology Clinical III
4 Credits

Prerequisites: RAD 127. Students are assigned to a clinical education facility to gain experience of the procedures presented in the lectures and labs.

RAD 129 Anatomy and Positioning III and Lab
3 Credits

Prerequisites: RAD 123. Covers pertinent anatomy, physiology and positioning exams of the skull and facial bones.

RAD 201 Radiographic Positioning III and Lab
3 Credits

Prerequisites: RAD 115. Content is designed to provide a knowledge base necessary to perform standard radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. Laboratory experience should be used to complement the didactic portion.

RAD 202 Radiographic Clinical Education III
4 Credits

Prerequisites: RAD 116. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences shall be designed to provide patient care and assessment, competent performance of Radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well being of the patient preparatory to, during and following the radiologic procedure.

RAD 203 Radiographic Clinical Education IV
4 Credits

Prerequisites: RAD 202. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences shall be designed to provide patient care and assessment, competent performance of Radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well being of the patient preparatory to, during and following the radiologic procedure.

RAD 204 Radiographic Clinical Education V
4 Credits

Prerequisites: RAD 203. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences shall be designed to provide patient care and assessment, competent performance of Radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well being of the patient preparatory to, during and following the radiologic procedure.

RAD 206 Radiobiology and Radiation Protection 3 Credits

Prerequisites: RAD 111 and RAD 117. Covers theories and principles of the effects of ionizing radiation upon living tissues. Includes dosages, measurements, DNA structures and functions, and cellular radiosensitivity. Overview of the principles of radiation protection are also covered.

RAD 209 Radiographic Positioning IV 3 Credits

Prerequisites: RAD 201. Content is designed to provide a knowledge base necessary to perform standard radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. Laboratory experience should be used to complement the didactic portion.

RAD 218 Image Production and Evaluation II 2 Credits

Prerequisites: RAD 112. Explains phototiming and its relationship to manual techniques. Associates kVp and mAs with the quality and quantity of radiation. Covers standard darkroom procedure, automatic processing, fluoroscopy and quality assurance.

RAD 220 Advanced Procedures and Special Modalities 3 Credits

Prerequisites: RAD 117. Corequisites: RAD 209 and RAD 203. Covers theories, principles and demonstrations of current imaging modalities.

RAD 299 General Exam Review 3 Credits

Prerequisites: Program Advisor Approval. Reviews content of program, emphasizing anatomy, physics, exposure principles, positioning and radiation safety. Simulated registry exams prepare the student for the American Registry of Radiologic Technologist Examination.

RES 121 Introduction to Respiratory Care 6 Credits

Prerequisites: Program Chair Approval. Presents an introduction into respiratory care, including a brief history of the profession; equipment cleaning and sterilization techniques; patient assessment techniques; and isolation techniques. Also includes medical records documentation, gas analyzers, introduction and application of therapeutic modalities including oxygen therapy, aerosol and humidity therapy, hyperinflation therapy, basic airways and an overview of ethical practice and safety. Introduces concepts and techniques of tracheobronchial aspiration.

RES 122 Therapeutic Modalities 3 Credits

Prerequisites: RES 121. Presents medicinal aerosol therapy and respiratory pharmacology and applying it to the nervous system and its receptors. In addition, and bronchial hygiene therapies will be discussed. Introduces basic bedside pulmonary function testing.

RES 123 Cardiopulmonary Physiology 3 Credits

Prerequisites: ANP 101. Presents the cardiopulmonary system including ventilation, perfusion, and gas exchange; introduces interpretation and application of arterial blood gases, acid-base regulation, and physiologic monitoring. Reviews the basic principles of physics as it relates to the respiratory system.

RES 124 Clinical I 3 Credits

Prerequisites: Current CPR AHA Course C or equivalent and RES 121. Completed health forms. Introduces the student to the hospital environment. The student will be exposed to various hospitals and respiratory care departments, patient charts, patient identification and communication within the hospital. Provides supervised experience in oxygen therapy, hyperinflation therapy, humidity/aerosol therapy and charting.

RES 125 Critical Care I 3 Credits

Prerequisites: RES 121. Presents an introduction to the respiratory care of the critically ill patient. This includes arterial blood gas collection; analysis and interpretation; and basic medical laboratory data. Introduces concepts and techniques of critical respiratory care of adults, to include establishment and maintenance of artificial airways. Includes application of adult mechanical ventilators and related cardio-pulmonary monitoring equipment.

RES 126 Clinical Medicine I 3 Credits

Prerequisites: RES 123. This particular course introduces etiology, symptomatology, diagnosis, therapeutics, and prognosis of selected pulmonary diseases.

RES 127 Clinical II   3 Credits

Prerequisites: RES 124. Provides supervised experience in selected therapeutic modalities. An introduction to chest physiotherapy, medicinal aerosol therapy, intermittent positive pressure breathing, and ultrasonic therapy will be included. Students will participate in the development of respiratory care plans to improve patient care. Students may have observation rotations in critical care areas. Continuing certification in CPR is required.

RES 128 Clinical III   9 Credits

Prerequisites: RES 125 and RES 127. Provides additional supervised experience in selected therapeutic modalities. Also includes advanced patient assessment, arterial blood gas analysis, and airway care. Provides supervised experience in adult critical care with mechanical ventilation. Allows students to participate in intra-hospital transfers along with land/air transports. Students will participate in the development of respiratory care plans to improve patient outcomes within the critical care setting. An introduction to pulmonary function testing is included. Continued Certification in CPR is required.

RES 129 Respiratory Care Pharmacology   3 Credits

Prerequisites: Program Chair Approval. The most common pharmacological agents currently being administered are discussed according to all body systems and in relation to the nervous system and its receptors. Emphasis is placed on classifications, indications, side effects, dosages, and routes of administration. Medication discussion to include, but not limited to emergency drugs, antibacterial medication, anti-fungal medications and the implications and complications of IV therapy.

RES 221 Cardiopulmonary Diagnostics   4 Credits

Prerequisites: RES 126. Presents in-depth approaches to diagnostic procedures used in the treatment of critically ill neonatal, pediatric, and adult patients. Special emphasis is placed on techniques of patient evaluation, selection of equipment, performing procedures, cardiopulmonary monitoring during the procedure, interpreting test results and suggesting management of the patient. Also included are advanced techniques of patient assessment through pulmonary function testing and other selected assessment techniques.

RES 222 Critical Care II   3 Credits

Prerequisites: RES 125. Presents advanced techniques of mechanical ventilation of neonatal, pediatric and adult patients; includes fetal development and assessment; neonatal and pediatric assessment, equipment, procedures and therapeutic techniques, introduces related aspects of the neonatal intensive care unit environment. Selected neonatal and pediatric diseases will be discussed.

RES 224 Clinical Medicine II   3 Credits

Prerequisites: RES 221. Studies etiology, symptomatology, diagnosis, therapeutics, and prognosis of disease conditions related to respiratory care; focuses on the interrelation of all physiologic systems. Emphasis on treatment protocols; includes preparation for the clinical simulation component of national credentialing examination.

RES 226 Continuing Care   2 Credits

Prerequisites: RES 222. Presents a brief history of home care patients in relation to respiratory care modalities. Provides an overview of respiratory care roles in the alternative care sites and pulmonary rehabilitation programs.

RES 227 Clinical IV   6 Credits

Prerequisites: RES 128. Provides additional supervised experience in selected therapeutic modalities. Also includes advanced cardiopulmonary diagnostic techniques, application of invasive and non-invasive monitoring of the cardiopulmonary system, and experience in respiratory care and quality assurance roles. Also includes advanced clinical experience in adult, pediatric and neonatal intensive care units. Exposure to home care settings, alternative care sites and pulmonary rehabilitation programs is expected. Students are expected to complete patient care plans, written case study and all clinical exams. Continuing certification in CPR is required.

RES 229 Emergency Management   1 Credit

Prerequisites: Current CPR AHA Course C or equivalent. Application of various techniques in advanced cardiopulmonary support during life threatening events. At the end of the course, students will be expected to successfully apply knowledge in a mock adult patient care setting.

RES 250 Beginning Polysomnography   2 Credits

Prerequisites: Program Chair Approval. An overview of the field of Polysomnography including history, job responsibilities, credentialing, medical ethics and patient confidentiality. Normal and abnormal sleep disorders, integrating the physiologic functions of the nervous, respiratory and cardiovascular systems. Emphasis on basic sleep sciences, physiology, monitoring, electrical safety, diagnosis and treatment of sleep disorders.

RTT 200 Introduction to Patient Care — 2 Credits

Prerequisites: None. Emphasis is on the holistic approach of the radiation oncology patient to include patient management and education. There will be an overview of diagnostic imaging and a thorough review of practical anatomies.

RTT 247 Introduction to Radioactivity — 3 Credits

Prerequisites: None. This course addresses mechanisms of nuclear decay and interaction of radiation with matter.

RTT 249 Radiation, Biology and Safety — 2 Credits

Prerequisites: None. An introductory course which focuses on nononcologic disease processes and the biological behavior of neoplastic conditions and quality assurance.

RTT 260 Radiation Therapy Orientation — 3 Credits

Prerequisites: None. A generalized overview of radiation therapy. Another major focus of this course is gaining a foundation in medical terminology as it pertains to radiation therapy in medicine.

RTT 261 Clinical 1 — 1 Credit

Prerequisites: None. Emphasis of this clinical education is on accurately delivering the planned course of radiation therapy with supervision of the clinical supervisor.

RTT 262 Oncology Physics — 3 Credits

Prerequisites: None. This course focuses on specific radiation therapy treatment units and photon and electron beam dosimetry and its application to the treatment of patients.

RTT 263 Oncology Pathology 1 — 3 Credits

Prerequisites: None. Emphasis of this course focuses on clinical oncology as well as malignant conditions and methods of treatment.

RTT 264 Clinical II — 2 Credits

Prerequisites: None. Emphasis of this clinical education is on accurately delivering the planned course of radiation therapy with supervision of the clinical supervisor.

RTT 265 Oncology Radiation 1 — 2 Credits

Prerequisites: None. Emphasis is on principles of clinical application in treatment planning, brachytherapy and quality assurance.

RTT 266 Oncology Pathology II — 3 Credits

Prerequisites: None. Emphasis of this course focuses on clinical oncology as well as malignant conditions and methods of treatment.

RTT 267 Oncology Radiation II — 2 Credits

Prerequisites: None. Emphasis is on principles of clinical application in treatment planning, brachytherapy and quality assurance.

RTT 268 Planning and Dosimetry — 4 Credits

Prerequisites: None. This course focuses on specific radiation therapy treatment units and photon and electron beam dosimetry and its application to the treatment of patients.

RTT 269 Clinical III — 2 Credits

Prerequisites: None. Emphasis of this clinical education is on accurately delivering the planned course of radiation therapy with supervision óf the clinical supervisor.

RTT 270 Clinical IV — 2 Credits

Prerequisites: None. Emphasis of this clinical education is on accurately delivering the planned course of radiation therapy with supervision of the clinical supervisor.

SCI 100 Earth Science   **4 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Introduces physical concepts and theories pertaining to current applications and trends in earth science. Basic concepts in geology, meteorology, oceanography, and astronomy will be illustrated.

SCI 111 Physical Science   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 050. Introduces physical concepts and theories pertaining to current applications and trends in physics. Basic concepts in chemistry, earth science and astronomy will also be illustrated. Emphasizes concepts and applications.

SOC 111 Introduction to Sociology   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Introduces students to the major theoretical paradigms of the science of human society, including fundamental concepts, descriptions, and analyses of society, culture, socialization processes, social institutions, social change, social stratification and the application of this understanding to everyday living.

SOC 164 Multicultural Studies   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Introduces students to the historical experiences, values, cultures, and beliefs of the major racial and ethnic groups that make up the population of the United States. Examines central questions in the theoretical and empirical study of race and ethnicity. This course will help prepare students to understand, appreciate, and work effectively with people who are different from themselves.

SOC 245 Cultural Diversity in the United States   **3 Credits**

Prerequisites: SOC 111 and ENG 111. Surveys multiple dimensions of diversity and social stratification in the United States, including race, ethnicity, age, class, physical ability, religion, gender, and sexuality. The social impact of the cultural integration of these groups will be introduced.

SOC 252 Social Problems   **3 Credits**

Prerequisites: SOC 111. Explores various problems in contemporary American society. Examines structural and cultural aspects of social problems with specific reference to their origin, development, and suggested solutions. Course utilizes a sociological framework which encompasses a variety of theoretical perspectives.

SOC 261 Sociology of Relationships and the Family   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Examines the sociological and psychological dynamics of dating, relationships, marriage, family life and parenting. Introduces students to the major theoretical paradigms as they relate to relationships. Emphasis will be placed on how our contemporary society and culture is affecting these institutions and customs. The course will also explore the impact of divorce and stepfamilies on today's lifestyles.

SPM 101 Introduction to Sport Management   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Focuses on the nature and scope of sport management. Students will examine the breadth of sport related careers as well as engage in critical thinking about current sport management issues and trends.

SPM 201 Sport in Society   **3 Credits**

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025, ENG 032 and MAT 044. Introduces the socio-cultural dimensions of sport. Sport is sometimes trivialized as a playground off to the side of the real world. This course will describe to the student that sport is a microcosm of society as well as a site for changing society. Finally, the course will show that sport has a profound influence on the social life of large numbers of people of all ages.

SPM 202 Management and Leadership in Sport   **3 Credits**

Prerequisites: SPM 101. A survey course designed to introduce the student to the management related to sport. The course will assist students in understanding what the role of a manager is in the various sport industries.

SPM 203 Venue and Event Management   3 Credits

Prerequisites: SPM 202. A survey course designed to introduce the student to the management related to venues and events in sport. The course will assist students in understanding the role of a venue or event manager.

SPM 280 Sport Management Internship   3 Credits

Prerequisites: Program Chair approval. A full-time work experience in the sport industry (40 hours/week). The experience is actual work in a sport management setting in which management practices are applied.

SPN 101 Spanish Level I   4 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introductory course in Spanish. Focuses on developing students' capacity to use the language and to appreciate Hispanic cultures. Emphasis is placed on skills of listening, speaking, reading and writing, and on grammar acquisition. Use of audio-visual aids, video, vocabulary building, computer resources as appropriate and "less-stress" techniques.

SPN 102 Spanish Level II   4 Credits

Prerequisites: SPN 101 or demonstrated competency in Spanish through appropriate assessment; demonstrated competency in reading and writing through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Continues the study of Spanish for students who have had the equivalent of one semester of college-level Spanish. Introduces advanced grammar structure and additional vocabulary to further develop speaking, reading, writing and listening skills and appreciation of Hispanic cultures. Provides opportunities to practice Spanish and experience Spanish culture.

SPN 201 Spanish Level III   4 Credits

Prerequisites: SPN 102 or demonstrated competency in Spanish through appropriate assessment; demonstrated competency in reading and writing through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. In Spanish 201, Spanish is the primary medium of instruction, as well as the subject. The goal of the course is to continue development of and reinforcement of the basic skills of the target language: listening, speaking, reading, and writing. The course continues the study of grammar/syntax and vocabulary building and introduces Spanish and Latin American civilization through conversation coordinated with reading of cultural text as well as written and oral reports.

SPN 202 Spanish Level IV   4 Credits

Prerequisites: SPN 201 or demonstrated competency in Spanish through appropriate assessment; demonstrated competency in reading and writing through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. Spanish is the primary medium of instruction, as well as the subject. Continues development of and reinforcement of the basic skills of the target language: listening, speaking, reading, and writing. Continues the study of grammar/syntax and vocabulary building. Study of Spanish and Latin American civilizations through readings, both journalistic and literary, and reinforced through class discussions as well as written and oral reports.

SUR 111 Fundamentals of Surgical Technology   4 Credits

Prerequisites: Admission to clinical phase of Surgical Program, ANP 101, MAT 111 or higher, ENG 111 and HHS 101. Introduces principles of sterile techniques and the operative care of the surgical patient. Includes the roles of scrubbing and circulating duties.

SUR 112 Application of Surgical Fundamentals   2 Credits

Prerequisites: Admission to clinical phase of Surgical Program, ANP 101, MAT 111 or higher, ENG 111 and HHS 101. Corequisites: SUR 111. Demonstrates the application of surgical fundamentals. Correlates theory to practice by requiring students to participate as members of a surgical team in laboratory simulations.

SUR 113 Surgical Procedures I   3 Credits

Prerequisites: SUR 111, SUR 112, ANP 102, BIO 2XX General Microbiology, Pharmacology, HHS 105 and Program Advisor Approval. Corequisites: SUR 114. Introduces general surgical procedures with review of perioperative patient care including diagnostic testing, pre-operative care, and immediate post-operative care.

SUR 114 Clinical Applications I   3 Credits

Prerequisites: SUR 111, SUR 112, ANP 102, BIO 2XX General Microbiology, Pharmacology, HHS 105 and Program Advisor Approval. Corequisites: SUR 113. Correlates the principles and theories of basic surgical procedures to clinical performance in affiliating hospitals. Includes knowledge, skills and attitudes necessary for successful implementation of safe patient care in an operating room.

SUR 201 Pharmacology
3 Credits

Prerequisites: ANP 101 and HHS 101 and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050. Introduces the basic concepts of pharmacology. Emphasis is given to classification, indications, interactions and adverse reactions of commonly used medications. Dosage calculation, weights and measures, terminology and abbreviations associated with drug use are presented. Medication use in the perioperative patient is addressed.

SUR 211 Surgical Procedures II
6 Credits

Prerequisites: SUR 113 and SUR 114 and COM 101 or COM 102 and PSY 101 or SOC 111. Corequisites: SUR 212. Studies advanced surgical procedures in relation to the physiological aspects of surgical intervention including those procedures related to the special senses, genitourinary, reproductive, musculoskeletal and nervous systems. Includes knowledge of the involved anatomy, existing pathology, surgical hazards encountered, the surgical procedure, and a review of perioperative patient care.

SUR 212 Clinical Applications II
9 Credits

Prerequisites: SUR 113 and SUR 114 and COM 101 or COM 102 and PSY 101 or SOC 111. Corequisites: SUR 211. Correlates the basic principles and theories of advanced surgical procedures to clinical performance in affiliating hospitals. Includes knowledge, skills and attitudes necessary for successful implementation of safe patient care in an operating room.

SUR 213 Surgical Procedures III
3 Credits

Prerequisites: SUR 211 and SUR 212. Corequisites: SUR 214. Studies specialized surgical procedures including those related to asthetic and reconstructive surgery, the cardiothoracic and vascular systems. Includes knowledge of the involved anatomy, existing pathology, surgical hazards encountered, the surgical procedure, and a review of perioperative patient care.

SUR 214 Clinical Applications III
7 Credits

Prerequisites: SUR 211 and SUR 212. Corequisites: SUR 213. Correlates principles and theories of specialized surgical procedures to the clinical performance in affiliating hospitals. Includes the knowledge, skills and attitudes necessary for successful implementation of safe patient care in an operating room.

TEC 101 Processes and Materials
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 024, ENG 031 and MAT 044. An introduction to the characteristics, fundamentals and properties of material used in industry. Also introduced are the fundamentals of traditional and non-traditional processes, tools and machines used in industry.

TEC 102 Technical Graphics
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 024, ENG 031 and MAT 044. Provides students with a basic understanding of the detailing skills commonly used by a drafting technician. Areas of study include: lettering, sketching, proper use of equipment, geometric constructions with emphasis on orthographic (multi-view) drawings that are dimensioned and noted to ANSI standards.

TEC 103 Collaborative Team Skills
1 Credit

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 024, ENG 031 and MAT 044. Introduces students to effective communication skills, conflict resolution, team collaboration and decision-making.

TEC 104 Computer Fundamentals for Technology
3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 024, ENG 031 and MAT 050. Provides an introduction to microcomputer hardware, applications and software. Emphasis is placed on computer literacy, the Windows operating system, computer programming and industrial orientation. Commonly used microcomputer applications are surveyed.

TMA 101 Holistic Approach to Massage Therapy
3 Credits

Prerequisites: None. Considers the holistic approach to wellness with discussion including the connection of disease, the autonomic nervous system, and the emotions. Explores the importance of the mind-body connection.

TMA 102 Legal Massage Applications   3 Credits

Prerequisites: None. Presents ethics of medicine and medical practice, as well as legal requirements and implications for allied health professions. Specific emphasis will be placed on the applications of ethics for massage practice situations. Forms, records, and documentation considerations will be addressed. Forms appropriate for use in a massage practice will be generated.

TMA 103 Human Energies   2 Credits

Prerequisites: None. This course helps the student develop an understanding of the human energy system and how this system impacts and reflects the physical, emotional, mental, and spiritual aspects of health. The techniques of several energy therapists will be taught, as well as professional practitioner/client interactions and the importance of self-care. These techniques are useful to aid relaxation, reduce pain, lessen anxiety, and accelerate wound healing, both for oneself and others.

TMA 104 Hand and Foot Reflexes   2 Credits

Prerequisites: None. Teaches the different aspects and points on the foot and hand relating to other areas of the body. Can be integrated into massage practice or can be an independent approach. An introduction to the musculoskeletal, cardiovascular, and nervous systems and their relationship to the zones on the feet are included. Systems disorders, including the sensory and endocrine, are also identified and discussed. The relationships of the five zones of the foot are identified as are the areas of the spine with spinal nerve innovation and intervention.

TMA 120 Massage Technician Training I   3 Credits

Prerequisites: ANP 101. This course will explore in detail the history of massage, professional and legal issues of massage, sanitation, professional touch, and massage equipment and products. Coursework will include the anatomy, physiology and psychology of the body, by systems, and the effects of massage on each. Disease conditions will be discussed in terms of indications and contraindications for massage. Medical terminology will be introduced and used to prepare SOAP note documentation of massages performed. Students will perform circulatory massage techniques, body mechanics, and draping skills for full body relaxation massage.

TMA 122 Massage Financial Management   3 Credits

Prerequisites: None. Provides instruction in massage office financial administration, bookkeeping, materials management and computer applications. Addresses product sales and inventory and bookkeeping for tax preparation. Client tracking methods will be discussed. Retirement planning and self-employment/employment issues will be explored.

TMA 125 Acupressure Theory and Methods   3 Credits

Prerequisites: ANP 101. Introduces the student to information and treatments designed around the approach of Asian medicine including energy systems, meridians, and the five elements theory. The basics of Shiatsu are included.

TMA 126 Jin Shin Do Bodymind Acupressure   2 Credits

Prerequisites: None. This class presents theories and techniques necessary for effective practice of Jin Shin Do Acupressure. Approximately half the time will be in lecture and half in practical hands-on skill. Students will be introduced to the basic theories of Traditional Chinese Medicine which is the basis of all Asian Bodywork. Therapy. Students will learn 57 points in relation to surrounding anatomy. After this class, students will be able to utilize simple acupressure techniques alone or combined with massage sessions. With successful completion of this class, students are eligible to take the Intermediate Jin Shin Do class.

TMA 140 Massage Technician Training II   3 Credits

Prerequisites: ANP 101 and TMA 120. Client consultations, conditions, and treatment plans are discussed. Emotional transference and psychological effects of massage will be addressed. Additional techniques and modalities addressed include deep friction, trigger point release, unwinding, PNF techniques, positional release, and intro to therapeutic exercise. Corporate (chair) massage is introduced. Guidelines for setting up a practice, including compliance with local state regulations, are discussed. Together these courses provide training for entry-level technicians into massage therapy.

TMA 141 Massage Through the Lifespan   3 Credits

Prerequisites: ANP 101 and TMA 120. This advanced course teaches the therapist to work with pregnant mothers to help ease the discomforts and stress that accompany pregnancy. Techniques to help with delivery are also addressed. It also addresses massage of infants and children to enhance bonding, relaxation, and comfort of the infant and child. Massage aspects of geriatric and disabled clients are addressed.

TMA 142 Aromatherapy   3 Credits

Prerequisites: ANP 101 and TMA 120. This advanced course teaches the therapist the integration of essential oils and aromatherapy into massage techniques.

TMA 201 Sports Massage, Injuries and Hydrotherapies   3 Credits

Prerequisites: TMA 120 and TMA 140. Presents a specific application of massage therapy designed to train the therapist in the treatment of athletes. Includes: pre-event and post-event techniques, general maintenance massage, and therapeutic exercises. First aid for sports injuries and the use of hydrotherapies will be explored.

TMA 202 Deep Tissue/Muscle Release   3 Credits

Prerequisites: TMA 120 and TMA 140. Helps practitioners apply deeper techniques in the body therapy releasing chronically held tissue from past trauma, illness, or recent injury. Discusses the use of various treatment modalities. Deep tissue techniques include compression and compression with stroke.

TMA 203 Herbs, Drugs and Massage   3 Credits

Prerequisites: ANP 102, HHS 101 and TMA 120. Covers common medical conditions, the most common medications and the herbal remedies used to supplement healthcare. The most common medications and herbal remedies will be discussed according to body systems with emphasis on classifications, uses, routes of administration, calculations, dosages, interactions, incompatibilities, and side effects. The student will learn how to research medical conditions, medications, and herbal remedies. Also addressed are special precautions, legal aspects, and patient education.

TMA 204 Herbal Remedies   3 Credits

Prerequisites: ANP 102 and HHS 101. Covers the common medical conditions, and the herbal remedies that are used to supplement healthcare. The most common herbal remedies will be discussed, as well as the traditional indications, dose ranges, side effects, and contraindications. The student will gain a more in depth knowledge of herbal remedies being utilized in healthcare today, and know how to research more knowledge on medical conditions and herbal remedies.

TMA 205 Pathology and Massage   3 Credits

Prerequisites: ANP 101, ANP 102 and TMA 120. Presents the basic concepts of diseases, their courses and functional disturbances as they relate to body systems. Includes the precipitating risk factors and appropriate methods of patient education regarding various disease processes and specifications for massage treatment.

TMA 206 Palpation Skills   2 Credits

Prerequisites: ANP 102 and TMA 140. Develops the student's palpation skills in order to enhance the practitioner's ability to evaluate the human body and energy systems. The course teaches a deeper understanding of muscular anatomy which includes craniosacral and fascial material. A substantial portion of this course will consist of exercises to refine palpation skills.

TMA 210 Biomechanics   3 Credits

Prerequisites: ANP 102 and TMA 140. Provides a basic understanding of joint movement and body motion. Addresses muscle action, origin and insertion, muscle synergists, antagonists, and evaluations of forces on each body region. Entry-level biomechanical principles with the structure, function and kinesiology of each body region will be explored.

TMA 220 Advanced Techniques and Hygiene   3 Credits

Prerequisites: TMA 120, TMA 125, TMA 140, TMA 141, and TMA 201 or TMA 202. Advanced training focusing on more techniques, body mechanics, and client management. It also addresses hygiene factors for both the therapist and the client. This course includes thorough client assessment techniques and is designed to expand the therapist into the medical field. The relationship of various illnesses and conditions to massage is discussed.

TMA 221 Business Development   3 Credits

Prerequisites: TMA 102, TMA 122 and TMA 140. Provides a basic understanding of the administrative responsibilities pertinent to massage therapy. Addresses computer usage, marketing, and office skills that will allow students to create, promote, and maintain their own business. Students prepare a business plan and define their goals for massage therapy.

TMA 240 Advanced Sports Massage   3 Credits

Prerequisites: TMA 201. Prepares the sports massage therapist to be a higher qualified, specific qualified therapist with an understanding of professional ethics and a team concept of (physician, trainer, coach, physical therapist, and massage therapist) as one team unit.

VID 106 Video Producing and Planning   3 Credits

Prerequisites: VIS 105. An introduction to producing and planning techniques. Focuses on knowledge and skills necessary to plan for video and audio productions. Develops visual flow and continuity, and applies principles of visual design to video storyboards.

VID 110 Production Editing I   3 Credits

Prerequisites: VIS 105. An introduction to non-linear, computer-based editing techniques and post-production skills. Focuses on knowledge and skills necessary to edit video and audio productions. Develops visual flow and continuity, and applies principles of visual design to video editing.

VID 111 Studio and Field Production I   3 Credits

Prerequisites: VIS 105. Hands-on training in basic technical skills. Students will be provided with an overview of the video production process, and help the student learn the terms and concepts used in the industry. This understanding will serve as the foundation for subsequent courses in video technology.

VID 113 Introduction to Film Appreciation   3 Credits

Prerequisites: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 and ENG 032. An introduction to understanding and appreciating movie and film. Students will analyze movies for narrative and story telling properties, cinematography, acting, editing and sound design.

VID 202 Studio and Field Production II   3 Credits

Prerequisites: VID 110 and VID 111. Focuses on knowledge and skills necessary to create and execute good video and audio productions. This course is designed to provide the student with a more complete view of the process of videography techniques and the video production process. Student will use the terminology and concepts used in the industry.

VID 203 Studio and Field Production III   3 Credits

Prerequisites: COM 101 or COM 102, ENG 111 and VID 202. Advanced studio and field production skills. Focuses on writing, producing and shooting projects both in the studio and on-location. Projects include remote video "shoot" planning, location scouting and site preparation, and hands-on studio practicing. Focuses on knowledge and skills necessary to create and execute good video and audio productions.

VID 204 Studio and Field Production IV   3 Credits

Prerequisites: VID 203. Masters studio and field production skills with a focus on production, programming and project management both in the studio and on-location.

VIS 101 Fundamentals of Design   3 Credits

Prerequisites: None. Introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving. Provides design experiences in applying design theories and concepts, and creative problem solving.

VIS 102 Fundamentals of Imaging   3 Credits

Prerequisites: None. Introduces students to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices. Explores composition and fosters creativity.

VIS 103 Interactive Media I   3 Credits

Prerequisites: VIS 101, VIS 102 and VIS 115. Explores various software programs involved in creating multi-media presentations, digital movies, digital animation, introductory scripting through a series of short projects. Explore the role of interactive in contemporary marketing and design.

VIS 105 Video and Sound
3 Credits

Prerequisites: None. An introduction to the field of video technology. Students will learn the basics of planning, shooting, editing and post-producing video and sound. Projects include exercises in technical and creative skills application, equipment usage and production techniques.

VIS 110 Web Design I
3 Credits

Prerequisites: VIS 101 and VIS 115. An introductory level course, which focuses on the tools, strategies, and techniques for web site design, architecture, navigation, language and production. Explores the methods for creating successful web sites from concept to implementation. Examines the process of integrating text, graphics, audio, and video for effective communication of information.

VIS 115 Introduction to Computer Graphics
3 Credits

Prerequisites: None. A fundamental course which introduces students to the computer's use in visual communication. The beginning focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive, and page layout software.

VIS 200 2-D Animation
3 Credits

Prerequisites: ART 116. Provides students with a solid introduction to digital 2D Animation. Primary emphasis will be placed on the various tools and techniques needed to create 2D movies. Strong emphasis will also be placed on effective information delivery as well as cutting edge design, both for the web and other media.

VIS 201 Electronic Imaging
3 Credits

Prerequisites: VIS 101 and VIS 102. Examines the area of raster image editing and current electronic darkroom software packages. Experience with the digital imaging environment includes calibrating scanning processes, digital camera input, manipulating images in black and white and color, working with retouching for advertising, illustrating text, and working with various output devices. Digital color spaces as they relate to various output devices will be covered. Calibration for 4-color separations and pre-press procedures will be discussed as well as preparing images properly for the web.

VIS 205 Business Practices for Visual Artists
3 Credits

Prerequisites: Program Advisor Approval and successful completion of 24 program credit hours. Examines legal and business issues affecting the professional visual artist.

VIS 206 Interdisciplinary Studies
3 Credits

Prerequisites: ART 217 or VIS 210 or PHO 109. Offers students the opportunity to complete selected projects while working in a team environment with students of other disciplines. Simulates situations found in industry.

VIS 207 Portfolio Preparation
3 Credits

Prerequisites: Program Advisor approval. Provides advanced facilitation focusing on the students' final preparation for the workforce. Requires an evaluation and portfolio development plan to be approved by the instructor. Finalizes project work demonstrating acquired knowledge and skills, along with resume and cover letter, for presentation to prospective employers. Also provides students with the opportunity to use one credit for field of study.

VIS 209 3D Rendering and Animation I
3 Credits

Prerequisites: VIS 201. Examines the virtual world of 3D and how it can be applied as an illustration and animation element in multimedia. Students will explore navigation, modeling, rendering, animation, and camera and lighting techniques.

VIS 210 Web Design II
3 Credits

Prerequisites: VIS 110 and VIS 201. Further focuses on the tools, strategies, and techniques for web site design, architecture, navigation, language and production. Explores more in depth the methods for creating successful web sites from concept to implementation. Examines the process of integrating text, graphics, audio, and video for effective communication of information.

VIS 211 Interactive Media II
3 Credits

Prerequisites: VIS 103 and VIS 201. Further explores various software programs involved in creating; multi-media presentations, digital movies, digital animation and scripting.

VIS 212 3-D Rendering and Animation II   3 Credits

Prerequisites: VIS 209. Further examines the virtual world of 3D and how it can be applied as an illustration and animation element in multimedia. Students will expand on navigation, modeling, rendering, animation, and camera and lighting techniques.

VIS 213 Advanced Electronic Imaging   3 Credits

Prerequisites: VIS 201. The creation of the electronic image from digital imaging and scanning devices is further investigated. Advanced Adobe Photoshop illustration techniques are taught. Other software such as Adobe Dimensions and Fractal Painter are introduced. Students will work with both raster and vector software to create final output. An emphasis in final output is given to portfolio projects that are in the print, web, and film media.

WLD 100 Welding Processes   3 Credits

Prerequisites: None. Provides general study of oxy-fuel, shielded metal arc, gas tungsten arc, gas metal arc, submerged arc, plasma arc, resistance, flash and upset, friction, electron bean, and laser welding processes. Covers equipment, techniques, electrodes, fuel gases and/or shielding gases, weld joint design, advantages and limitations, process applications, process variables and operational costs.

WLD 101 Gas Welding 1   3 Credits

Prerequisites: None. Introduces basic oxy-fuel brazing, soldering and braze welding. Involves detailed study of the techniques of making a strong braze or solder joint. Demonstrate proper technique for making a good braze weld joint on mild steel and cast iron. Provides additional background essential to performing maintenance and repair welds in industry.

WLD 103 ARC Welding 1   3 Credits

Prerequisites: None. Covers the welding of ferrous metals and alloys utilizing metallic manual arc welding methods. Includes procedures in joint design using "T" joint, lap joint, and butt joint designs. Covers single pass and multi-pass techniques. Emphasizes safety hazards and safe practices in arc welding.

WLD 105 Welding Equipment and Electrical Maintenance   3 Credits

Prerequisites: None. Focuses on the design of oxy-fuel welding and cutting equipment and electric arc welding and cutting equipment. Enables students to perform troubleshooting on the equipment and apply proper maintenance. Examines relationships of voltage, current, and resistance on electrical circuits with emphasis on the production of heat from the flow of electric current through resistance.

WLD 107 Welding Troubleshooting   3 Credits

Prerequisites: WLD 101 or WLD 109. Covers evaluation of weldments, welding procedures and tolerances, joint design and alignment. Also covers weld defects caused by improper equipment settings, equipment failure, base metal, improper filler metal, and improper shielding of welds. Emphasis will be placed on weldability of metals.

WLD 108 Shielded Metal Arc Welding I   3 Credits

Prerequisites: None. Provides students with knowledge of shielded metal arc welding operations and equipment. Provides extensive practice time to produce the skills to make satisfactory welds with this process. Emphasizes safety hazards and safety practices in arc welding.

WLD 109 Oxy-Fuel Gas Welding and Cutting   3 Credits

Prerequisites: None. Offers basic instruction in oxy-fuel welding with emphasis on welding techniques in flat, horizontal, vertical, and overhead positions. Includes brazing, soldering and flame cutting. Focuses on safety hazards and safe practices in oxy-fuel welding and cutting.

WLD 115 Shop Practices 1   1 Credit

Prerequisites: None. Provides use of a shop to obtain basic welding skills using various types of welding processes.

### WLD 116 Shop Practices II   1 Credit

Prerequisites: WLD 115. Continues open use of shop to practice various types of welding to improve operator skills to a higher level.

WLD 117 Shop Practices III   1 Credit

Prerequisites: WLD 116. Continues open use of shop to practice various types of welding to improve operator skills to an advanced level.

WLD 201 Special Welding Processes   3 Credits

Prerequisites: Advisor Approval. This is an advanced welding course that involves theory and hands-on practice with various welding processes such as FCAW, PAW, SAW, GTA and other welding processes. Presents welding processes with emphasis on use and orientation of the equipment.

WLD 203 Pipe Welding I   3 Credits

Prerequisites: WLD 108 and WLD 206. This course provides extensive practice in the preparation and welding of pipe in the 2G and 5G position, and information of preparation, methods of welding, and electrode and filler wires used.

WLD 204 Pipe Welding II   3 Credits

Prerequisites: WLD 108, WLD 206, WLD 207 and WLD 208. Provides extensive training in the preparation and welding of pipe in the 5G and 6G position. Includes information on preparation, method of welding, and electrodes and filler rods used.

WLD 205 Welding Codes, Specifications and Estimating   3 Credits

Prerequisites: Advisor Approval. Provides students with different types of welding codes and testing operations. Covers procedures, specifications and information about filler materials, positions, post-heat and preheat treatment, backing strips, preparations of parent metals, cleaning and defects. Introduces students to various welding processes used in the welding industry. Prepares students with a background in which will assist them in taking the American Welding Society Certified Welding Inspector exam. The AWS, ASME and other codes are discussed.

WLD 206 Shielded Metal Arc Welding II   3 Credits

Prerequisites: None. Covers SMAW welding equipment and products used to produce groove type butt and fillet welds. Provides extensive practice to develop the skills to achieve satisfactory welds of this type. Safety hazards and safe practices in arc welding are emphasized.

WLD 207 Gas Metal Arc (MIG) Welding   3 Credits

Prerequisites: None. Considers various gas metal welding (GMAW) processes including microwire, flux-core, inner shield, and submerged arc with emphasis on metal inert gas welding. Techniques of welding in all positions on various thicknesses metal.

WLD 208 Gas Tungsten Arc (TIG) Welding   3 Credits

Prerequisites: IDS 102. Provides students with through knowledge of the gas tungsten arc welding process. Includes detailed study of the techniques of making welds in all positions using the GTAW applications. Lectures and discussion provide additional background information essential to a qualified GTAW welder.

WLD 209 Welding Certification   3 Credits

Prerequisites: Advisor Approval. Prepares the student for certification in shielded metal arc, GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and other welding processes through study of the welding procedures and standards established by agencies such as the American Welding Society and the American Society of Mechanical Engineers.

WLD 210 Welding Fabrication I   3 Credits

Prerequisites: WLD 108, WLD 109, and WLD 207. Provides for continued practice in hands-on fabrication of welded products. Include basic equipment used in fabrication.

WLD 211 Welding Fabrication II   3 Credits

Prerequisites: WLD 108, WLD 109, and WLD 207. Provides opportunities for practice in hands-on fabrication of welded products. Include basic equipment used in fabrication.
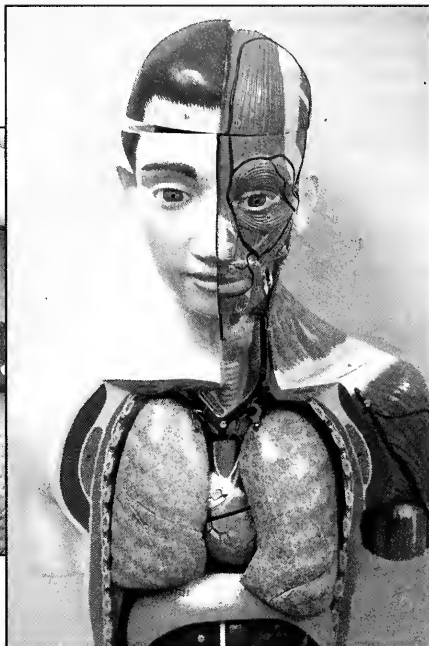
Program Availability

Ivy Tech Community College offers many educational programs. Not all programs are offered at all campuses, however, and the degrees available within a program may vary from campus to campus. Use this section to find out what programs and degrees are available at the campus that interests you.

Program Availability

Anderson Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Early Childhood Education
Electronics and Computer Technology
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Business Administration
Design Technology
Electronics and Computer Technology
General Studies
Human Services
Nursing
Paralegal Studies
Associate of Arts
Liberal Arts

Bloomington Campus

Associate of Applied Science
Accounting
Biotechnology
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
Manufacturing and Industrial Technology
Office Administration
Paralegal Studies

Technical Certificate
Early Childhood Education
Manufacturing and Industrial Technology
Office Administration
Practical Nursing

Associate of Science
Biotechnology
Business Administration
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
General Studies
Liberal Arts
Nursing
Paralegal Studies
Paramedic Science
Radiation Therapy
Respiratory Care
Associate of Arts
Liberal Arts

Columbus Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies (via Distance Education)
Paramedic Science
Surgical Technology
Visual Communications

Technical Certificate
Accounting
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Electronics and Computer Technology
General Studies
Liberal Arts
Nursing
Paralegal Studies (via Distance Education)
Paramedic Science
Radiologic Technology
Associate of Arts
Liberal Arts

East Chicago Campus

Associate of Applied Science
Accounting
Automotive Technology
Computer Information Systems
Construction Technology
Design Technology
Early Childhood Education
(via Distance Education)
Hospitality Administration
Manufacturing and Industrial Technology
Mortuary Science
Office Administration

Technical Certificate
Accounting
Automotive Technology
Business Administration
Computer Infomation Systems
Construction Technology
Design Technology
Hospitality Administration
Manufacturing and Industrial Technology
Office Administration

Associate of Science
Computer Information Systems
Design Technology
General Studies
Liberal Arts
Associate of Arts
Liberal Arts

Elkhart Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Early Childhood Education
(via distance education)
Electronics and Computer Technology
Human Services (via distance education)
Medical Assisting
Office Administration
Paralegal Studies (via distance education)

Technical Certificate
Business Administration
Computer Information Systems
Early Childhood Education
(via distance education)
Medical Assisting
Practical Nursing

Associate of Science
Accounting
Business Administration
Computer Information Systems
(via distance education)
Design Technology
Electronics and Computer Technology
General Studies
Human Services (via distance education)
Liberal Arts
Paralegal Studies (via distance education)
Associate of Arts
Liberal Arts

Evansville Campus

Associate of Applied Science
Accounting
Automotive Technology
Biotechnology
Building Construction Management
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
Environmental Design
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paramedic Science
Surgical Technology
Visual Communications

Technical Certificate
Accounting
Automotive Technology
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Building Construction Management
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Nursing
Visual Communications
Associate of Arts
Liberal Arts

Fort Wayne Campus

Associate of Applied Science
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Criminal Justice
Design Technology
Early Childhood Education
Hospitality Administration
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paramedic Science
Public Safety
Therapeutic Massage

Technical Certificate
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Design Technology
Early Childhood Education
Hospitality Administration
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing
Public Safety

Associate of Science
Business Administration
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Nursing
Paralegal Studies
Paramedic Science
Physical Therapist Assistant
Respiratory Care
Associate of Arts
Liberal Arts

Gary Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Early Childhood Education
(via distance education)
Electronics and Computer Technology
Hospitality Administration
Manufacturing and Industrial Technology
Office Administration
Public Safety

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Early Childhood Education
Hospitality Administration
Manufacturing and Industrial Technology
Office Administration
Practical Nursing
Public Safety

Associate of Science
Business Administration
Computer Information Systems
General Studies
Liberal Arts
Nursing
Physical Therapist Assistant
Associate of Arts
Liberal Arts

Indianapolis Campus

Associate of Applied Science
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Electronics and Computer Technology
Hospitality Administration
Human Services
Machine Tool Technology
Manufacturing and Industrial Technology
Medical Assisting
Mortuary Science
Office Administration
Paralegal Studies
Public Safety
Surgical Technology
Visual Communications

Technical Certificate
Automotive Technology
Early Childhood Education
Design Technology
Hospitality Administration
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing
Public Safety

Associate of Science
Accounting
Automotive Technology
Biotechnology
Business Administration
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Logistics Management
Nursing
Office Administration
Paramedic Science
Radiologic Technology
Respiratory Care
Visual Communications
Associate of Arts
Liberal Arts

Kokomo Campus

Associate of Applied Science
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Criminal Justice
Design Technology
Early Childhood Education
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paramedic Science
Visual Communications

Technical Certificate
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Dental Assistant
Design Technology
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Accounting
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
General Studies
Human Services
Liberal Arts
Nursing
Paramedic Science
Professional Communication
Surgical Technology
Associate of Arts
Liberal Arts

Lafayette Campus

Associate of Applied Science
Accounting
Automotive Technology
Biotechnology
Business Administration
Chemical Technology
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies
Surgical Technology

Technical Certificate
Automotive Technology
Dental Assistant
Design Technology
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Automotive Technology
Biotechnology
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
General Studies
Human Services (via distance education)
Liberal Arts
Nursing
Paralegal Studies
Respiratory Care
Associate of Arts
Liberal Arts

Lawrenceburg Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Early Childhood Education
Electronics and Computer Technology
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies

Technical Certificate
Accounting
Business Administration
Early Childhood Education
Medical Assisting
Office Administration

Associate of Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Nursing
Paralegal Studies
Associate of Arts
Liberal Arts

Logansport Campus

Associate of Applied Science
Business Administration
Computer Information Systems
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Manufacturing and Industrial Technology
Office Administration
Practical Nursing

Associate of Science
Business Administration
Computer Information Systems
General Studies
Liberal Arts
Office Administration
Associate of Arts
Liberal Arts

Madison Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Early Childhood Education
Electronics and Computer Technology
Human Services
Manufacturing and Industrial Technology
Office Administration
Paralegal Studies

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Early Childhood Education
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Business Administration
Computer Information Systems
Design Technology
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Nursing
Paralegal Studies
Associate of Arts
Liberal Arts

Marion Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Design Technology
Early Childhood Education
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies
Radiologic Technology

Technical Certificate
Business Administration
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Business Administration
Design Technology
General Studies
Human Services
Liberal Arts
Nursing
Paralegal Studies
Radiologic Technology
Associate of Arts
Liberal Arts

Michigan City Campus

Associate of Applied Science
Accounting
Business Administration
Early Childhood Education (via Distance Education)
Hospitality Administration
Medical Assisting
Surgical Technology

Technical Certificate
Accounting
Business Administration
Medical Assisting

Associate of Science
Business Administration
General Studies
Liberal Arts
Respiratory Care
Associate of Arts
Liberal Arts

Muncie Campus

Associate of Applied Science
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
Hospitality Administration
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies
Surgical Technology

Technical Certificate
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Early Childhood Education
Hospitality Administration
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Business Administration
Computer Information Systems
Criminal Justice
Early Childhood Education
Design Technology
Electronics and Computer Technology
General Studies
Hospitality Administration
Human Services
Liberal Arts
Nursing
Paralegal Studies
Physical Therapist Assistant
Associate of Arts
Liberal Arts

Richmond Campus

Associate of Applied Science
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Construction Technology
Early Childhood Education
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Paralegal Studies

Technical Certificate
Accounting
Computer Information Systems
Construction Technology
Office Administration
Practical Nursing

Associate of Science
Business Administration
Computer Information Systems
Early Childhood Education
General Studies
Liberal Arts
Nursing
Associate of Arts
Liberal Arts

Sellersburg Campus

Associate of Applied Science
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Design Technology
Early Childhood Education
Electronics and Computer Technology
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Visual Communications

Technical Certificate
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Design Technology
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Business Administration
Design Technology
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Nursing
Respiratory Care
Associate of Arts
Liberal Arts

South Bend Campus

Associate of Applied Science
Accounting
Automotive Technology
Biotechnology
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Environmental Design
Electronics and Computer Technology
Hospitality Administration
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Medical Laboratory Technology
Office Administration (via Distance Education)
Paralegal Studies
Visual Communications

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing

Associate of Science
Biotechnology
Business Administration
Computer Information Systems (via Distance Education)
Criminal Justice (via Distance Education)
Design Technology
Electronics and Computer Technology
General Studies
Human Services (via Distance Education)
Liberal Studies
Nursing
Paralegal Studies (via Distance Education)
Paramedic Science

Associate of Arts
Liberal Arts

Associate of Fine Arts
Visual Communications

Terre Haute Campus

Associate of Applied Science
Accounting
Automotive Technology
Aviation Technology
Biotechnology
Business Administration
Chemical Technology
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
Human Services
Manufacturing and Industrial Technology
Medical Assisting
Medical Laboratory Technology
Office Administration
Paramedic Science
Public Safety
Surgical Technology
Visual Communications

Technical Certificate
Accounting
Automotive Technology
Business Administration
Computer Information Systems
Early Childhood Education
Manufacturing and Industrial Technology
Medical Assisting
Office Administration
Practical Nursing
Public Safety

Associate of Science
Automotive Technology
Biotechnology
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education
Electronics and Computer Technology
General Studies
Human Services
Liberal Arts
Manufacturing and Industrial Technology
Nursing
Radiologic Technology
Respiratory Care

Associate of Arts
Liberal Arts

Valparaiso Campus

Associate of Applied Science
Accounting
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Early Childhood Education (via Distance Education)
Electronics and Computer Technology
Manufacturing and Industrial Technology
Office Administration
Paralegal Studies

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Design Technology
Manufacturing and Industrial Technology
Office Administration
Practical Nursing

Associate of Science
Business Administration
Computer Information Systems
Criminal Justice
Design Technology
Electronics and Computer Technology
General Studies
Liberal Arts
Nursing
Paralegal Studies
Associate of Arts
Liberal Arts

Warsaw Campus

Associate of Applied Science
Computer Information Systems (via Distance Education)
Early Childhood Education (via Distance Education)
Human Services (via Distance Education)
Office Administration (via Distance Education)
Paralegal Studies (via Distance Education)

Technical Certificate
Accounting
Business Administration
Computer Information Systems
Early Childhood Education (via Distance Education)
Office Administration
(via Distance Education)

Associate of Science
Computer Information Services (via Distance Education)
General Studies
Human Services (via Distance Education)
Liberal Arts
Paralegal Studies (via Distance Education)
Associate of Arts
Liberal Arts

Faculty & Staff

REGION 1
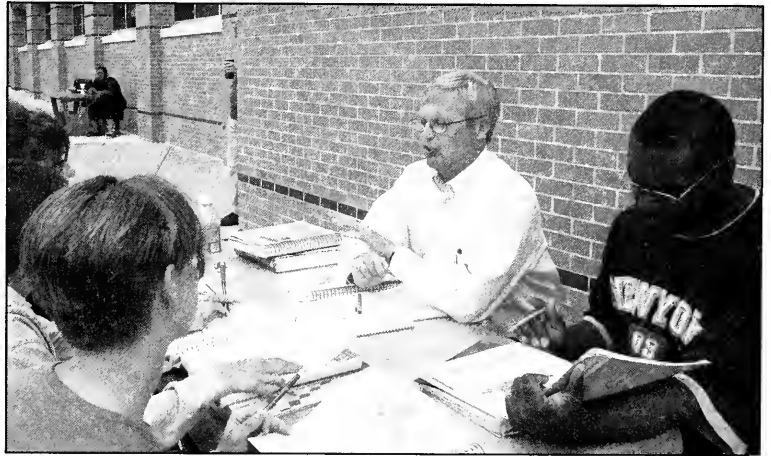
VALTIERRA, JOSE GUADALUPE, Chancellor

BA, Purdue University; MS, JD, Indiana University

HORN, BRIAN, Executive Director of Administration

BS, MBA, Indiana University

COMER, NORMAN, Executive Dean, East Chicago

BS, Northwestern University; MS, Indiana University; EdD, Loyola University

HAKLIN, DELORES, Executive Dean, Valparaiso

BA, Simpson College; MS, St. Francis College; PhD, Indiana State University

HUDDLESTON, JERRY L., Executive Dean, Michigan City

BS, MA, Ball State University

HALIK, DEBORAH A., Dean of Academic Affairs

BS, Calumet College of Saint Joseph; MS, Purdue University; PhD, Indiana State University

MALONE, MARC K., Dean of Student Affairs, Gary

BS, Morehouse College; MS, Purdue University

POLLARD, LOUISE F., Assistant Dean of Academic Affairs, Gary

BS, Wayne State University; MRC, Arkansas State University

JOHNSON, SHEILA, Assistant Dean of Academic Affairs, Michigan City

BA, Central Michigan University; MEd, Indiana Wesleyan University

ROSENBLUM, KENNETH, Assistant Dean of Academic Affairs, Valparaiso

BS, University of Wisconsin; JD, DePaul University

WOROSZ, MICHAEL, Assistant Dean of Academic Affairs, East Chicago

MS, Indiana State University

FACULTY

ABEYTA, ELIDA, Instructor in Hospitality, Program Chair, East Chicago

AAA, Ivy Tech State College

ADAMS, ROGER L., Associate Professor in General Education, East Chicago

BA, MA, Western Michigan University

ADAMSKI, JOHN, Assistant Professor in General Education, Gary

BS, Indiana State; MS, Purdue University

ALSPAUGH, DEBORAH M., Associate Professor in Academic Skills Advancement, Program Chair, Gary

BS, MPA, Indiana University

ARMOR, VANESSA, Instructor in Medical Assisting, Michigan City

AS, Indiana University

BANKS, MARY A., Associate Professor in Office Administration, Program Chair, East Chicago

BS, Alcorn A & M; MS, Indiana University

BERNAL, JOANNE, Instructor in Hospitality, Program Chair, Gary

BS, Calumet College

BLASZKIEWICZ, HOLLY, Assistant Professor in Computer Information Systems, Program Chair, Gary

AA, MS, Purdue University; BA, Calumet College of St. Joseph

BOWMAN, LEROY E., Associate Professor in Accounting, Program Chair, Valparaiso

AS, Valparaiso Tech; BS, Valparaiso University; MBA, Indiana Wesleyan University

BREEN, JANET, Assistant Professor in Accounting, Program Chair, Valparaiso

MS, DePaul University

BRUCE, PAUL R., Assistant Professor in Computer Information Systems, Michigan City

AAS, BS, Purdue University, MBA, Indiana University

CANNON, MICHELLE, Assistant Professor in Accounting, Program Chair, Gary

MBA, Indiana University

COPE, CHARLES T., Instructor in Construction, East Chicago

AAS, Ivy Tech State College; Certified in Steel Framing, American Iron and Steel Institute

DAVIES, SUSAN, Assistant Professor in Early Childhood Education, Program Chair, Gary

MS, Purdue University

DELBY, RICHARD, Instructor in Hospitality, Gary

DENEAL PATRICIA D., Associate Professor in Practical Nursing, Gary

Diploma, St. Mary Mercy; BS, St. Francis; MS, University of Notre Dame

DOUGLAS, JOYCE, Assistant Professor in Nursing, Gary

MS, DePaul University

DOWNS, DALE D., Associate Professor in General Education, Program Chair, Michigan City

BS, Loyola University Chicago; MS, PhD, The University of Illinois at Chicago

DYE, JAMES, Assistant Professor in Physical Therapist Assistant, Program Chair, Gary

BS, University of Illinois; PhD, Cheighton University Medical Center

ERIKS, MARSHA, Associate Professor in Surgical Technology, Michigan City

AAS, Ivy Tech State College

EXCELL, DONNA J., Associate Professor in Office Administration, Program Chair, Michigan City

BA, MS, Purdue University

FABIAN, ALFRED E., Professor in Business Administration, Program Chair, Gary

BA, University of Georgia; MBA, Roosevelt University

FEUERBACH, ELIZABETH Z., Associate Professor in Computer Information Systems, Program Chair, East Chicago

BS, Calumet College of St. Joseph; MS, Purdue University

FORSYTHE, SYBIL, Associate Professor in Practical Nursing, Program Chair, Valparaiso

BS, Indiana University; EdD, Nova Southern University

GATEWOOD, ERIC L., Instructor in Physical Therapist Assistant, Gary

BS, Indiana University

GIVEN, JOAN G., Assistant Professor in Practical Nursing, Valparaiso

Diploma, Suburban Hospital; BS, St. Francis; MS, Valparaiso University

GREAVES, JOHN, Instructor in Manufacturing and Industrial Technology, Program Chair

BS, Indiana University; MS, California Coast University

GUADIANA, JUAN P., Assistant Professor in Automotive Technology, Program Chair, East Chicago

ASE; AAS, Vincennes University; BS, Indiana State University

GUTIERREZ, LARRY, Instructor in Tech Prep and Construction Technology, East Chicago

GYURKO, CHARLENE, Associate Professor in Health Science, Valparaiso

BS, Purdue University; MPA, Indiana University

HARDER, DIANE, Assistant Professor in Practical Nursing, Valparaiso

MS, Indiana University; EdD, Nova Southern University

HARRIS, DANITA S., Assistant Professor in Respiratory Care, Michigan City

BS, Cabrini College; MPA, Indiana University

HARVEY, ETHEL, Associate Professor in Computer Information Systems, Gary

BS, Purdue University; MBA, Indiana University

HENDERSON, CREOLA, Instructor in Practical Nursing, Gary

BSN, MPA, Indiana University

HERNANDEZ, CARLOS, Assistant Professor in General Education, Program Chair, East Chicago

MD, Industrial University of Santander

HOLCEY, JANICE, Associate Professor in Academic Skills Advancement, East Chicago

BS, MS, Indiana University

HOLLINGSWORTH, GENETHA S., Associate Professor in Academic Skills Advancement, Program Chair, Gary

BS, Fayetteville State University

HORNE, SAUNDRA S., Associate Professor in Practical Nursing, Program Chair, Gary

AAS, Purdue University; BS, MS, College of St. Francis

IDOWU, TOLULOPE, Instructor in General Education, Program Chair, Valparaiso

MA, University of Ibadan

IGBOEGWA, EJIKE, Professor in Design Technology, East Chicago, Program Chair

BS, MS, Eastern Illinois University; PhD, University of Illinois

INMAN, BARBARA, Instructor in Practical Nursing, Valparaiso

MSN, Valparaiso University

JEFTICH, DANNY P., Professor in Academic Skills Advancement and General Education, Program Chair, Valparaiso

BA, MS, College of St. Francis

JENKINS, STEPHEN, Instructor in Criminal Justice, Program Chair, Valparaiso

MA, Valparaiso University

JOHNSON, SHEILA, Associate Professor in General Education, Program Chair, Michigan City

BA, Central Michigan University; MEd, Indiana Wesleyan University

JONIEC, JOSEPH, Assistant Professor in Accounting, Program Chair, East Chicago

BA, MEd, Loyola University

JOSESKI, TONI, Instructor in General Education, Valparaiso

BS, MS, Purdue University

JORDAN, PARNELL, Instructor in Manufacturing and Industrial Technology, East Chicago

ASME, AWS Welding Certification

KANOLIS, CHRIS F., Associate Professor in Business Administration, Program Chair, East Chicago

BA, MBA, Indiana University

KLEIN, RAYMONO G., Associate Professor in Electronics, Program Chair, Valparaiso

BS, Illinois Institute of Technology

KROL, DONNA, Instructor in Practical Nursing, Valparaiso

BS, College of Saint Teresa

LAYHEW, SUSAN J., Associate Professor in Respiratory Therapy, Program Chair, Michigan City

BS, Calumet College of St. Joseph; MA National-Louis University

LOVE, NANCY L., Assistant Professor in Practical Nursing, Gary

AAS, Indiana University; BS, Purdue University

LYNCH-JACKSON, TRINA, Assistant Professor in Business, Gary

BS, Saint Joseph College; MPA, Indiana University

MACKOVYAK, ROBERT, Instructor in Construction Technology, Gary

MAS, JOSE, Instructor in General Education, Gary

DVM, National University of Northeast Argentina

McCOY, JOHN, Assistant Professor in Manufacturing & Manufacturing and Industrial Technology, Progran Chair, Gary

BS, University of the State of New York

MERRILL, DAVID, Associate Professor in General Education, Program Chair, Michigan City

BS, Ramapo College of New Jersey; DC, Palmer College of Chiropractic

MILLER, HARRY B., Assistant Professor in Manufacturing and Industrial Technology, Valparaiso

ASME, AWS Welding Certification

MOONEY, PHYLLIS, Assistant Professor in Nursing, Program Chair, Valparaiso

BSN, MSN, Valparaiso University

MOORE, SANDRA, Associate Professor in Business Administration, Program Chair, Valparaiso

BA, Calumet College of St. Joseph; MA, Purdue University

MORIKIS, ETHEL, Assistant Professor in Medical Assisting, Program Chair, Michigan City

AS, BS, Indiana University

MURRELL, JIMMIE L., Associate Professor in Automotive Technology, East Chicago

BA, Chicago State University; Certified – The National Institute of Automotive Service Excellence

NEARY, JAMES H., Associate Professor in General Education, Program Chair, Gary

BA, University of Notre Dame; MA, Purdue University

OBAJULUWA, VICTOR A., Associate Professor in Physical Therapist Assistant, Gary

BA, MEd, PhD, University of Ibadan

O'DROBINAK, REGINA, Assistant Professor in Nursing, Gary

MSN, Indiana University

OLSON, KATHY G., Assistant Professor in Business Administration, Program Chair, Valparaiso

BA, Tri-State College, MS Ed, Purdue West Lafayette

PLANK, LORA Y., Assistant Professor in Surgical Technology, Program Chair, Michigan City

AAS, Purdue University; Certified Surgical Technologist

POLLARD, LOUISE F., Associate Professor in Academic Skills Advancement, Department Chair, Gary

BS, Wayne State University; MRC, Arkansas State University

RAMIREZ, EVLAYNE, Instructor in Nursing, Valparaiso

BSN, Northern Illinois University; MSN, University of Illinois

REMAR, JOHN M., Full Professor in Business Administration, Program Chair, East Chicago

BGS, Roosevelt University; MS, Chicago State University

RIDDELL, DARRELL, Instructor in Computer Information Systems, Gary

BS, Indiana State University

RIDDLE, JARED M., Assistant Professor in Academic Skills Advancement, Program Chair, East Chicago

BA, Indiana University

ROBERTS, TAMARA, Instructor in Office Administration, Program Chair, Gary

BS, Purdue University

ROSENBLUM, KENNETH, Instructor in Paralegal, Division Chair, Valparaiso

BS, University of Wisconsin; JD, DePaul University

ROSILLO, LAURA, Associate Professor in General Education, Program Chair, East Chicago

BA, Indiana University; MD, IU School of Medicine, Indianapolis

RUE, GINA M., Assistant Professor in Computer Information Systems, Gary

AAS, Ivy Tech State College; BS, Calumet College of St. Joseph

SARGENT, MARY K., Assistant Professor in General Education, Valparaiso

BS, MS, University of Alabama

SCHOENFELDER, JOHN H., Professor in Business Administration, Program Chair, Michigan City

AAS, Moraine Valley College; BA, MA, Governors State University

SCHOOLEY, ANGELA, Instructor in Practical Nursing, Valparaiso

BS, MS, Valparaiso University

Scott, Sharon T., Instructor in Medical Assisting, Gary

Certified Laboratory Assistant (ASCP), Indiana University

Siewert, John A., Assistant Professor in Automotive Technology, East Chicago

Dupont Certified

Sikoski, Aco, Associate Professor in Design Technology, Program Chair, Valparaiso

BA, "Kiril I Metodij" Skopje Macedonia; MS, Purdue University

Smith-Estes, Gail, Associate Professor in Nursing, Program Chair, Gary

BS, MS, Purdue University

Soria, Richard, Assistant Professor in Mortuary Science, Program Chair, East Chicago

BS, Calumet College of St. Joseph

Stalevska, Liljana, Assistant Professor in General Education, Program Chair, Valparaiso

MS, Purdue University

Stipp, Deborah, Assistant Professor in General Education, Program Chair, Gary

BA, Purdue University; MA, Valparaiso University

Stowers, Beverly A., Associate Professor in Office Administration, Program Chair, Valparaiso

BA, Cedarville College; MBA, Indiana Wesleyan University

Wheeler-Andrews, Shari L., Assistant Professor in Early Childhood Education, Gary

BS, MS, Indiana State University

Williams, Gomer, Assistant Professor in Manufacturing and Industrial Technology, Program Chair, Valparaiso

AAS, Ivy Tech State College; BS California Coast University

Worosz, Michael, Assistant Professor in Applied Science & Technology, Division Chair, Gary

MS, Indiana State University

Zych, Terrence, Instructor in Hospitality, Program Chair, Michigan City

AS, Ivy Tech State College

REGION 2

Calvin, Virginia, Chancellor

BS, Alcorn State University; MA, New Mexico Highlands University; EdD, Texas Women's University

Batzer, Lyn, Dean of Academic Affairs

BS, Northern Illinois University; MS, Indiana University-South Bend; EdD, Western Michigan University

Gerstbauer, Ronald, Campus Dean, Elkhart

AA, Holy Cross Junior College; BA, Indiana University; MA, University of Alabama

Jovanovic, James, Campus Dean, Warsaw

BS, Indiana University; MS, Indiana University

Freymuth, Tracy, Dean of Student Affairs, South Bend

BS, University of Notre Dame

FACULTY

Adamczyk, Richard, Assistant Professor in Manufacturing & Industrial Technology, South Bend

BS, University of Krakow; Technical Mechanic and Teacher Degree, Pedagogical Technical School, Kielce (Poland)

Beaven, Thomas, Assistant Professor in General Education, Program Chair, South Bend

BS, University of Southern Indiana; MS, University of Notre Dame

Boembeke, Angela, Associate Professor in Visual Communications, Program Chair, South Bend

BA, Anderson University; MBA, Indiana Wesleyan University

Borowski, George J., Assistant Professor in Manufacturing & Industrial Technology, Department Chair, South Bend

AAS, Ivy Tech State College; BAS, Siena Heights College

Brinkruff, David, Assistant Professor in Electronics & Computer Technology, Division Chair, South Bend

BS, Purdue University, MS, Purdue University

Burtch, Gale R., Assistant Professor in Academic Skills Advancement, Elkhart

BA, Indiana University-Bloomington; MS, Indiana University-South Bend

Campbell, Melody, Instructor in Associate Degree Nursing

BSN, Bethel College; MSN, Ball State University

Carrigan, Timothy, Instructor in Hospitality Administration, South Bend

Comeau, John, Associate Professor in General Education, South Bend

BA, University of Notre Dame; MS, Indiana University

Coty, Mary, Assistant Professor in Associate Degree Nursing, South Bend

BSN, Ball State University; MSN, Valparaiso University

Counts, Dena, Instructor in General Education, South Bend

BA, Abilene Christian University; MA, Abilene Christian University

Curry, Deborah, Assistant Professor in Practical Nursing, South Bend

BSN, Pittsburg State University; MSN, Ball State University

Dolph, Joseph, Instructor in Technology, Elkhart

BS, Notre Dame University

Fiorella-Teves, Sharon, Instructor in Associate Degree Nursing, South Bend

BSN, Marycrest College; MS, University of Louisville

Freel, Linda, Assistant Professor in Visual Communications, South Bend

BA, Bethel College; MS, Indiana University-South Bend; MFA, University of Notre Dame

Freygang, Jim, Assistant Professor in Design Technology, South Bend

AAS, Ivy Tech State College; BFA, St. Francis College

Garrels, Martha, Associate Professor in Medical Assisting, Program Chair, South Bend

BS, Michigan State University; MS, University of Notre Dame

Gerbasich, Karen, Assistant Professor in Nursing, South Bend

BSN, St. Mary's College; MSN, Associate Degree, Ball State University

Gerdes, Edith, Assistant Professor in Practical Nursing, South Bend

ADN, Purdue University; BHCA, St. Joseph's College

Gick, Desmond, Associate Professor in Computer Information Services, South Bend

BS, Purdue University

Gray, David, Assistant Professor in General Education, South Bend

AB, Indiana University; MD, Indiana University

Gruber, Ellen, Assistant Professor in Academic Skills Advancement, South Bend

BS, Eastern Illinois University; MS, Northern Illinois University

Guthrie, Louise, Assistant Professor in Business, Elkhart

BS, Indiana University; MBA, University of Nebraska

Hackemann, Sandra, Assistant Professor in General Education, Elkhart

BA, Millsaps College; MA George Peabody College

Hammonds, Bonnie, Instructor in Practical Nursing, South Bend

BSN, Indiana University

Harper, Nora, Instructor in Associate Degree Nursing, South Bend

LPN, Utah Technical College; ADN, Weber State College; BSN, Weber State College

Harris, Imogene, Associate Professor in Business, Division Chair, South Bend

BS, Southern University

Hiers, Judy, Assistant Professor in Office Administration, Program Chair, South Bend

AAS, Delta College; BS, Western Michigan University; MS, Indiana State University

Hinkle, William, Assistant Professor in Criminal Justice, Program Chair, South Bend

BA, Indiana University; MPA, Indiana University; PhD, Western State University

Horner, Mary Ann, Instructor in Practical Nursing, South Bend

BSW, St. Mary of the Woods College; BSN, Bethel College

Horning, Greg, Assistant Professor in Computer Information Systems, Program Chair, South Bend

BA, Indiana University at South Bend; MA, Western Michigan University

Huettl, Robert, Assistant Professor in Automotive Technology, Program Chair, South Bend

AS, University of Wisconsin-Barron County Campus; BS, University of Wisconsin-Stout

Kambs, Dennis, Assistant Professor in Business Administration, South Bend

BS, Andrews University; MA, Western Michigan University

Kent, Katherine, Professor in Interior Design, Division Chair, South Bend

BS, Andrews University; MA, Western Michigan University

Keusch, Donna, Assistant Professor in Nursing, Program Chair, South Bend

Diploma, Memorial Hospital School of Nursing; BSN, Indiana University; MSN, Valparaiso University

Kirkner, Carol, Professor in Medical Laboratory Technician, Division Chair, South Bend

BS, Kent State University; MS, University of Notre Dame

Krakowski, Beth, Assistant Professor in Practical Nursing, Program Chair, South Bend

Diploma, Memorial Hospital School of Nursing; BSN, University of Evansville; MSN, Ball State University

Lagadon, P. Ben, Assistant Professor in Manufacturing and Industrial Technology, South Bend

BA, Indiana University

Lankston, Thomas, Assistant Professor in Academic Skills Advancement, South Bend

BS, Purdue University; MS, Michigan State University

Leosome, Daniel, Assistant Professor in General Education, South Bend

BA, Muskingum College; MA, Miami University

Lutz, Mark, Assistant Professor in General Education, South Bend

BA, University of Southern California; MA, University of Notre Dame

Maxon, Randy, Professor in General Education, Warsaw

BA, Grace College; MEd, Millersville University

McCune, Betsy, Assistant Professor in Associate Degree Nursing, South Bend

BSN, Medical University of South Carolina; MSN, Texas Women's University

Measell, Nancy, Assistant Professor in Medical Assisting, South Bend

AAS, J. Sargent Reynolds Community College; BA, Winthrop College

Negahban, Rahim, Associate Professor in Electronics and Computer Technology, Program Chair, South Bend

AS, J. C. Calhoun State Community College; BS, University of Alabama; MSEE, Tuskegee Institute

Nowlin, Bruce, Assistant Professor in Early Childhood Education and Human Services, Department Chair, South Bend

BS, Ball State University; MS, Ball State University

Nseula, Michael, Instructor in Computer Information Systems, South Bend

BA, Indiana University

Osiro, Meshack, Assistant Professor in Computer Information Systems, South Bend

BA, Bluffton College; MA, Ohio University

Parmley, Craig, Assistant Professor in General Education, South Bend

BS, Indiana State University; MBA, Indiana Wesleyan

Powell, James, Associate Professor in General Education, Division Chair, South Bend

BS, Rose-Hulman Polytechnic Institute; PhD, University of Notre Dame

Primrose, Pamela, Associate Professor in Medical Laboratory Technician, Program Chair, South Bend

BS, Indiana University; MS, University of Maryland

Rufuku, Charles, Assistant Professor in General Education, Elkhart

BA, College Du Saint Espirit; MD, Moscow Medical

Stringham, Ethel, Instructor in Practical Nursing, South Bend

ADN, Henry Ford Community College; BSN, Bethel College; MSN, Ball State University

Qintanilla, Debra, Instructor in Medical Assisting, Elkhart

BS, University of Texas Pan American

Sattler, Lauran, Assistant Professor in Computer Information Systems, Warsaw

AAS, Ivy Tech State College; BS, Goshen College

Smyers, Harry, Assistant Instructor in Automotive Services, South Bend

TC, Ivy Tech State College; BS, Indiana State University

Stevens, Julia, Assistant Professor in Nursing, South Bend

Diploma, Lincoln General Hospital School of Nursing; BS, Nebraska Wesleyan University; BSN, Central Missouri State University; MS, Andrews University

Tuthill, Mary, Assistant Professor in Visual Communications, South Bend

BA, Indiana University

VanOosterum, Cynthia, Associate Professor in Accounting, Program Chair, South Bend

BS, MBA, Indiana University-South Bend

Waltz-Freel, Kathryn, Professor in Academic Skills Advancement, Department Chair, South Bend

BA, Montana State University; MS, Indiana University

Wolfson, Colette, Associate Professor in Business Administration, Department Chair, South Bend

BS, Indiana University; MS, Indiana University

REGION 3

Rupright, Jon L., Vice President/Chancellor

BS, Huntington College; MS, Saint Francis College; MMP Studies, General Electric Co.

Keen, Mark A., Dean of Academic Affairs, Fort Wayne

AAS, BS, ITT Technical Institute, MS, Indiana Wesleyan University; PhD, Indiana State University

Lewton, J. Charles, Dean of Student Affairs, Fort Wayne

BS, Indiana State University; MS, Purdue University

FACULTY

Ahr, Terry S. Assistant Professor in Practical Nursing, Fort Wayne

BA, Indiana University; MSN, Purdue University

Barlow, Christine E., Assistant Professor in Science, Fort Wayne

BS, MS, Purdue University

BARNETT-JOHNSON, KIM R., Assistant Professor in General Education, Division Chair, Fort Wayne

BS, Taylor University; MLS, Indiana University

BAUSSER, JANET, Assistant Professor in General Education, Fort Wayne

BA, University of California; MLS, University of Hawaii; PhD, Ohio State University

BICKNASE, BERNICE L., Assistant Instructor in Therapeutic Massage, Program Chair, Fort Wayne

AAS, Ivy Tech State College

BISSELL, THERESA, Assistant Professor in General Education, Program Chair, Fort Wayne

BA, DePauw University; MS, Purdue University

BONEFF, ROSE L., Instructor in Respiratory Care, Director of Clinical Education, Fort Wayne

RRT-NPS, AS, BS, Indiana University

BOSTWICK, PAULA R., Assistant Professor in Nursing, Program Chair, Fort Wayne

RN, BSN, MSN, Ball State University

BRADSHAW, MARY ANNA, Instructor in Human Services, Fort Wayne

AB, Indiana University; MS, St. Francis College

BRINK, JENNIFER K., Assistant Professor in Respiratory Care, Program Chair, Fort Wayne

RRT-NPS, AS, Butler University; BS, University of St. Francis

BURCH, JEFFREY B., Assistant Instructor in Manufacturing Technology, Fort Wayne

AAS, Ivy Tech State College

CAROTHERS, REBECCA S., Assistant Professor in Early Childhood Education, Program Chair, Fort Wayne

BS, MAE, Ball State University

CHRISTMAN, JOHN, Assistant Instructor in Manufacturing and Industrial Technology, Fort Wayne

TC, Indiana Vocational Technical College; CWE, CWI, American Welding Society

CROWDER, KAY M., Assistant Professor in Early Childhood Education, Fort Wayne

AS, Indiana University; BS, Indiana Institute of Technology; MS, Indiana Wesleyan University

DILLER, JEWEL K., Associate Professor in Practical Nursing, Fort Wayne

RN, BS, Fort Wayne Bible College; MSEd, Indiana University; MSN, Concordia University

DITTON, DONNA S., Assistant Professor in General Education, Program Chair, Fort Wayne

BA, Purdue University; MA, Ball State University

DUNCAN, GENA F., Associate Professor in Associate of Science in Nursing, Fort Wayne

RN, BS, Fort Wayne Bible College; MSEd, Indiana University; MSN, Indiana Wesleyan University

DUNLAVY, SHARI A., Assistant Professor in General Education, Fort Wayne

AAS, BA, Purdue University; MSEd, Indiana University

EADS, PATRICIA E., Assistant Professor in Practical Nursing, Fort Wayne

AS, Purdue University; BSN, Ball Sate University; MSEd, Indiana University, RN

ENEA, CHARLES, Assistant Professor in Manufacturing and Industrial Technology, Program Chair, Fort Wayne

BS, Tri-State University

EYLER, GEORGE ALAN, Associate Professor in Hospitality Administration, Program Chair, Fort Wayne

BGS, Indiana University

FAGAS, DEBORAH L., Assistant Professor in ASA Reading

BA, Indiana University; MA, Ball State University

FALK, JOHN E., Assistant Professor in Construction Technology, Program Chair, Fort Wayne

Licensed Journeyman Plumber; Licensed Plumbing Contractor

FIELDHOUSE, NANCY J., Instructor in Practial Nursing, Fort Wayne

RN, BSN, Goshen College; MSN, Purdue University

GRAMMER, STEVEN C., Assistant Professor in Paramedic Science, Program Chair, Fort Wayne

BS, Indiana Wesleyan University

GRANNAN, JOHN A., Instructor in Criminal Justice, Program Chair, Fort Wayne

AB, Indiana University; MS, Indiana Wesleyan University

HAGEN-SHORT, MICHELLE L., Instructor in Office Administration, Fort Wayne

BS, Purdue University

HAMM, RONALD, Program Chair in Fire Science, Fort Wayne

BS, University of Cincinnati

HEISE, JOAN M., Associate Professor in Computer Information Systems, Program Chair, Fort Wayne

BS, MBA, Indiana Wesleyan University

HENSEL, DENNIS, Assistant Professor in Manufacturing and Industrial Technology, Fort Wayne

BAM, Tri-State University; CWE, CWI, American Welding Society

HESS, JAMES P., Assistant Professor in Business Administration, Program Chair, Fort Wayne

BA, Manchester College; MBA, Indiana University

HESS, JOHN W., Associate Professor in Construction Technology, Fort Wayne

BA, Tri-State University

HINSEY, ROBINSON ANDREA, Assistant Professor in Office Administration, Program Chair, Fort Wayne

AAS, BS, Purdue University; MBA, Indiana Institute of Technology

INGALLS, JAMES G., Assistant Professor in Academic Skills Advancement, Fort Wayne

BS, Austin Peay State University

JORDAN, DENISE M., Assistant Professor in Practical Nursing, Program Chair, Fort Wayne

RN, BSN, Indiana University; MA, Ball State University,

KAUFFMAN, KENT D., Assistant Professor in Paralegal, Program Chair, Fort Wayne

BA, Temple University; JD, The Dickinson School of Law

KEATHLEY, MICHAEL W., Associate Professor in General Education, Program Chair, Fort Wayne

BA, Michigan State University; MA, Wayne State University

KELOER, MICHAEL O., Assistant Professor in Automotive Technology, Fort Wayne

AAS, ITT Technical Institute; BA, Tri-State University

KELSEY, RALPH L., Assistant Professor in Automotive Technology, Program Chair, Fort Wayne

AAS, Purdue University; AAS, Purdue University; BS, Indiana State University

KELTY, ROBERT, Assistant Professor in Public Services, Division Chair, Fort Wayne

BA, St. Francis College; MS, Indiana University

KEMERER, PATRICIA, Assistant Professor in General Education, Program Chair, Fort Wayne

BA, Youngstown State University; MS, University of Saint Francis

KHOULI, VICKI L., Assistant Professor in Practical Nursing, Fort Wayne

BSN, MA, Ball State University; RN

KNEUBUHLER, DENISE, Instructor in Practical Nursing, Fort Wayne

RN, BSN, MSN, FNP, Indiana Wesleyan University

KNOX, DEEANN K., Assistant Professor in Medical Assisting, Fort Wayne

RN, BSN, Ball State University

Leckrone, Jeannine L., Assistant Professor in Practical Nursing, Fort Wayne

RN, BSN, Youngstown State University

Leigh, Ronald W., Associate Professor in Design Technology, Fort Wayne

AB, MA, Wheaton College; PhD, New York University

Lengerich, Donald D., Associate Professor in Accounting, Fort Wayne

BS, Indiana University; MSE, MBA, St. Francis College, CPA

Long, Joshua, Instructor in Economics, Fort Wayne

BA, Wadhams Hall Seminary College; MA, Walsh College

Lynch, John D., Assistant Professor in Accounting, Program Chair, Fort Wayne

BS, Purdue University; MS, Indiana University

Mantock, Charlene M., Assistant Professor in Health Aide, Program Chair, Fort Wayne

BSN, Olivet Nazarene University; MA, Ball State University

Martin, Richard S., Assistant Professor in Manufacturing Technology, Fort Wayne

AAS, Ivy Tech State College; BS, Indiana State University; U.S. Dept. of Labor Certified Tool and Die Maker

McCormick, Patrick, Assistant Professor in Business Administration, Fort Wayne

AAS, IPFW; BS, Purdue University

Metzger, Rebecca, Associate Professor in Academic Skills Advancement, Program Chair, Fort Wayne

BS, Ball State University; MA, Regent University

Miley, William J., Instructor in General Education, Program Chair, Fort Wayne

BS, MS, University of Missouri

Morgan, Phil, Instructor in Automotive Services, Fort Wayne

TC, Minnesota State University

Nagel, Diane E., Assistant Professor in Academis Skills Advancement, Program Chair, Fort Wayne

BA, Saint Francis College

Newman, Linda, Instructor in Practical Nursing, Fort Wayne

RN, BSN, Purdue University; MSN, Ball State University; FNP, Indiana Wesleyan University

Powers, Jean E., Assistant Professor in Business Administration, Fort Wayne

AAS, Ivy Tech State College; BS, Tri-State University; MS, University of Saint Francis

Reilly, Karen L., Academic Skills Advancement Division Chair, Fort Wayne

BA, MPA, Indiana University

Romines, Linda, Assistant Professor in Medical Assisting, Fort Wayne

AAS, CMA, RN, BSN, Purdue University; MSN, Concordia University

Rothgeb, Marcia, Assistant Professor in Practical Nursing, Fort Wayne

RN, AAS, Purdue University; BA, College of Saint Francis

Royse, Brian L., Assistant Professor in General Education, Fort Wayne

BA, MA, Indiana University

Rybolt, Russell H., Assistant Professor in Paralegal, Fort Wayne

BA, Indiana University; JD, Valparaiso University

Schladenhauffen, Candace S., Assistant Professor in Respiratory Care, Division Chair, Fort Wayne

RRT-NPS, RPFT, BS, Indiana University; MS, Purdue University

Shattuck, Carol, Assistant Professor in Practical Nursing, Fort Wayne

BS, University of St. Francis; MS, Indiana University; MSN, Indiana Wesleyan

Shearer, James C., Assistant Professor in Construction Technology, Fort Wayne

BA, Tri-State University

Simmons, Jeffrey L., Assistant Professor in Academic Skills Advancement, Fort Wayne

BA, Taylor University; BS, Ball State University; MDiv, Anderson School of Theology

Slater, James M., Assistant Professor in General Education, Fort Wayne

BS, Purdue University; MS, Eastern Michigan University; DO, Kirksville College of Medicine and Surgery

Spradin, Christopher D., Instructor in Academic Skills Advancement, Program Chair, Fort Wayne

BA, Cedarville University; MA, Concordia Theological Seminary

Steele, Laura, Assistant Professor in General Education, Fort Wayne

BS, MS, Purdue University

Stonebraker, Ben A., Assistant Professor in Computer Information Systems, Fort Wayne

AAS, Indiana Vocational Technical College; BS, Purdue University

Stroup, Donald L., Assistant Professor in Computer Information Systems, Fort Wayne

BS, Purdue University; MBA, Michigan State University

Sullens, Barry J., Assistant Professor in Computer Information Systems, Fort Wayne

AA, Anderson College; BS, Lander University

Surface, Michael O., Assistant Professor in Manufacturing and Industrial Technology, Fort Wayne

BS, Purdue University

Thierer, Nina L., Associate Professor in Medical Assisting, Fort Wayne

AAS, Indiana Vocational Technical College, BS, Indiana Institute of Technology, CMA

Townsend, Robert, Instructor in Design Technology, Program Chair, Fort Wayne

BS, Northeastern University

Treff, Conrad C., Assistant Professor in Manufacturing and Industrial Technology, Fort Wayne

BS, Fairleigh Dickinson University

Tsakova, Maria, Assistant Professor in Academic Skills Advancement, Fort Wayne

BA, Saints Cyril and Methodius University; MLS, Indiana University

Tumbleson, Steven L., Assistant Professor in Manufacturing Technology, Program Chair, Fort Wayne

BS; MA, Ball State University

Vick, Jan S., Assistant Professor in Human Services, Program Chair, Fort Wayne

BS, Ball State University, MS, Saint Francis College

Walsh, John D., Assistant Professor in General Education, Fort Wayne

BS, University of Notre Dame; MS, Wesleyan University

Walter, John L., Associate Professor in Manufacturing Technology, Fort Wayne

AAS, Indiana Vocational Technical College; BS, Indiana Wesleyan University

Weiss, Anna C., Assistant Professor in Accounting, Fort Wayne

BA, Middlebury University; MSEd, Indiana University, CPA

Wiegand-Green, Tova, Assistant Professor in Medical Assisting, Fort Wayne

BS, Purdue University, CMA

Wyneken, Meshele G., Assistant Professor in Hospitality Administration, Fort Wayne

RD, Saint Francis Medical Center; AA, Ivy Tech State College; BS, Illinois State University

REGION 4

Bathe, David, Chancellor

AS, Vincennes University; BS, Greenville College; MS, PhD, Illinois State University

Ostrye, Mary E., Dean of Academic Affairs

BS, MS, West Virginia University; PhD, Indiana State University

ROSWARSKI, TODD E., Assistant Dean of Academic Affairs

BA, MS, PhD, Purdue University

LAWS, JOHN, Dean of Student Affairs, Lafayette

BS, MS, Southern Illinois University; EdD, Indiana University

FACULTY

ABEL, CINDY A., Assistant Professor in Medical Assisting, Program Chair, Lafayette

AAS, Ivy Tech State College; BS, Indiana Wesleyan University

ADDISON, PAUL, Assistant Professor in Computer Information Systems, Lafayette

BA, Indiana University; M.S., Xavier University

ALEXANDER, STANLEY W., Associate Professor in Psychology, Lafayette

BA, Cornell University; MEd, Boston College; PhD, University of Michigan

BAWA, SATISH, Instructor in Business Administration, Lafayette

BA, Dehli University; M.BA, Xavier University

BLACK, AMY L., Instructor in Academic Skills Advancement, Lafayette

BS, St. Joseph College; MA, University of Phoenix

BOGUE, WAYNE L., Instructor in Machine Tool Technology, Program Chair, Lafayette

BA, Olivet Nazarene University; MA, Anderson University

BRODSKY, JANET J., Assistant Professor in Mathematics, Program Chair, Lafayette

BA, Clark University; MA Purdue University

BUCKLES, JUDITH A., Associate Professor in Dental Assistant, Program Chair, Lafayette

AAS, BS, Purdue University

CARREON, CARA L., Instructor in Medical Assisting, Lafayette

AAS, El Paso Community College; BS, Indiana Wesleyan University

CHASTAIN, ANDREW, Director of Clinical Education for Respiratory Care, Lafayette

BS, Indiana University

COGHILL, WILLIAM M., Instructor in Criminal Justice, Division Chair, Lafayette

BA, MS, Purdue University

COMBS, JONATHON D., Instructor in Design Technology, Lafayette

BS, Purdue University

DEADMAN, ROBERT, Instructor in Computer Information Systems, Lafayette

AAS, BS, Purdue University; MSM-IT, Colorado Technical University

DOLK, KAREN L., Professor in Nursing, Program Chair, Lafayette

BSN, University of Pittsburgh; MSN, Case Western Reserve University

DOUGHERTY, KAREN K., Associate Professor in Dental Assistant, Lafayette

BS, Indiana Wesleyan University

DUDA, MARSHA K., Professor in Practical Nursing, Program Chair, Lafayette

AS, Purdue University; BSN, Michigan State University; MSN, Indiana University

DYE, DEBORAH K., Assistant Instructor in Nursing, Lafayette

AS, Ivy Tech State College; BSN, Indiana Wesleyan University

ERSKIN, ERIC L., Assistant Professor in Automotive Technology, Program Chair, Lafayette

AAS, Montcalm Community College; BS, Ferris State University; MA, Northern Michigan University

FAUST, JUDITH I., Assistant Professor in Practical Nursing, Lafayette

BSN, MSN, Ball State University

GRAHAM, LISA L., Assistant Instructor in Surgical Technology, Lafayette

AAS, Ivy Tech State College; BS, Indiana State University

GUERRETTAZ, SARAH E., Assistant Professor in English, Lafayette

BS, Indiana State University; MEd, Bowling Green State University

HALL, DOROTHY S., Associate Professor in Surgical Technology, Program Chair, Lafayette

AAS, Purdue University; BSN, Graceland College; MSN, Purdue University

HAMMER, WENDY K., Assistant Professor in English, Lafayette

BA, University of Wisconsin; MA, Ball State University

HEARN, DAVID H., Assistant Professor in Academic Skills Advancement, Lafayette

BS, MS, University of Delaware; PhD, Purdue University

HENDERSON, MARY C., Instructor in Chemical Technology, Program Chair, Lafayette

BS, Indiana State University

INGRAM, MIKE A., Assistant Instructor in HVAC, Program Chair, Lafayette

AAS, Ivy Tech State College

ISAACS, JACOB P., Assistant Professor in Communication, Lafayette

BA, Wabash University; MA, Ball State University

JAMES, PEGGY S., Professor in Respiratory Care, Program Chair, Lafayette

AAS, Lansing Community College; BS, MBA, Indiana Wesleyan University

JONES, ELIZABETH A., Associate Professor in Nursing, Lafayette

AAS, BSN, MS, Purdue University; MSN, Indiana University

LANA, ELIZABETH A., Instructor in Practical Nursing, Lafayette

AAS, BS, Purdue University; BSN, Purdue University

LINDBERG, AMANDA BARCHE, Instructor in Early Childhood Education, Program Chair, Lafayette

BA, North Central College; MA, Eastern Illinois University

LITTLE, STACEY E., Instructor in Business Administration, Lafayette

AS, Ivy Tech State College; BA, St. Mary of the Woods; MA, Indiana University

LOGAN, LYNDA S., Assistant Instructor in Practical Nursing, Lafayette

TC, AS Ivy Tech State College; BS, Indiana Wesleyan University

LUCAS, DONALD A., Instructor in Design Technology, Program Chair, Lafayette

BS, MS, Purdue University

MANIAK, LYNN M., Professor in Nursing, Lafayette

Diploma in Nursing, St. Mary's Mercy Hospital; BSN, Valparaiso University; BS, College of St. Francis; MSN, Purdue University-Calumet

MANIAN, VYJU V., Instructor in Mathematics, Lafayette

BS, MS, University of Bombay; MS, University of Pittsburgh; MS, Columbia University

MARION, WES S., Instructor in Paralegal Studies, Program Chair, Lafayette

BA, Purdue University; JD, Indiana University

MCANDREWS, M. CHARLENE, Assistant Instructor in Nursing, Lafayette

BS, Indiana University

MCANDREWS, DENNIS P., Instructor in Industrial Maintenance Technology, Program Chair, Lafayette

BS, Purdue University

MERCIER, WILLIAM C., Assistant Professor in Mathematics, Program Chair, Lafayette

BA, University of Colorado; MS, University of Cincinnati

MERIDA, PAMELA S., Assistant Instructor in Nursing, Lafayette

AS, Purdue University; BS, Indiana Wesleyan University

MILLER, CYNTHIA J., Instructor in Computer Information Systems, Lafayette

AS, Ivy Tech State College; BS, Indiana Wesleyan University; MSM-IT, Colorado Technical University

MILLER, JOLENE K., Professor and Division Chair in Health Sciences, Lafayette

AS, University of Southern Indiana; BS, College of St. Francis; MS, Purdue University

MOORE, TERESA G., Associate Professor in English, Program Chair, Lafayette

BA, MA, Western Kentucky University

NANCE, DENNIS A., Associate Professor in Manufacturing and Industrial Technology, Program Chair, Lafayette

AAS, Ivy Tech State College; BA, Southwestern University

NEES, VICKI L., Associate Professor in Practical Nursing, Lafayette

AAS, Purdue University; BSN, Purdue University; MSN, Purdue University

NIELSON, KAREN E., Instructor in Criminal Justice, Program Chair, Lafayette

BA, Eastern Nazarene College; MS, JD, University of Connecticut

PLEASANTS, STACIA L., Instructor in Early Childhood Education, Lafayette

BA, MS, Purdue University

PRATER, BARBARA G., Associate Professor in Chemistry and General Education, Division Chair, Lafayette

BA, University of Kansas; PhD, University of Texas at Austin

PRIEST, ROGER D., Assistant Professor in Communication, Program Chair, Lafayette

BA, MA, Purdue University

RISK, KATHLEEN M., Instructor in Academic Skills Advancement, Program Chair, Lafayette

BA, MA, Purdue University

ROSALES, JACQUELINE P., Assistant Professor in Biotechnology, Lafayette

BS, Indiana University of Pennsylvania; MEd, University of Pittsburgh; MS, PhD, Purdue University

ROBERSON, GLEN D., Assistant Professor in Automotive Technology, Technology Division Chair, Lafayette

AAS, Purdue University; AAS, Ball State University; BS, Purdue University

ROBINSON, L. DIANN, Associate Professor in Academic Skills Advancement, Department Chair, Program Chair, Lafayette

BA, MS, Purdue University

SMITH, JAMES G., Professor in Technology, Lafayette

AAS, BS, University of Toledo; MS, Western Michigan University

SMOCK, WARREN W., Associate Professor in Accounting, Program Chair, Lafayette

BS, University of Indianapolis; MBA, Indiana Wesleyan University

SNYDERS, SHARON M., Associate Professor in Academic Skills Advancement, Program Chair, Lafayette

BS, Purdue University; MS Indiana Wesleyan

WATSON, LINDA J., Associate Professor in Business Administration, Program Chair, Lafayette

BS, Miami University; MS, University of Cincinnati

WEALING, JOAN, Instructor in Computer Information Systems, Lafayette

BS, Taylor University; MSM-IT, Colorado Technical University

WENDALL, ROBERT K., Assistant Professor in Mathematics, Lafayette

BS, MS, Purdue University

WIESE, MARY B., Associate Professor in Nursing, Lafayette

BSN, Ball State University; MS, Purdue University

WILLIAM, COLIN T., Assistant Professor in Psychology, Program Chair, Lafayette

BA, Berry College; MA, PhD, Emory University

R · E G I O N   5

DAILY, STEVEN J., Chancellor

BS, MS Indiana University-Kokomo

HOCKNEY, DANIEL W., Campus Dean, Logansport

BS, MA, Ball State University

LEWIS, PAMELA J., Dean of Academic Affairs

BS, Indiana University; MA, Ball State University

BAILEY, JANICE L., Dean of Student Affairs

BS, Indiana University; MA, Ball State University

FACULTY

ANDERSON, DONALO, Assistant Professor in Physics, Kokomo

BS, Wisconsin State College; BS, PhD, Purdue University

BARR, DARCI, Instructor in Dental Assistant, Program Chair, Kokomo

CDA

BATY, DAVID E., Associate Professor in Accounting, Program Chair, Kokomo

BS, MA, Ball State University

BORSE, GREGORY, Assistant Professor in English, Wabash

BA, MA, University of Dallas; PhD, Louisiana State University

CALDWELL, KIM, Assistant Professor in Mathematics, Kokomo

BS, Purdue University; MS, Indiana University

CROUCH, BENJAMIN, Instructor in Computer Information Systems, Wasbash

BS, MS, Ball State University

DUNKLE, ROBERT, Assistant Professor in Psychology, Program Chair, Kokomo

BA, Parsons College; MS, PhD, Purdue University

FITZGERALD, JAMES, Instructor in Business Administration, Program Chair, Kokomo

BA, McKendree College; MA, Xavier University

FRY, LINDA, Assistant Professor in Computer Information Systems, Logansport

AAS, Ivy Tech State College; BS, MS, Purdue University

GALLAHAN, LAURA, Instructor in Practical Nursing, Logansport

BSN, Indiana University

GARONER, RANDALL, Assistant Professor in HVAC, Program Chair, Kokomo

AAS, Ivy Tech State College; AS, BS, Indiana State University; MSM, Ball State University

THOMAS GHERING, Assistant Professor in English, Program Chair, Kokomo

AS, San Diego Mesa College; BA, San Diego State University; MA, Purdue University

GROVES, RHONDA K., Professor in Office Administration, Division Chair, Kokomo

BS, MA, Ball State University

GROVES, STEVE, Assistant Professor in Accounting and Business Administration, Logansport

BS, Indiana State University

HALL, JAY, Assistant Professor in Mathematics, Kokomo

BS, Rose Hulman Institute; MS, Indiana University

HALL, LARRY R., Assistant Professor in Automotive Technology, Program Chair, Kokomo

AAS, Ivy Tech State College; AS, BS, Indiana State University

HARRIS, PHYLLISS, Associate Professor in Office Administration, Program Chair, Kokomo

BS, Ball State University

HARTZOG, RICHARD, Instructor in Practical Nursing, Kokomo

BS, Indiana Wesleyan University

HECKMAN, ANGELA, Instructor in Nursing, Kokomo

BSN, Indiana Wesleyan University; MSN, Indiana University

HILDENBRAND, JANE, Associate Professor in Early Childhood Education, Program Chair, Kokomo

AS, Vincennes University; BS, MS, Indiana State University

HORNER, JANE, Instructor in Early Childhood Education, Logansport

BS, Purdue University; MS, Indiana University

JACKSON, BONITA, Instructor in Nursing, Logansport

MSN, Indiana University

JOHNSON, CHRISTOPHER L., Assistant Professor in Criminal Justice, Program Chair, Kokomo

BS, Cedarville College; JD, University of San Diego

JORDAN, GRETCHEN, Instructor in Mathematics, Logansport

BS, MS, Purdue University

KING, KIM, Associate Professor in Communication, Program Chair, Kokomo

BS, University of Indianapolis; MA, Ball State University

KOCH, JEAN, Associate Professor in Computer Information Systems, Division Chair, Kokomo

AAS, Ivy Tech State College; BS, MS Ball State University

KUNKLE, ALAN, Assistant Professor in Mathematics, Program Chair, Kokomo

BS, MS, Purdue University

LAGRAVE, STEVE E., Associate Professor in Business Administration, Kokomo

BS, Indiana University-Purdue University-Indianapolis; MA, Ball State University

LATHAM, CRAIG, Instructor in Manufacturing and Industrial Technology, Wabash

BS, Letourneau College

MAXSON, SUSAN, Assistant Professor in Human Services, Program Chair, Kokomo

BA, Purdue University; MS, Butler University

McCAULEY, AMY, Instructor in English, Kokomo

BA, Butler University; MA, Ball State University

McFARLAND, BARBARA, Instructor in Office Administration, Logansport

BS, Ball State University; MS, Indiana Wesleyan University

McKINNEY, PAULA, Instructor in Nursing, Program Chair, Kokomo

MSN, Indiana Wesleyan University

MILLER, BRIAN, Instructor in Computer Information Systems, Kokomo

BS, Cincinnati College of Mortuary Science; MS, Ball State University

MOORMAN, THOMAS, Instructor in Business Administration, Wabash

BA, Wabash College; MBA, University of Phoenix

MORGAN, CONNIE, Associate Professor in Medical Assisting, Division Chair, Kokomo

BS, MED, Indiana Wesleyan University

MUNSELL, SUSANNA, Instructor in Medical Assisting, Kokomo

BA, Indiana Wesleyan University

OLSON, JARL, Instructor in Spanish, Logansport

AB, Franklin College; MS, Indiana State University

PEACOCK, CATHERINE, Instructor in English, Logansport

BA, Bryn Mawr College; MS, Georgetown University

PERKINS, JERRY, Assistant Professor in Computer Information Systems Program Chair, Kokomo

BS, Indiana University; MS, Webster University; MBA Troy State University

PETERS, LAURIE F., Associate Professor in Nursing, Division Chair, Kokomo

BSN, Indiana University-Kokomo; MSN, Ball State University

PETERSON, DANEL, Instructor in Nursing, Kokomo

AS, BS, MS, Indiana University

PIERCE, TONYA, Instructor in Computer Information Systems, Kokomo

BS, MS, Ball State University

LAUDERBAUGH, LINDA, Assistant Professor in Practical Nursing, Kokomo

BS, Indiana University; MSN, University of Southern Indiana

McCLAIN, NATHAN, Assistant Professor in Industrial Apprenticeship Technology, Program Chair, Kokomo

BS, Purdue University

MORGAN, CONNIE, Associate Professor in Medical Assisting, Division Chair, Kokomo

BSN, MA, Indiana Wesleyan University

PRITCHETT, JOHN E., Assistant Professor in Construction Technology, Program Chair, Kokomo

AS, Linn Technical College; BS, Indiana State University

SCHUSTER, ANGELA, Instructor in Nursing, Kokomo

BSN, Indiana Wesleyan University; MSN, Indiana University

SCHUSTER, KATHRYN, Instructor in Medical Assisting, Logansport

SINGHI, SARINA, Instructor in Science, Program Chair, Kokomo

BA Columbia University; MS, DNM, University of Bridgeport

THIBOS, RONALD, Instructor in Industrial and Manufacturing Technology, Program Chair, Logansport

BS, MS, Indiana State University

TOWNSEND, JUDITH, Instructor in Surgical Technology, Program Chair, Kokomo

BS, Purdue University

TURNPAUGH, VEARL D., Associate Professor in Manufacturing and Industrial Technology, Kokomo

BS, MS, Purdue University

WARD, DAN, Assistant Professor in Design Technology, Program Chair, Kokomo

BS, Purdue University

WARD, LUKE, Instructor in Visual Communications, Kokomo

BS, Purdue University

WILEY, KYLE, Assistant Professor in Visual Communications, Program Chair, Kokomo

BS, Purdue University

WILLIAMS, KELLY, Instructor in Nursing, Program Chair, Kokomo

MSN, Indiana Wesleyan University

WILSON, JANE, Professor in History, Division Chair, Kokomo

BS, MA, Ball State University

REGION 6

JEFFS, ROBERT, Chancellor

BA, Oliver Nazarene College; MA, Ball State University; Ph.D, Indiana State University

DOLLY, PATRICIA, Executive Dean, Anderson

AS, Grand Rapids Community College; BS, Aquinas College; MA, EdD, Western Michigan University

LIGHTLE, JOHN, Executive Dean, Marion

BS, MA, EdD, Ball State University

CHESTERFIELD, GAIL, Dean of Academic Affairs, Muncie

BS, Indiana University; MA, Ball State University; ABD, Indiana University

LEWELLEN, MARY, Dean of Student Affairs, Muncie

BS, MA, Ball State University

FACULTY

ANTHONY, NEIL, Associate Professor in General Education, Muncie

BS, MA, Ball State University

BARDONNER, STEVE, Assistant Professor in Design Technology, Program Chair, Muncie

AAS, Ivy Tech State College; BS, Ball State University; MA, IUPUI

BISHOP, DANNA, Assistant Professor in Office Administration, Program Chair, Marion

BS, Indiana State University; MAE, Indiana Wesleyan University

Bow, Curtis, Assistant Professor in Practical Nursing, Muncie

AS, Vincennes University; BS, MS, Ball State University

Brinkley, Harold, Assistant Professor in Manufacturing and Industrial Technology, Program Chair, Anderson

AAS, Ivy Tech State College; BS, Indiana Wesleyan University

Conwell, Tamre, Assistant Professor in Early Childhood Education, Muncie

BA, MA, Ball State University

Culp, Sid, Assistant Professor in Design Technology, Muncie

BS, Ball State University

Dana, Kristen, Instructor in Academic Skills, Muncie

BS, Ball State University

Dietzen, Karrie, Assistant Professor in Nursing, Muncie

AD, Anderson University; BS, Indiana Wesleyan University; MSN, University of Phoenix

Dillman, Debra, Assistant Professor in Radiologic Technology, Program Chair, Marion

BS, Indiana Wesleyan University

Everett, Arnold, Instructor in Academic Skills, Marion

MS, MAE, Ball State University

Fry, Owen, Assistant Professor in Academic Skills, Program Chair, Muncie

BS, MAE, Ball State University

Gaskill, Fred, Assistant Professor in Human Services, Department Chair, Muncie

BS, MA, Ball State University

Gilbert, Larry, Associate Professor in Academic Skills, Anderson

AB, Anderson University; MA, Ball State University

Goodman, Stephanie, Assistant Professor in Medical Assisting, Marion

BS, Ball State University

Gosset, Kris, Assistant Professor in Business Administration, Muncie

BS, Otterbein College; MBA, Morehead State University

Gould, Suzanne, Associate Professor in General Education, Program Chair, Muncie

BA, University of Illinois-Urbana; MS, University of Illinois-Chicago

Gourley, Debbie, Instructor in Hospitality Administration, Program Chair, Muncie

BS, MA, Ball State University

Greenan, Mary, Associate Professor in Academic Skills, Anderson

BS, University of Maine; MS, Butler University

Griffin, Obrin, Assistant Professor in Electronics, Program Chair, Anderson

BS, University of Sierra Leone; MSEE, University of Evansville

Grogg, Elke, Instructor in General Education, Muncie

MS, MA, Ball State University

Hanson, Greg, Assistant Professor in Computer Information Systems, Anderson

AAS, Ivy Tech State College; BS, Free Will Baptist Bible College; MS, Ball State University

Hardman, Teresa, Assistant Professor in Nursing, Muncie

BSN, MSN, Ball State University

Hartig, David A., Associate Professor in Construction Technology, Program Chair, Muncie

AAS, Western Wisconsin Technical Institute; BS, University of Wisconsin-Stout

Hayes, David, Assistant Professor in Computer Information Systems, Program Chair, Muncie

BS, MS, Ball State University

Hicks, Michelle, Instructor in Nursing, Muncie

BSN, Ball State University

Hiday, Mary, Associate Professor in Practical Nursing, Program Chair, Muncie

AD, Anderson College; BSN, Anderson University; MA, Ball State University

Hobbs, Lori K., Assistant Professor in Physical Therapist Assistant, Muncie

AS, Oklahoma City Community College; BS, Indiana University; MA, Ball State University

Hoffman, Nancy J., Professor in Early Childhood Education, Program Chair, Muncie

BS, Penn State University; MA, Ed.D, Ball State University, PhD, Ball State University

Housholder, Donald, Assistant Professor in General Education, Program Chair, Marion

BA, Anderson University; MA, Ball State University

Humphrey, Caryn, Assistant Professor in Surgical Technology, Program Chair, Muncie

BSN, Anderson University

Hyatt, Andrea, Assistant Professor in Academic Skills, Marion

BS, MA, Ball State University

Johnson, Rose, Assistant Professor in Nursing, Marion

BS, Indiana Wesleyan; MS, Ball State

Johnson, Tania, Assistant Professor in Nursing, Anderson

BSN, Indiana University

Jones, Patrick M., Professor in Manufacturing and Industrial Technology, Program Chair, Muncie

AAS, Ivy Tech State College; BS, Taylor University; MA, Ball State University; PhD, Cappella University

Judson, Martha, Assistant Professor in Nursing, Anderson

LPN, Ivy Tech State College; ASN, BSN, Indiana State University; MSN, Indiana University

Macauley, Teresa, Assistant Professor in Dental Assisting, Anderson

CDA, BS, Indiana University

Moore, Michelle, Assistant Professor in General Education, Anderson

BS, MS, Indiana University

Murray, Cathy, Assistant Professor in Nursing, Muncie

BSN, MSN, Ball State University

Nelson, Susan, Assistant Professor in Nursing, Program Chair, Anderson

BSN, Anderson University; MSN, Ball State University

Keller, Teresa G., Associate Professor in Office Administration, Anderson

BS, MAE, Ball State University

Kerr, Marilyn K., Associate Professor in Business Administration, Program Chair, Anderson

BS, MBA, Ball State University

Kleeberg, Michael, Assistant Professor in General Education, Anderson

BA, Kean College of New Jersey; MA, Ball State University

Masterman, Julayne, Assistant Professor in Medical Assisting, Program Chair, Muncie

BS, Indiana Wesleyan; MHS, Ball State University

Mays, Mark D., Assistant Professor in Academic Skills, Muncie

BA, Ball State University

McDaniel, Kathleen, Assistant Professor in Medical Assisting, Anderson

BA, Loyola University; MA, Ball State University

Moorhead, Phil, Associate Professor in Computer Information Systems, Marion

BS, Bowling Green University; MS, University of Dayton

Outland, Dan K., Assistant Professor in Business Administration, Marion

BBA, Memphis State University; MBA, Ball State University

PRUITT, LINDA, Associate Professor in Medical Assisting, Program Chair, Marion

BS, MBA, Indiana Wesleyan University

REEDER, EMILY, Assistant Professor in Human Services, Anderson

BA, Anderson University; MSW, Indiana University

RICHWINE, LISA, Instructor in Nursing, Anderson

BSN, Ball State University

ROBERTS, BARBARA, Assistant Professor in Medical Assisting, Muncie

BA, Anderson University; MS, St. Francis College

ROSALES, KAREN, Instructor in Early Childhood Education, Anderson

BS, University of North Texas; ME, Texas Tech University

RONALD, KAREN, Assistant Professor in Nursing, Muncie

ASN, Indiana University; BSN, MSN, Ball State University

SCHULZ, NEILSEN, Associate Professor in Medical Assisting, Program Chair, Anderson

BS, MA, Ball State University

SCOTT, JEFFREY, Assistant Professor in Criminal Justice, Program Chair, Muncie

BS, Ball State University; MSW, Indiana University

SEXTON, STEVE, Associate Professor in Automotive Technology, Program Chair, Muncie

BS, Indiana University

SHAFER, MARSANN, Instructor in Nursing, Anderson

MSN, Anderson University

SHAFFER, PEGGY, Assistant Professor in General Education, Division Chair, Muncie

BA, MAE, EdD, Ball State University

SHEPHERD, TAMARA, Assistant Professor in Radiological Technology, Marion

AAS, BS, Ball State University

SHONK, CORA, Assistant Professor in Nursing, Muncie

BSN, MSN, Indiana Wesleyan

SIPE, BETTY, Professor in General Education, Anderson

BS, Lenoir Rhyne College; MA, Ed.D, Ball State University

SMEDINGHOFF, JOHN, Assistant Professor in Computer Information Systems, Anderson

BS, University of Dayton; MS, Armour College

SMITH, SEAN, Instructor in General Education, Muncie

BA, MAE, Ball State University

SMOKER, SUSAN, Assistant Professor in Nursing, Program Chair, Muncie

AA, Indiana University; BS, Indiana Wesleyan University; MSN, Indiana University

STOOPS, SHARON, Professor in Academic Skills and Public Services, Muncie

BS, MAE, Ball State University

SWAIN, RICHARD, Associate Professor in General Education, Anderson

BS, Ball State University; MS, Miami University

SYLVERSON, JULIA, Associate Professor in Nursing, Department Chair, Anderson

AD, Anderson University; BSN, Indiana Wesleyan University; MSN, University of Phoenix

SZAKALY, MICHAEL, Associate Professor in Business, Division Chair, Muncie

BS, MA, EdD, Ball State University

THORNBURG, NANCY, Instructor in Surgical Technology, Muncie

Diploma, BMH School of Surgical Technology; AAS, Ivy Tech State College

TRENNEPOHL, LORI, Instructor in Nursing, Anderson

BS, Indiana University

VESPERRY, PAUL, Assistant Professor in Manufacturing Technology, Program Chair, Muncie

AA, Clark State University; BS, Ohio State University

WALKER, NANCY, Assistant Professor in Nursing, Program Chair, New Castle

BSN, Indiana University; MSN, Ball State University

WEDGEWORTH, MICHAEL, Assistant Professor in General Education, Muncie

BS, MS, Ball State University

WHISLER, VESTA, Professor in Accelerated Degree Program, Program Chair, Muncie

BS, MAE, Ball State University; PhD, Capella University

WHITE, NANCY, Assistant Professor in Nursing, Program Chair, Muncie

BSN, MSN, Ball State University

WILLADSEN, KRISTEN, Instructor in Paralegal Services, Program Chair, Muncie

BA, JD, University of North Dakota

WILLY, BONNIE, Assistant Professor in Computer Information Systems, Muncie

BS, MAE, Ball State University

WISE, MARK, Assistant Professor in Physical Therapy Assistant, Program Chair, Muncie

BS, Bowling Green State University; MA, Ball State University

WOODWARD, CATHERINE, Associate Professor in Health Sciences, Division Chair, Muncie

BSN, Ball State University; MSN, Indiana Wesleyan

REGION 7

PITTMAN, JEFF, Chancellor

BS, Western Kentucky University; BS, Indiana University; MS, Indiana State University; PhD, Indiana University

STREIGHT, RICKY W., Dean of Academic Affairs

BS, University of Central Oklahoma; MS, West Coast University, US Army War College; PhD, University of Oklahoma

ALLMAN, LEAH, Dean of Student Affairs, Terre Haute

BS, MS, Indiana State University

FACULTY

ABBITT, JERRY, Associate Professor in Computer Information Systems, Terre Haute

BS, MS, Indiana University

ALSMAN, CATHY, Associate Professor in Human Services, Program Chair, Terre Haute

BS, MS, Indiana State University

ARNEY, DON, Professor, Division Chair, Terre Haute

BS, MS, Indiana State University

BERRISFORD, RICK, Assistant Professor in Welding, Terre Haute

BS, Indiana State University

BOESEN, MELANIE, Associate Professor in Office Administration, Program Chair, Terre Haute

BS, MS, Indiana State University

BOLINGER, BONNIE, Associate Professor in Business Administration, Program Chair, Terre Haute

BS, MBA, Indiana State University; PhD, Indiana State University

BOYER, BRENDA, Instructor in Nursing, Terre Haute

AS, BS, Indiana State University

BRINSON, JAMES, Instructor in Science, Terre Haute

BA, MS, Indiana State University

BROWNING, AMY, Instructor in Accounting, Program Chair, Terre Haute

BS, Indiana State University; MBA, Ball State University

CANNON, EMILY, Instructor in Nursing, Terre Haute

AA, Vincennes University; BS, MS, Indiana Wesleyan University

CHAN, ISABELLE, Assistant Instructor in Electronics, Terre Haute

MS, Ball State University

CHANEY, MARY, Associate Professor in Visual Communications, Program Chair, Terre Haute

BA, St. Mary of the Woods; MS, Indiana State University

COFFEY, LYNETTE, Assistant Instructor in Practical Nursing, Terre Haute

ASN, Vincennes University; BS, Indiana Wesleyan University

COOPER, KIM, ASSISTANT Instructor in Practical Nursing, Program Chair, Terre Haute

BS, AS, Indiana State University

COX, PHYLLIS, Assistant Professor in General Education, Terre Haute

BS, MA, Indiana State University

CREED, SHERRA, Instructor in Surgical Technology, Terre Haute

AS, BS, Indiana State University

DAHLIN, BROCK, Instructor in Business Administration, Terre Haute

BS, Eastern Illinois University; MPA, Indiana State University

DAVIS, MICHAEL, Assistant Instructor in Automotive Services, Terre Haute

AAS, Ivy Tech State College

EICHHORST, BARBARA, Instructor in Medical Laboratory Technology, Terre Haute

BS, MS, Indiana State University

FIELDS, VICTOR, Assistant Professor, Site Manager, Terre Haute

BS, Indiana State University; MS, Indiana University

GAMBILL, JANEE, Associate Professor in Medical Laboratory Technology, Program Chair, Terre Haute

BS, MS, Indiana State University

GARNER, JOHN, Assistant Professor in Radiology, Program Chair, Terre Haute

BS, Indiana State University

GOOD, ANSON, Assistant Professor in Automotive Technology, Terre Haute

BS, MS, Indiana State University

GOODE, RENA, Assistant Professor in Medical Laboratory Technology, Terre Haute

BA, Greenville College

GOPALAN, SUJATA, Assistant Professor in Biotechnology, Program Chair, Terre Haute

BFA, MFA, Louisiana State University and A&M

GOSNELL, KELLY, Assistant Professor in Practical Nursing, Terre Haute

AS, BSN, Indiana State University

GRABLE, HEATHER, Instructor in Respiratory Care, Terre Haute

AAS, Ivy Tech State College

GRAHAM, JEANNE, Professor in Liberal Arts, Program Chair, Terre Haute

BS, Indiana University; MA, Indiana State University

GREENWELL, WILLIAM, Assistant Professor in Human Services, Terre Haute

BA, MA, University of Mississippi

HARMLESS, MALCOLM, Assistant Professor in Electronics, Program Chair, Terre Haute

AAS, Ivy Tech State College; BS,MS, Indiana State University

HART, GLENDA, Associate Professor in Office Administration, Division Chair, Terre Haute

BS, MS, Indiana State University

HELDERMAN, MICHELLE, Instructor in Practical Nursing, Terre Haute

BS, University of Evansville

HENSON, JOSEPH, Assistant Professor in Math, Instructor in Aviation Technology, Terre Haute

BA, Indiana University; MA, Indiana State University

HOFMANN, BEULAH, Associate Professor in Practical Nursing, Program Chair, Greencastle

BSN, MS, Indiana State University

JONES, CHARLES, Assistant Instructor in Manufacturing and Industrial Technology, Terre Haute

AAS, Ivy Tech State College; BS, Indiana State University

JONES, CHERYL, Assistant Professor in Early Childhood Education, Program Chair, Terre Haute

AAS, BS, MS, Indiana State University

JONES, ROBERT, Assistant Professor in General Education, Terre Haute

BS, Purdue University

KING, DEANNA, Assistant Professor in Accounting, Division Chair, Terre Haute BS, Indiana University; MBA, Indiana State University, PhD, Indiana State University

KIRBY, BRYAN, Assistant Professor in General Education, Terre Haute

BA, Olivet Nazarene University; MA, Indiana State University

KREICKER, CYNTHIA, Instructor in Practical Nursing, Terre Haute

BS, MS, Indiana Wesleyan

LAWSON, JAMES, Assistant Professor in Manufacturiing and Industrial Technology, Terre Haute

BS, Indiana State University

LONG, JOE, Assistant Instructor in HVAC, Terre Haute

TC, Ivy Tech State College

LUMSDON, DONALD R., Assistant Professor in Automotive Technology, Program Chair, Terre Haute

BS, Indiana State University

MAHER, ELIZABETH, Assistant Professor in Life Sciences, Terre Haute

BS, St. Mary of the Woods; MS, Indiana State University

MARTIN, DENA, Instructor in Criminal Justice, Program Chair, Terre Haute

BA, JD, Indiana University

McCAMMON, CARRIE, Assistant Professor in Math, Program Chair, Terre Haute

BS, MS, Indiana State University

MOUNCE, TERRA, Assistant Instructor in Practical Nursing, Greencastle

AS, BS, Indiana State University

MURRAY, ROBERT, Associate Professor in Computer Information Systems, Program Chair, Terre Haute

BA, MS, Butler University

NICOSON, BERRY, Instructor in Paramedic Science, Program Chair, Terre Haute

AAS, Ivy Tech State College

OPELL, TOMMIE, Assistant Instructor in Practical Nursin, Terre Haute

BS, Indiana Wesleyan University

PAGE-BLACK, KAREN, Assistant Professor in Visual Communications, Terre Haute

BS, Hardin-Simmons University; MS, Indiana State University

PEEBLES, CHARLES, Assistant Instructor in Electronics, Computer Information Systems, Terre Haute

AAS, Ivy Tech State College

PURDUE-REECE, JENNIFER, Assistant Professor in Respiratory Care, Program Chair, Terre Haute

ART, BS, Indiana University; ASN, Excelsior College; MS, Ball State University

PURVIANCE, DONNA, Assistant Instructor in Practical Nursing, Terre Haute

BS, Mennonite College of Nursing

RASLEY, JAMES, Assistant Professor in Computer Information Systems, Terre Haute

AAS, Ivy Tech State College; BS, Pacific Western University

RONG, JIANREN, Assistant Professor in Design, Program Chair, Terre Haute

BSAE, Tianjin Institute of Technology; MS, Rose-Hulman Institute of Technology; MBA, Lancaster University

ROYCE, ROBIN, Instructor in Medical Assisting, Terre Haute

AS, Indiana State University; BS, Indiana Wesleyan University

SCHONBERGER, BECKY, Assistant Professor in Medical Assisting, Program Chair, Terre Haute

BS, Indiana State University; BS, University of Evansville

SCHROEDER, KENNETH, Assistant Professor in Computer Information Systems, Terre Haute

BS, Indiana State University; MBA, Indiana Wesleyan

SCHWENK, TERRI, Instructor in Practical Nursing, Terre Haute

AS, Vincennes University; BSN, MS, Indiana Wesleyan University

SHOTWELL, ROBERT, Associate Professor in Science, Division Chair, Terre Haute

BS, Rose-Hulman Institute of Technology; MS, Indiana State University

SISCOE, DONOVAN, Assistant Instructor, Terre Haute

AAS, Ivy Tech State College

SLYH, KATHLEEN, Associate Professor in AS Nursing, Terre Haute

BSN, University of Cincinnati

STULTZ, LESLIE, Associate Professor in General Education, Division Chair, Terre Haute

BS, MS, Indiana State University; PhD, Indiana State University

SUTTON, MARY, Assistant Instructor in Radiology Technology, Terre Haute

AAS, Ivy Tech State College

SWANK, DENISE, Assistant Professor in Radiology Technology, Terre Haute

AAS, Ivy Tech State College; BS, St. Mary of the Woods

THOMAS, PATRICIA, Assistant Professor in Math, Terre Haute

MLS, Indiana State University; MS, Indiana State University

TROUT-SWALLS, JANET, Assistant Professor in Business Administration, Division Chair, Terre Haute

BS, Indiana State University; MBA, Indiana Wesleyan University

VOLL, RANDALL, Instructor in Aviation Technology, Program Chair, Terre Haute

FAA Certified

WEBSTER, JANICE, Associate Professor in Science, Program Chair, Terre Haute

BS, MS, Indiana State University

WEUST, JAN, Instructor in Practical Nursing, Terre Haute

AS, Indiana State University; BS, MS, Indiana Wesleyan University

WIEL, JULIE, Instructor in AS Nursing, Terre Haute

BS, MS, Indiana State University

WILLIAMS, ANGELIA, Instructor in Practical Nursing, Terre Haute

AAS, Illinois Eastern Community College; BS, Indiana Wesleyan University; MS, University of Southern Indiana

WILLIAMS, CHAD, Instructor in Aviation Technology, Terre Haute

AS, Ivy Tech State College

WILSON, DEBRA, Instructor in Surgical Technology, Program Chair, Terre Haute

BS, MS, Indiana Wesleyan University

WISBEY, LOUISE, Instructor in Radiology, Terre Haute

AS, University of Evansville; BS, Indiana University

REGION 8

D'AMICO, CAROL, Chancellor

MS, EdD, Indiana University

LEE, KATHLEEN, Dean of Academic Affairs, Indianapolis

AS, MS, Indiana University; BS, Muskingun College; EdD, Ball State University

COUSERT, DARRELLE, Dean of Student Affairs, Student Life and Development, Indianapolis

BS, Indiana University; MS, Indiana State University; PhD, Purdue University

HINCHEY, MONICA, Dean of Student Affairs, Enrollment, Indianapolis

BA, Kendall College

ALFREY, DUANE C., Assistant Professor in Manufacturing and Industrial Technology, Indianapolis

AAS, Ivy Tech State College; BS, Columbia State University

ALTMAN, SUSAN, Assistant Professor in Paralegal, Progam Chair, Indianapolis

BA, MA, Eastern Kentucky University; JD, University of Louisville

ANDERSON, LANA, Assistant Professor in Medical Assisting, Indianapolis

BA, University of Massachusetts; MA Ball State University

ANDREWS, LORI, Assistant Professor in Medical Assisting, Program Chair, Indianapolis

AS, BS, MS, Indiana University

AULL, ANN G., Associate Professor in Early Childhood Education, Program Chair, Indianapolis

BS, Indiana University; MS, Indiana State University

BAISLEY, DEWEY, Assistant Professor in Social Science, Program Chair, Indianapolis

BGS, Indiana University; MA, Ball State University

BARNES, JOHN BRADEN, Instructor in Design Technology, Indianapolis

MS, Purdue University

BAUMER, MARGARET A., Assistant Professor in Office Administration, Indianapolis

AS, Miami Jacobs College of Business; BS, University of Cincinnati; MS, Indiana University

BECKER, LANA, Instructor in Communications, Indianapolis

BA, West Chester University; MA, Regent University

BENNETT, JANET, Assistant Professor in Human Services, Indianapolis

BS, MA, Ball State University

BIZUNEH, MOGES, Associate Professor in General Education, Indianapolis

BS, Haile Sallassie University; MS, Cornell University; PhD, Indiana University

BODIE, CAROL JUNE, Assistant Professor in Practical Nursing, Indianapolis

BS, St. Mary of the Woods

BOLINGER, THOMAS, Associate Professor in Business Administration, Indianapolis

BA, Butler University; MBA, Indiana University

BOURKE, MARY, Assistant Professor in Nursing, Indianapolis

ASN, Bacone College; MSN, Indiana University

BRICKER, JEFF, Instructor in Hospitality Administration, Program Chair, Indianapolis

AAS, Ivy Tech State College; BS, Indiana Wesleyan University; Certified Executive Chef

BROWN, MARY, Associate Professor in Practical Nursing, Indianapolis

BSN, MSEd, Indiana State University

CAMPBELL, BRENDA R., Assistant Professor in ASA English, Indianapolis

BA, University of North Florida; MA, Georgetown College

CARPENTER, LORENE, Assistant Professor in Nursing, Indianapolis

BSN, University of North Carolina

CARVER, STEVE, Instructor in Computer Information Systems, Indianapolis

AS, Purdue University; BA, Indiana University

CHATTERJEE, SHIKA, Assistant Professor in Practical Nursing, Indianapolis

BSN, MSN, Delhi University

CINKOSKE, BERNADETTE, Assistant Professor in Computer Information Systems, Indianapolis

BA, Indiana University

CLARKSON, CHERYL, Assistant Professor in Practical Nursing, Indianapolis
BSN, Indiana University; MSN, Ball State University

COLEMAN, BRY, Instructor in Surgical Technology, Program Chair, Indianapolis
TC, Community College of the Air Force

COMSTOCK, ERIC, Assistant Professor in Human Services, Program Chair, Indianapolis
BA, Michigan State University; MA, John F. Kennedy University

CRANFILL, KELLIE, Assistant Professor in Radiology, Indianapolis
AAS, Ivy Tech State College; BS, Indiana University; MS, Midwestern State University

DALZELL, JANE, Assistant Professor in General Studies, Program Chair, Indianapolis
BA, University of Indianapolis; MS, Butler University

DAUGHERTY, MARVIN L., Associate Professor in Computer Information Systems, Program Chair, Indianapolis
AAS, Ivy Tech State College; BS, Martin University, MS, Indiana State University

DEADY, BARBARA L., Associate Professor in Practical Nursing, Program Chair, Indianapolis
BSN, Indiana State University, MSEd, Indiana University

DEBOURBON, MICHAEL W., Associate Professor in Arts and Design, Division Chair, Indianapolis
BS, Southern Illinois University; MS, Indiana University

DICKMANN, PATRICIA, Assistant Professor in Early Childhood Education, Indianapolis
BS, Purdue University; MS, Nova University

DUNCAN, JAMES C., Associate Professor in Communications, Program Chair, Indianapolis
BS, Oakland City College; MDiv, Drew University; AM, DePauw University; EdD, Nova Southeastern University

DUNN, SHARON, Assistant Professor in Academic Skills Advancement, Assistant Division Chair, Indianapolis
BS, Ball State University; MS, Butler University

ENGLAND, THOMAS, Instructor in Hospitality Administration, Indianapolis
BA, University of Evansville

EVANS, JAMES, Assistant Professor in Anatomy and Physiology, Indianapolis
BS, MS, Indiana State University

FARMER, ALICE, Instructor in Nursing, Indianapolis
BSN, Indiana University

FAULK, TIMOTHY E., Assistant Professor in Public Safety, Indianapolis
AS, Indiana University; BS, University of New York

FERGUSON, CHRISTOPHER, Instructor in Automotive Technology, Indianapolis
AAS, Ivy Tech State College

FINNEY, RONALD DEAN, Assistant Professor in Automotive Technology, Program Chair, Indianapolis
AAS, Ivy Tech State College; BS, Indiana University

FLANIGAN, WILLIAM T., Associate Professor in Manufactring and Industrial Technology, Program Chair, Indianapolis
BS, Tri-State University; MS, Indiana Wesleyan University

FLICK, DANIEL, Instructor in Machine Tool Technology, Indianapolis
BA, Indiana University

FLUHARTY, LINDA KAY, Associate Professor in Nursing, Indianapolis
BSN, University of Evansville; MSN, Indiana University-Purdue University at Indianapolis

FOX, ALISA, Assistant Professor in Visual Communications, Indianapolis
BFA, Herron School of Art; MS, Indiana University

FOX, MELINDA, Associate Professor in General Education, Indianapolis
BS, MS, Indiana State University

GASSNER, CONNIE, Assistant Professor in Early Childhood Education, Indianapolis
BS, University of Maine; MS, Indiana University

GORSLINE, MICHAEL D., Associate Professor in General Education, Indianapolis
BA, Indiana University; MA, Ball State University

GRAY, HARRY E., Assistant Professor in Accounting, Program Chair, Indianapolis
BS, Butler University; CPA

GRIFFIN, LAURENE, Instructor in Hospitality Administration, Indianapolis
AAS, Ivy Tech State College; BS, Indiana Wesleyan University; Certified Executive Chef

HALL, MICHAEL C., Associate Professor in Computer Information Systems, Indianapolis
BS, MS, Purdue University

HALL, VICTORIA, Instructor in Computer Information Systems, Indianapolis
MBS, Indiana Institute of Technology

HAMILTON, MARILYN S., Professor in General Education, Indianapolis
BS, Purdue University; MS, Butler University

HARDING, DERRICK W., Assistant Professor in General Education, Indianapolis
BA, College of Wooster; MA, Indiana University

HARDY, MELANIE, Instructor in Nursing, Indianapolis
BSN, Indiana Wesleyan University

HAVER, WANDA L., Assistant Professor in Surgical Technology, Program Chair, Indianapolis
BS, Martin University

HAWKINS, STEVE, Instructor in Machine Tool Technology, Indianapolis
AS, Vincennes University; BS, Purdue University

HOLLENBERG, KRISTA, Assistant Professor in Paralegal, Indianapolis
BA, Manchester College; MA, JD, Indiana University

HOLLOWELL, RONALD L., Professor in General Education, Indianapolis
BS, University of Indianapolis; MA, Ed.D, Indiana University

HOSKINS, LARRY E., Assistant Professor in Public Safety, Program Chair, Indianapolis
AAS, Ivy Tech State College; BS, Southern Illinois University

HUETTL, KEITH, Instructor in Automotive Technology, Indianapolis
AAS, Ivy Tech State College; BS, Ferris State University

IMEL, JANET E., Professor in Early Childhood Education, Program Chair, Indianapolis
BS, MS, Ball State University

IRWIN, JAMES W., Assistant Professor in Manufacturing and Industrial Technology
AAS, Ivy Tech State College; BS, Martin University, MS Oakland University

JABLONSKI-POLK, TERESA, Associate Professor in Health Sciences and Public Services, Division Chair, Indianapolis
BA, University of Kentucky; MSW, Washington University

JONES, KENNETH, Insructor in Business Education, Indianapolis
MBA, Indiana University

KECK, ROBERT JOE, Professor in Human Biology, Indianapolis
BS, University of Southern Indiana; MS, Indiana State University; MS, College of St. Francis

KOLLER, ANGELA M., Assistant Professor in Practical Nursing, Indianapolis
BSN, Purdue University; MSN, University of Phoenix

KRAMER, JANET A., Associate Professor in Nursing, Program Chair, Indianapolis
BSN, Ursuline College; MSN, University of Akron

LAFOUREST, JUDITH, Instructor in General Education, Indianapolis
BA, MAT, Indiana University

LAND, CHRIS, Assistant Professor in General Education, Indianapolis

BS, MAT, Purdue University

LEIGH, GREGORY, Assistant Professor in Computer Information Systems, Indianapolis

BS, MS, Indiana University

LESURE, JENNIFER, Instructor in Accounting, Indianapolis

MBA, Indiana Wesleyan University

LEVERETTE, DEBRA, Assistant Professor in Office Administration, Program Chair, Indianapolis

BS, Ball State University; MS, Indiana University

LEWIS, WILLIAM ALAN, Instructor in Visual Communications, Indianapolis

MS, Indiana University

MAGERS, AMBER, Instructor in Respiratory Care, Indianapolis

AAS, Ivy Tech State College; BS, Indiana University

MAGNANT, PETER T., Associate Professor in Health Sciences and Public Services, Indianapolis

AA, BS, Indiana University; BA, St. Mary's College; MS, EdD, Indiana University

MAGNUSON, MARK, Associate Professor in General Education, Division Chair, Executive Director of Community Campuses, Indianapolis

BA, BEd, MEd, University of Saskatchewan; PhD, University of North Dakota

MASSEY, CONCHITA, Assistant Professor in Practical Nursing, Indianapolis

BSN, Indiana University; MAEd, Ball State University

MARTIN, BROOKE, Assistant Professor in Practical Nursing, Indianapolis

BSN, Eastern Kentucky University; MSN, Vanderbilt University

MCQUINN, ELIZABETH, Assistant Professor in Nursing, Indianapolis

BSN, Ball State University; MSN, Indiana University

MEADOWS, CHRIS, Instructor in Automotive Technology, Indianapolis

AS, Indiana University

MEEK, MARY E., Assistant Professor in Nursing, Indianapolis

ASN, University of Indianapolis; BSN, MS, Ball State University

MERLE, JILL A., Associate Professor in Business Administration, Indianapolis

BS, Purdue University; MBA, Indiana University

MEYER, TEISHA, Assistant Professor in General Education, Indianapolis

BS, University of Indianapolis

MILLER, DAVID E., Associate Professor in Electronics and Computer Technology, Program Chair, Indianapolis

AAS, Ivy Tech State College; BS, Purdue University; MS, Indiana State University

MILLINER, SEAN, Instructor in Computer Information Systems, Indianapolis

BA, Glenville State College

MILLS, TRACY, Instructor in Biotechnology, Indianapolis

BS, MS, Tennessee Tech University

MOMAN, FRANKIE L., Associate Professor in Business Administration, Program Chair, Indianapolis

BS, Murray State University; MS, Oakland City University

MUNDT, JAMES D., Assistant Professor in Mathematics, Indianapolis

AB, Hanover College; JD, Indiana University

MURPHY, TODD, Assistant Professor in Biotechnology, Program Chair, Indianapolis

BS, MS, University of Kentucky

NOE, J. STEPHEN, Instructor in Anatomy and Physiology, Indianapolis

BS, University of Notre Dame; MS, Illinois State University

OSMUNDSON, DAN, Associate Professor in Visual Communications, Program Chair, Indianapolis

BA, Saint Olaf College; MFA, University of Wisconsin

PAPROSKI, SUSAN, Assistant Professor in Radiology, Indianapolis

BS, Indiana University; MA, Ball State University

PEREZ, JOHN, Instructor in Visual Communications, Indianapolis

BS, Ball State University

PETTIT, JAMES E., Assistant Professor in Manufacturing and Industrial Technology, Indianapolis

BS, Martin University

PIERCE, DEBRA, Assistant Professor in Early Childhood Education, Indianapolis

BA, North Park University; MS, Nova University

PREER, JAMES C., Associate Professor in Science, Indianapolis

BA, Swarthmore College; BS, Columbia University; PhD, California Institute of Technology

RAIRDON, JULIA, Assistant Professor in Nursing, Indianapolis

BSN, McNeese State University; MSN, Virginia Commonwealth University

RAMSEY, SUSAN B., Associate Professor in English, Indianapolis

BS, MS, Indiana University

RAY, REBECCA, Instructor in Visual Communications, Indianapolis

BFA, Herron School of Art

REKLAU, MARYANN A., Associate Professor in Nursing, Indianapolis

ASN, Staten Island Community College; BSN, MSN, Indiana University

RICE, MARY KATHLEEN, Associate Professor in English, Indianapolis

BA, MS, Indiana University Purdue University at Indianapolis

RULE, S. RENEE, Instructor in English, Indianapolis

BA, Indiana University; MFA, Goddard College

RUSU, LUCIA, Professor in Science, Program Chair, Indianapolis

BS, Babes-Bolyai University; MS, Purdue University

SASSER, JOHN, Associate Professor in Mathematics, Program Chair, Indianapolis

BA, University of Maryland; MEd, Columbus State University; MS, PhD, University of Southern California

SCHOWE, EDWIN, Instructor in Chemistry, Indianapolis

BA, MS, Purdue University; MA, Ball State University

SCHUCK, CAROE, Assistant Professor in English and Spanish, Program Chair, Indianapolis

BS, Ball State University; MA, Butler University

SENSENBRENNER, OWEN L., Assistant Professor in Manufacturing and Industrial Technology, Indianapolis

BS, MS, Indiana State University

SHARON, STEPHEN, Assistant Professor in Manufacturing and Industrial Technology, Indianapolis

BS, Purdue University; MS, Iowa State University

SHIRZADI, SIMIN, Assistant Professor in Social Science, Indianapolis

BA, MA, EdS, Western Michigan University; EdD, Nova Southeastern University

SISEL, ANN, Associate Professor in Radiologic Technology, Program Chair, Indianapolis

BS, Marian College-Fond du Lac, Wisconsin; MS, Indiana University

SMITH, ALLEN N., Assistant Professor in Social Science, Indianapolis

AB, Hope College; AM, University of Michigan; JD, Indiana University

SMITH, DIANE, Assistant Professor in Early Childhood Education, Indianapolis

BS, Ohio State University; MS, Georgetown College

STONE, DIANE, Assistant Professor in Business Administration, Indianapolis

BS, MS, Indiana Wesleyan

STOWE, MARCUS D., Associate Professor in Respiratory Care, Program Chair, Indianapolis

AS, Indiana University; BS, St. Francis University; MS, Indiana University

Tarricone, Bonnie, Assistant Professor in Anatomy and Physiology, Indianapolis

BA, Wheaton College; MA, The William Paterson College of New Jersey; PhD, Indiana University

Teeguarden, Janet, Associate Professor in General Education, Indianapolis

BA, DePauw University; MS, Indiana State University; MA, National-Louis University

Thomas, Margaret S., Associate Professor in General Education, Indianapolis

BS, Winthrop University; MA, Indiana State University

Trusty II, Richard T., Assistant Professor in Design Technology, Program Chair, Assistant Division Chair, Indianapolis

BS, Purdue University

Updike, Barton, Assistant Professor in Social Science, Indianapolis

AB, Hanover College; MDiv, Yale University

Ward, Denise, Assistant Professor in Practical Nursing, Indianapolis

ASN, Indiana University; BSN, Indiana University-Purdue University at Indianapolis

Ward, Judy, Instructor in Medical Assisting, Indianapolis

BS, Ball State University

Warner, Laura, Assistant Professor in Practical Nursing, Indianapolis

BSN, Oakland University

Whitfield, Willie, Associate Professor in Criminal Justice, Program Chair, Indianapolis

BA, MS, Alabama A & M University

Wilson, Michael, Instructor in English, Indianapolis

BS, California University of Pennsylvania; MA, Ball State University

Wilson, Dan, Instructor in Respiratory Care, Indianapolis

AAS, Ivy Tech State College, Indianapolis

Wilson, Rose, Instructor in Early Childhood Education, Indianapolis

BS, MEd, California University of Pennsylvania

Wood, Christopher, Professor in General Education, Indianapolis

BA, MA, Indiana University

Wurtz, Robert L., Assistant Professor in Design Technology, Indianapolis

AS, BS, Purdue University; MS, Indiana State University

REGION 9

Steck, James, Chancellor, Richmond

BS, MS, Ohio State University

Tincher, Steven, Dean of Academic Affairs, Richmond

BS, MA, Ball State University; PhD, Regent University

Pennington, Sabrina, Dean of Student Affairs, Richmond

BA, University of Indianapolis; MS, Ball State University

FACULTY

Anderson, Jillene K., Professor in Nursing, Program Chair, Richmond

BS, Indiana Wesleyan University; MS, Ball State University, RN

Ayton, Eugene G., Assistant Professor in Business Administration, Program Chair, Richmond

BS, Morgan State University; MA, Ball State University

Bechtel, Barbara E., Assistant Professor in Practical Nursing, Richmond

BSN, Indiana University; RN

Blakely, Curtis, Assistant Professor in Computer Information Systems, Program Chair, Richmond

AS, BS, Indiana University; MBA, Jones International University

Bond, Idris, Associate Professor in Health Sciences, Division Chair, Richmond

BS, MS, Indiana University; RN, CMA

Brown, Roderick, Associate Professor in English, Program Chair, Richmond

BA, University of Notre Dame; MS, MA, Indiana University

Brustkern, Maureen E., Professor in Early Childhood Education, Program Chair, Richmond

BS, Ohio State University; MS, Wright State University; PhD, University of Dayton

Cline, Glenda, Assistant Professor in Practical Nursing, Richmond

BS, Indiana University; RN

Cook Ramona, Instructor in Construction Technology, Program Chair, Richmond

AAS, Ivy Tech State College; AA, BGS, Indiana University; MS, Indiana Wesleyan University

Ferguson, Jeanne, Assistant Professor in Anatomy and Physiology and Biology, Richmond

BS, Marian College; MA, Ball State University

Frantz, Robert M., Assistant Professor in Automotive Technology, Program Chair, Richmond

AAS, Ivy Tech State College; BA, Indiana Wesleyan University; ASE Master Mechanic; ASE Master Machinist

Gabbard, Billie Jo, Instructor in Practical Nursing, Progam Chair Richmond

TC, ASN, Ivy Tech State College; BSN, Indiana University; MSN, University of Phoenix; RN

Guard, Kimberly, Instructor in Nursing, Richmond

BSN, Indiana Wesleyan University; RN

Graesser, William M., Professor in Mathematics, Division Chair, Richmond

BA, Otterbein College; MAT, Webster University

Harvey, Louis, Assistant Professor in Manufacturing and Industrial Technology, Program Chair, Connersville

AAS, BS, ITT Technical Institute

Johnson, Jason, Instructor, Computer Information Systems, Richmond

BS, MS, Indiana Wesleyan University

Kushniroff, Melinda, Instructor in Accounting, Program Chair, Richmond

AAS, Miami University; BS, University of Cincinnati; MBA, Xavier University

Oler, Ronald, Associate Professor in Office Administration, Program Chair, Richmond

AAS, Ivy Tech State College; BS, MS, Indiana Wesleyan University

Phares, Vanessa, Instructor, Practical Nursing, Richmond

ASN, Indiana University; BSN, Indiana Wesleyan University; RN

Plankenhorn, Kathryn, Instructor in Medical Assisting, Program Chair, Richmond

TC, Ivy Tech State College; ASN, Regents College; BSN, Indiana Wesleyan University; RN

Reisinger, Sarah, Assistant Instructor, Tutoring and Labs, Richmond

BS, Purdue University

Stokes, James, Instructor in Manufactring and Industrial Technology, Department Chair, Richmond and Connersville

BA, MA, Ball State University

Swihart, Anna, Instructor in Health Sciences, Richmond

BS, Ohio University; MS, Ball State University

Terrell, Peggy J., Professor in Office Administration, Division Chair, Richmond

BS, Indiana State University; MA, Ball State University

Thurston, Sheryl L., Associate Professor in Nursing, Richmond

BSN, MA, Ball State University; MSN, University of Phoenix; RN

Ward, Barbara, Assistant Professor in Practical Nursing and Nursing, Richmond

AS, BS, Indiana University; RN

WITTER, KELLY, Instructor in Practical Nursing, Richmond
ASN, BSN, Indiana University; MSN, University of Phoenix; RN

WILSON, MARC L., Associate Professor in General Education, Richmond
BA, MA, Ball State University

REGION 10

HOGAN, JOHN, Chancellor, Columbus
BS, MA, Western Kentucky University; PhD, Indiana State University

HINE, ROSALIE J., Dean of Academic Affairs, Columbus
BS, MS, EdD, Ball State University

BINGHAM, ROGER, Dean of Student Affairs
BA, MA, University of Dayton

FACULTY

ADKINS-LITTRELL, MAXINE, Associate Professor in General Education, Columbus
BA, Indiana Central College; MA, University of Indianapolis

ALENDUFF, MARTIN, Assistant Professor in Anatomy and Physiology, Columbus
BS, Butler University; MS, Indiana State University

ANDERSON, MARIBETH, Assistant Professor in General Education, Division Chair, Columbus
BA, Indiana University; MA, Butler University

BAKER, GENEVA, Professor in Health Sciences, Division Chair, Columbus
AAN, BSN, MSN, Indiana University

BARKER, DONA, Instructor in Nursing, Columbus
BA, Indiana University

BREEDING, JUDY, Instructor in Nursing, Columbus
BA, Indiana University

BRIGGS, JOYCE, Instructor in Nursing, Columbus
BSN, Elmhurst College; MSN, St. Xavier University

BURTON, JANET, Instructor in Nursing, Columbus
BSN, Bob Jones University; MSN, University of Alabama

CAIN, WENDY, Instructor in Anatomy and Physiology and Microbiology, Columbus
BA, Olivet Nazarene University

CANINE, JILL, Professor in Computer Information Systems, Program Chair, Columbus
BA, Hanover College; MA Ball State University

DEPAUL, LEWIS, Associate Professor in Business, Division Chair, Columbus
BS, Youngstown State University; MBA, Indiana University

DOUGHERTY, RONALD, Professor in Business Administration and Accounting, Program Chair, Columbus
BS, Indiana University; MS, Indiana Wesleyan University

DUAN, XIN-RAN, Professor in Design Technology, Division Chair, Columbus
BS, Xi'an Jiao-tong University; MS, University of Oklahoma; PhD, Indiana State University

GAUDIN, ANTHONY, Professor in Science, Program Chair, Columbus
BS, MS, PhD, University of Southern California

GILES, CAROLYN, Associate Professor in General Education, Columbus
BA, MS, PhD, University of Southern California

GRALE, GREGORY, Associate Professor in General Education, Columbus
BS, MS, Indiana University

HADLER, KIM, Instructor in Nursing, Columbus
BA, MA, Indiana University

HAMMERSLEY, PHIL, Assistant Professor in General Education, Columbus
BA, Olivet Nazarene College; MS, Indiana University

HARDEN, TERESA, Assistant Professor in Nursing, Columbus
BA, Indiana University

HAZA, KIM, Assistant Instructor in Manufacturing and Industrial Technology, Program Chair, Columbus
BS, Indiana State University

HUNTINGTON, SANDY, Instructor in Nursing, Columbus
BSN, MSN, Indiana University; MBA, Indiana Wesleyan University

JACKSON, ROBERT, Assistant Professor in Accounting, Columbus
BS, MA, Bowling Green State University

LAMBERT, LISA, Instructor in Nursing, Columbus
BA, Indiana Wesleyan University

LEWIS, ELOISE, Associate Professor in Nursing, Columbus
BA, MA, Adelphi University

MANZIONE, KAREN, Instructor in Nursing, Columbus
BSN, University of Mississippi; MSN, University of Phoenix

MCPHERSON, KAREN, Assistant Professor in Criminal Justice, Program Chair, Columbus
BA, College of the Ozarks; MA, Lincoln University; ABD, Ohio State University

MILLER, MARCY, Associate Professor in Design Technology, Columbus
BS, Purdue University; MS, Indiana State University

NISSEN, DON. E., Associate Professor in Visual Communications, Columbus
BA, Buena Vista College; MA, University of Kansas

NOLTING, BONNIE, Professor in Office Administration, Program Chair, Columbus
BS, MS, Indiana University

NORRELL, MARY PATRICIA, Professor in Nursing, Program Chair, Columbus
BSN, Ball State University; MS, Indiana University

RAGLE, BRENDA, Assistant Professor in Early Childhood Education, Program Chair, Columbus
BA, Indiana University; MBA, Indiana Wesleyan University

SHEETS, SUSAN, Assistant Professor in Surgical Technology, Program Chair, Columbus
AAS, Ivy Tech State College; AS, BS, Purdue University

SIMS, CHARLES, Instructor in Paramedic Science, Program Chair, Columbus
BA, Indiana University; State Certified EMT Paramedic

TAYLOR, JUNE, Associate Professor in Nursing, Columbus
BA, Ohio State University; MA, Ball State University

TODD, JANET, Instructor in Nursing, Columbus
BA, Indiana Wesleyan University

WALTZ, SUSAN, Associate Professor in Nursing, Program Chair, Columbus
BSN, Indiana University; MA, Ball State University

WANG, PEI WEI, Associate Professor in Manufacturing and Industrial Technology, Columbus
BS, Shanghai Institute of Mechanical Engineering; MS, University of Missouri

WILSON, JONATHAN, Professor in Visual Communications, Division Chair, Columbus
BFA, San Francisco Art Institute; MFA, Indiana University

WONNING, JUDY, Assistant Professor in Nursing, Columbus
BS, Indiana University

WYOMING, JUDY, Assistant Professor in Nursing, Columbus
BS, Indiana University

REGION 11

HELMS, JAMES, Chancellor

BS, Hanover College; MS, EdS, Xavier University

HEIDERMAN, DON, Campus Dean/Dean of Student Affairs, Madison

BA, Indiana State University

GRAVER, MARK, Campus Dean/Associate Dean of Academic Affairs

BS, Indiana University; MS, Central Michigan University

MOORE, L. JOE, Dean of Academic Affairs

AB, PhD, Indiana University

FACULTY

ADAMS, CORA, Assistant Professor in Practical Nursing, Madison

BSN, MSN, Indiana University

CAROLUS, CATHY, Program Chair, General Education and Support Services, Lawrenceburg

BA, Connecticut College; MA, Xavier University

CARTWRIGHT, SUSAN, Assistant Professor, Computer Information Systems, Madison

BS, Indiana Wesleyan University; MS, Indiana State University

DADOSKY, PAUL, Associate Professor in Computer Information Systems, Lawrenceburg

BS University of Kentucky; MS, Xavier University

DISCH, THERESA, Medical Assisting Program Chair, Lawrenceburg

AS, Vincennes University, BS, Indiana Wesleyan

DORSEY, LAURIE E., Associate Professor in Associate of Nursing Program, Madison

BS, Ball State University; MSN, Indiana University

ERICKSON, JOHN L., Associate Professor, General Education and Support Services, Madison

BA, Indiana State University; MS University of Kentucky

FITZPATRICK, STACEY, Program Chair in General Education and Support Services, Madison

BS, MS, Indiana University; MS, Ball State University

GARNER, ANNABET, Program Chair, Medical Assisting, Madison

AS, Ivy Tech State College

GEGLEIN, RICHARD E., Department Chair, Accounting and Business Administration, Madison

BA, Hanover College; MBA, Indiana Wesleyan

GOODWIN, BETH, Assistant Professor in Office Administration, Batesville

BS, Indiana University; ME, Indiana State University

GREER, RUTH A., Program Chair in General Education and Support Services, Madison

BA, University of Florida; MS, Indiana State University

HALL, TAMARA L., Assistant Professor in Associate of Nursing Program, Madison

BSN, University of Evansville; MSN, Indiana University

HELMS, REBECCA, Associate Professor of Business and Accounting, Madison

BS, University of Evansville; MS, Indiana State University

KRISTOFF, STEVEN, Program Chair, General Education and Support Services, Lawrenceburg

BS, MS, PhD, Indiana University

LAUBER, CYNTHIA, Assistant Professor in Practical Nursing, Madison

BSN, Indiana Wesleyan; MSN, Purdue University

MARPLE, DONNA, Program Chair, General Education and Support Services, Lawrenceburg

BA, Marian College

MCKAY, SUZANNE, Assistant Professor in Nursing, Lawrenceburg

BSN, Indiana Wesleyan University; MA, University of Cincinnati

MCILVAIN, BETH, Assistant Professor, General Education and Support Services, Madison

BA, Miami University

MEDYNSKI, THOMAS, Assistant Professor, General Education and Support Services, Madison

BA, University of Chicago; MS, Northwestern University; MA, PhD, Indiana University

MORTON, JENNIFER, Associate Professor in Accounting and Business, Lawrenceburg

BS, Miami University; MBA, Xavier University

NICKAS, JEANETTE, Assistant Professor in Office Administration, Madison

BA, University of Illinois; MA, Ball State University

PROBST, MATTHEW, Department Chair in Accounting and Business, Lawrenceburg

BS, Indiana University; MBA, Xavier University

RAHE, PAT A., Professor in General Education and Support Services, Lawrenceburg

BS, Indiana University; MS, Ball State University

SANCHEZ, ELIZABETH, Professor in General Education and Support Services, Madison

BS, DePauw University; MA, Central Michigan University

SHAPINSKY, GENE A., Department Chair, Nursing, Madison

BSN, University of the State of New York; MSN, Bellarmine College: PhD, Indiana State University

SHARP, KAREN, Associate Professor in General Education and Support Services, Lawrenceburg

AA, Concordia Lutheran College; AAB, BS, M.Ed, Miami University of Ohio

SIMMONS, GEORGIA, Instructor in Practical Nursing, Madison

BSN, Eastern Kentucky University

STEPHENS, EMILY A., Department Chair, Computer Information Systems and Office Administration, Madison

BS, California State University; MS, Indiana State University

STERRETT, DAVID, Assistant Professor in Electronics and Computer Technology, Lawrenceburg

BSEE, Virginia Tech; MSEE, University of Virginia

THURNALL, CLARA J., Associate Professor in Associate of Nursing, Madison

BS, Indiana University; MS, Indiana University – Purdue University of Indianapolis

TACKETT, GEORGE, Program Chair, Electronics and Computer Technology, Madison

AAS, Ivy Tech State College; BS, Rose Hulman

YOWLER, HOLLACE, Associate Professor in Practical Nursing, Madison

BSN, University of Kentucky; MSN, University of Southern Indiana

REGION 12

SCHENK, DAN, Chancellor

BS, University of Southern Indiana; MBA, University of Evansville; PhD, Indiana State University

NAAS, JAMES, Dean of Academic Affairs

BS, MS, PhD, Southern Illinois University

GARRETT, DEBORAH, Dean of Student Affairs, Evansville

BS, MS, Western Illinois University; EdD, Northern Arizona University

ADAMS, JONI, Instructor in Associate Degree Nursing, Evansville
BS, Western Kentucky University; MS, University of Evansville

AMSLER, JEANNE, Assistant Professor in Liberal Arts, Evansville
MS, MFA. Indiana State University

AULICH, SUMMER, Assistant Professor in Medical Assisting, Evansville
AAS, Ivy Tech State College; BS, University of Southern Indiana

BAILEY, SANDRA C., Program Chair, Associate Professor in Business Administration, Evansville
BS, University of Southern Indiana, MBA, University of Evansville

BASS, PAMELA, Instructor in Associate Degree in Nursing, Evansville
AS, BA, University of Evansville; MS, University of Southern Indiana

BUNNER, LANA L., Program Chair, Professor in Office Administration, Evansville
BS, MS, University of Southern Indiana

CHAPMAN, CAROLE, Assistant Professor of English Literature, Evansville
BA, MA, University of Evansville

CLIFTON, LONNIE, Assistant Professor in Computer Information Systems, Evansville
AS, BS, MS, Southern Illinois University; MS, University of Evansville

COMBS, STEVEN B., Professor/Instructional Technologist, Evansville
BS, MS, Murray State University

COUGHLAN, S. DANETTE, Instructor in Computer Information Systems, Evansville
BS, University of Southern Mississippi; MS, Soutwest Missouri State University

COZART, KELLY, Instructor in Environmental Design, Program Chair, Evansville
BS, University of Illinois; MA, University of Southern Indiana

DENTINO, MARY JO, Division Chair, Professor in Business, Evansville
BS, MS, University of Southern Indiana; PhD, Indiana State University

DIEMER, JEANIE L., Associate Professor in Business Administration, Evansville
BS, Eastern Illinois University; MBA, University of Southern Indiana

DILLMAN, MATTHEW A., Professor in General Education, Evansville
BS, University of Southern Indiana; MS, Murray State University, MENG, University of Louisville

DURBIN, JOHN, Assistant Professor in Manufacturing and Industrial Technology, Program Chair, Evansville
AAS, Ivy Tech State College; BS, Franklin University

DYE, SUSAN E., Professor in Associate Degree Nursing, Program Chair, Evansville
BS, MS, University of Evansville

EHLEN, MARGARET K., Professor in Academic Skills Advancement, Evansville
BA, University of Illinois-Urbana; MA, Northeastern Illinois University

FLYNN, SHERRI, Instructor in Business and Office Administration, Evansville
BA, Texas A & M at Corpus Christi; MBA, Embry-Riddle Aeronautical University

GORE, KAREN W., Associate Professor in Business Administration, Evansville
BA, MBA, University of Evansville

GRAMMER, NANCY, Associate Professor in English Literature, Program Chair, Vincennes
MA, University of Evansville

GREESON, CYNTHIA B., Program Chair, Associate Professor in Accounting, Evansville
BS, Central Michigan University, MBA, University of Southern Indiana

HARTGROVE, EARL, Assistant Professor in Building Construction Management, Program Chair, Evansville
BS, North Carolina State University; MBA, University of Southern Indiana

HEIM, BARBARA H., Associate Professor in Academic Skills Advancement, Evansville
BA, University of Evansville, MS, University of Southern Indiana

HELLER, WILLIAM C., Program Chair, Associate Professor in Computer Information Systems, Evansville
BA, Defiance College, MS, St. Francis College

HENDRICKSON, KEVIN, Instructor in Paramedics, Program Chair, Evansville
AAS, Ivy Tech State College

HESS, MARY, Instructor in Human Services, Program Chair, Evansville
BS, University of Southern Indiana; MA, Western Kentucky University

HINKLE, JULIA, Associate Professor in Surgical Technology, Evansville
BS, Indiana Wesleyan University, MS, University of Evansville

HOSTETLER, JOE, Instructor in Visual Communications, Evansville
BA, Purdue University; MS, Indiana University

HOWARD, MICHAEL A., Associate Professor in Physics, Evansville
BS, Murray State University, MEP, University of Virginia

JENNINGS, EDWIN H., Assistant Professor in Manufacturing Technology, Evansville
BS, Murray State University

JINDRICH, SUSAN, Assistant Professor in Early Childhood Education, Evansville
AS, University of Southern Indiana; BS, Auburn University; MS, Indiana State University

JOBE, NANCY, Associate Professor in Office Administration, Evansville
BS, Wayne State University, MBE, Eastern Michigan University

KARZAY, NAZAR M., Associate Professor in Electronics Technology, Evansville
BS, Kabul University, MS, Indiana State University

KATOWITZ, CAROL, Associate Professor in Early Childhood Education, Program Chair, Evansville
BS, Purdue University; BS, University of Southern Indiana; MA, University of Evansville

KIEFER, CHRISTOPHER, Instructor in Criminal Justice, Program Chair, Evansville
BS, MS, Indiana State University

LAMMERS, MARK P., Program Chair, Professor in Automotive Technology, Evansville
AAS, Ivy Tech State College, BS, Eastern Illinois University, MS, Indiana State University

LEWIS, ANN E., Professor in Office Administration, Evansville
AS, Wabash Valley College, BS, MS, Southern Illinois University

LUTZ, KITTY, Assistant Professor in Medical Assisting, Evansville
BS, MS, University of Southern Indiana

McCUTCHAN, JUDITH A., Professor in Associate Degree Nursing, Division Chair, Evansville
AS, BS, MS, University of Evansville

MERLE, DON, Assistant Professor in Manufacturing and Industrial Technology, Evansville
BS, Purdue University

MEIBALANE, PAMELA, Instructor in Associate Degree Nursing, Evansville
BS, MS, University of Evansville

MOTYCKA, ANN, Professor in Associate Degree Nursing, Evansville
AD, Sinclair Community College; BS, MS, University of Evansville

NIEHAUS, MICHAEL A., Program Chair, Assistant Professor in Electronics Technology, Evansville
BS, University of Southern Indiana

OATIS, CAROLYN S., Associate Professor in Biology and Microbiology, Evansville
BS, St. Louis University, MS, University of Southern Indiana

O'DANIEL, SCOTT, Assistant Professor in Speech and Interpersonal Communication, Evansville

BA, MA, University of Southern Indiana

OFFERMAN, J. STEPHEN, Associate Professor in Business Administration, Evansville

BS, MBA, University of Evansville

PERRY, BILL, Instructor in Industrial Maintenance Technology, Evansville

BSME, University of Evansville; MA, Bastyr University

PETTY, MICHAEL E., Division Chair, Professor in General Education , Evansville

BA, Indiana State University, MA, University of Evansville, PhD, Indiana State University

RENDLEMAN, BARBARA, Assistant Professor in General Education, Program Chair, Evansville

BS, University of Illinois, MS, University of Wisconsin-Milwaukee

RIES, ANTONINA, Assistant Professor in Chemistry, Evansville

BS, MS, St. Petersburg University

ROBB, TRACY, Instructor in Visual Communications, Evansville

BS, University of Southern Indiana, MFA, Savannah College of Arts and Design

SATTERFIELD, MICHAEL A., Program Chair, Assistant Professor in Design Technology, Evansville

BS, Ball State University

SCHMIDT, ALICE E., Associate Professor in Practical Nursing, Evansville

BS, Evansville College School of Nursing, MS, University of Evansville

SHULL, DONALD, Program Chair in General Education, Evansville

MS, University of Evansville; EdD, Indiana University

SILLIMAN, JEANNE C., Professor in Academic Skills Advancement, Evansville

BA, Saint Benedict College, MA, University of Evansville

SMITH, MARK, Instructor in Design Technology, Evansville

BSME, University of Evansville; MBA, University of Southern Indiana

SWAIN, CAMILLA, Assistant Professor in Academic Skills Advancement, Evansville

BA, Certificate in Youth Ministry, Taylor University

SWARTZ, M. JANE, Professor in Associate Degree Nursing, Evansville

AD, BS, MS, University of Evansville

TICHENOR, JANE, Program Chair, Professor in Academic Skills Advancement, Evansville

BS, Oakland City College, MS, Indiana University

UHDE, KARLA G., Assistant Professor in Practical Nursing, Evansville

BS, Indiana University, MS, University of Pennsylvania

WARREN, GREGORY A., Assistant Professor in Automotive Technology, Evansville

AA, Parkland College, BA, Southern Illinois University; MS, Southern Illinois University

WEISS, JAN, Assistant Professor in Mathematics, Program Chair, Evansville

BS, MS, University of Southern Indiana

WHIPPLE, REBECCA L., Associate Professor in Associate Degree Nursing, Program Chair, Evansville

BS, MS, University of Evansville

WHITE, VICTORIA R., Associate Professor in Accounting, Evansville

BS, MBA, University of Southern Indiana

WILDER, TAMMY, Assistant Professor in Practical Nursing, Evansville

BS, MS, University of Evansville

WILTSIE, LISA, Assistant Professor in Academic Skills Advancement, Evansville

MS, Oakland City University

REGION 13

HANDY, TY J., Chancellor

BS, Western Kentucky University; MBA, Drexel University; EdD, University of Memphis

SMITH, CHERRY KAY, Interim Dean of Academic Affairs

BS, Western Kentucky University; MS, University of Kentucky; ABD, University of Louisville

BUTLER, LAURA N., Dean of Student Affairs

BS, Cumberland College; MEd, University of Louisville

FACULTY

BENNETT, DAVID R., Associate Professor in General Education, Sellersburg

BS, MS, Indiana State University; MA, University of Delaware; EdD, University of South Carolina

BROUGHTON, TONYA, Assistant Professor in Associate of Science in Nursing, Sellersburg

LPN, ASN, Ivy Tech State College; BSN, Indiana University Southeast; RN, MSN, Bellarmine University

BURTON, PAMELA, Instructor in Medical Assisting, Program Chair, Sellersburg

CMA, Jefferson State Vocational School, CPT, LRT

CALDWELL, BILLIE JUNE, Assistant Professor in Associate of Science in Nursing, Sellersburg

LPN, ASN, Ivy Tech State College; BSN, Indiana University Southeast; RN, MSN, Bellarmine University

CLARK, BONNIE L., Instructor, Associate of Science in Nursing, Sellersburg

ASN, Ivy Tech State College; BSN, Indiana University Southeast

CLIFTON, DAVID L., Associate Professor

BSC, University of Louisville; MBA, University of Kentucky; EdD, Spalding University

CONGLETON, TERRI, Instructor in Associate of Science in Nursing, Sellersburg

BSN, Western Kentucky University

DILBECK, JACK, Associate Professor in Business, Division Chair, Sellersburg

BBA, McKendree College; MBA, Webster University

EDWARD, DAVID, Instructor in Design Technology, Sellersburg

BS, West Virginia University; MBA, University of Louisville

FITZNER, BEVERLY, Associate Professor in Office Administration, Sellersburg

BS, Indiana University; MS, State University of New York

FREEMAN, BARBARA, Associate Professor in Practical Nursing, Sellersburg

BSN, Midwestern State University; MS, Indiana State University

GREGORY, MICHAEL, Associate Professor in Anatomy and Physiology, Sellersburg

BS, MS, Eastern Kentucky University; MS, University of Louisville

HALL, NATALIE D., Instructor in Practical Nursing, Sellersburg

BSN, Murray State University

HOISCH, MICHAEL, Associate Professor in Business Administration, Sellersburg

AAS, City College of New York; BAA, Bernard Baruch College; MA, Bellevue University; EdD, University of Louisville

HORNUNG, BRIAN, Assistant Professor in HVAC, Sellersburg

AAS, Community College of the Air Force; BS, Wayland Baptist; MS, Indiana State University

JEWELL, SUSAN C., Associate Professor in Practical Nursing, Program Chair, Sellersburg

LPN, New Albany School of Nursing; BSN Spalding University; MS, Indiana University

KINKLE, MARK ROBERT, Assistant Professor in Respiratory Care

AHS, University of Louisville; BA, Clemson University ·

LAMBERT, STEVE, Associate Professor in Visual Communications, Program Chair, Sellersburg

AAS, BA, American University; MAAD, Syracuse University

LEWELLEN, LONNIE R., Professor in Design Technology, Department Chair, Sellersburg

AAS, Louisville Technical Institute; BA, Louisville Bible College; MA, Cincinnati Bible College; MS, Indiana State University

LONG, ROY C., Associate Professor in Manufacturing and Industrial Technology, Sellersburg

BS, Indiana University Southeast

McCORMICK, MAURICE D., Associate Professor in Human Services, Program Chair, Sellersburg

BS, University of Louisville; MEd, Spalding University; CPC EdD, Heed University; LMHC

McKAY, TERESA, Assistant Professor in Early Childhood Education, Sellersburg

BS, Indiana University; MA, Concordia University

MILLER, NANCY, Assistant Professor in Practical Nursing, Sellersburg

ASN, BSN, Indiana University

NEWBY, PATSY K., Assistant Professor in General Education, Sellersburg

BA, Lindsey Wilson College; MA, Western Kentucky University

NOE, KEITH, Professor in Electronics and Computer Technology, Program Chair, Sellersburg

AS, Cincinnati Technical College; BS, University of Cincinnati; MS, Indiana University Southeast

PATUS, JIM W., Assistant Professor in Computer Information Systems, Sellersburg

BA, Indiana University

PICKERILL, KEN, Instructor in Automotive Technology, Sellersburg

Certified-ASE; BS, Indiana State University

PHULPAGAR, STANLEY, Instructor in General Education, Sellersburg

BSc, Bhayan's College; MS, Central Michign University

QUINLAN, TERRANCE, Professor in Manufacturing and Industrial Technology, Department Chair, Sellersburg

AAS, Kentucky College of Technology; BA, Morehead State University; MS, Indiana State University

RANDELIA, GOOL, Professor in General Education, Program Chair, Sellersburg

BA, MA, University of Bombay; MLS, Indiana University; MS, Indiana University Southeast

RAWLES, DEBORAH, Associate Professor in Medical Assisting, Sellersburg

AS, Mount Ida Junior College; BA, Purdue University; PA, University of Kentucky

ROBERTS, A. JACK., Associate Professor in Academic Skills Advancement, Sellersburg

BS, Austin Peay University; MS, Indiana University Southeast

SCOTT, JERRY, Assistant Professor in Accounting, Sellersburg

BS, Indiana University Southeast; MA, Webster University

SHELTON, JAMES, Assistant Professor, Computer Information Systems, Sellersburg

BS, Murray State University; MBA University of South Carolina

SOBOLEWSKI, ELISE A., Director of Respiratory Clinical Education, Sellersburg

AS, BS, University of Louisville

SPETH, KIMBERLY, Instructor in Associate of Science in Nursing, Sellersburg

BSN, RN, Indiana University

SPRIGLER, GAIL, Professor in Associate of Science in Nursing, Program Chair Sellersburg

LPN, New Albany School of Nursing; BSN, Indiana University Southeast; MSN, Bellarmine University

STOCKDELL, ELIZABETH, Assistant Professor in Associate of Science in Nursing, Sellersburg

BSN, MA, Spalding University

TALBERT, MICHAEL, Associate Professor in Academic Skills Advancement, Sellersburg

BA, Central Bible College; M.Div, Southern Baptist Theological Seminary

VON KANEL, ROBERT, Professor in Associate of Science in Nursing, Sellersburg

AAS, Indiana University Southeast; BSN, Spalding College; MSN Bellarmine University

WILLIAMSON, ROBERT, Assistant Professor in Computer Information Systems, Sellersburg

BA, Texas Western College; MS, Eastern Kentucky University

WRIGHT, DIAN, Assistant Professor in Associate of Science Nursing, Sellersburg

AS, Hiwassee College; BS, US Army School of Allied Health; MBA, Indiana Wesleyan University

YORK, ROBERT L., Assistant Professor in General Education, Sellersburg

BS, MA, Southern Illinois University

REGION 14

WHIKEHART, JOHN, Chancellor

BS, Indiana University; MA, Ball State University

FROST, NANCY, Assistant Dean of Academic Affairs

BS, MS, MBA, Indiana University

JACOBS, DIANA, Dean of Student Affairs

BS, MEd, State University of New York

NEWTON, BRYAN, Dean of Enrollment Services

BA, Southern Illinois University; JD, The Ohio State University

SMITH, JAMES O., Dean of Academic Affairs

BS, Ball State University; MBA, University of Illinois; ABD, Indiana State University

FACULTY

ARNOLD, LINDA C., Associate Professor in Nursing, Program Chair, Bloomington

MSN, University of Southern Indiana

ARNOLD, STEVE, Assistant Professor in Biotechnology, Bloomington

MS, Purdue University

BARE, BRUCE, Assistant Professor in Paramedic Science, Program Chair, Bloomington

BA, Purdue University

BARNES, KIRK, Professor in Design Technology, Program Chair, Bloomington

BS, MA, Ball State University

DAWSON, RONALD A., Professor in Manufacturing and Industrial Technology, Program Chair, Bloomington

BS, University of Illinois; MA, Eastern Illinois University

DIX, JEANETTE, Assistant Professor in Computer Information Systems, Bloomington

BS, Indiana University

ELKES, ROY, Assistant Professor in Accounting, Bloomington

BA, MA, Indiana University

ENGLERT, STEVEN A., Instructor in Accounting, Program Chair, Bloomington

BS, Indiana University

ESCH-WILLIAMS, MARK, Instrucor in Manufacturing and Industrial Technology, Bloomington

BS, Indiana State University

GRAY, ANNIE M., Associate Professor in General Education, Program Chair, Bloomington

BA, Goshen College; MA, Indiana University

GOODWIN, SHEILA, Assistant Professor in Nursing, Bloomington

BSN, Purdue University; MS, Indiana University

HALL, DONN, Assistant Professor in General Education, Bloomington

BA, MA, Indiana University

HASLER, GLORIA, Assistant Professor in Academic Skills Advancement, Bloomington

MS, Butler University

HEINZEN, JIM, Assistant Professor in Business and Office Administration, Department Chair, Bloomington

MS, University of Illinois

HESSERT, PAUL A., Associate Professor in General Education, Program Chair, Bloomington

BS, MA, Indiana University

HOLTSCLAW, DIANNA, Assistant Professor in Practical Nursing, Bloomington

MSN, University of Southern Indiana

JILLOT-ELICK, KAREN, Assistant Professor in Nursing, Bloomington

MSN, University of Southern Indiana

KLINE, KEITH, Assistant Instructor, Program Chair, Communication and Sociology, Bloomington

BS, Indiana University

KORNYA, PETER S., Associate Professor in General Education, Bloomington

PhD, University of Oregon

LEACH, CELINDA K., Professor in Practical Nursing, Division Chair, Bloomington

BS, MPH, Indiana University; Nursing Diploma, University of Tennessee

LEE, SENGYONG, Assistant Professor of Biotechnology, Program Chair, Bloomington

PhD, Miami University

LONG, JENNIFER, Assistant Instructor in Practical Nursing, Bloomington

BSN, MSN, Indiana University

MADDEN, HEATHER, Assistant Professor in General Education, Bloomington

MA, New Mexico State University

MAITLAND, ANGELA, Assistant Professor in Criminal Justice and Paralegal Studies, Department Chair, Bloomington

MS, Central Missouri State University

MELTON, NONA L., Associate Professor in Practical Nursing, Bloomington

BS, University of Evansville; MSN, University of Southern Indiana

MILLEN, TOM, Instructor in Electronics and Computer Technology, Bloomington

BSEE, University of Arkansas

MURPHY, REBECCA, Assistant Instructor, Associate of Science in Nursing, Bloomington

BSN, Indiana University

NELSON, PEGGY L., Professor in Academic Skills Advancement, Department Chair, Bloomington

BS, MS, Indiana University

OGLES, MICHAEL, Assistant Professor in Academic Skills Advancement, Bloomington

BA, Indiana University

OVERTON, BONITA S., Instructor in General Education, Bloomington

BS, University of Southern Indiana

PIERRO, LOU, Associate Professor in Computer Information Systems, Program Chair, Bloomington

BS, MA, California State University; EdD, Indiana University

READING, THOMAS C., Assistant Professor in Business Administration, Bloomington

BS, Indiana University; MBA, Harvard University

REINHARDT, MONTRA, Assistant Instructor in Practical Nursing, Bloomington

BSN, University of Evansville

RISEN, MARJIE B., Assistant Professor in Early Childhood Education, Program Chair, Bloomington

BS, MS, Indiana University

RODRIGUEZ, OSCAR, Assistant Professor in Electronics and Computer Technology, Program Chair, Bloomington

BSE, Trinty College & University

ROY, LEAH, Assistant Instructor in Practical Nursing, Bloomington

BSN, Case Western Reserve

RUCKER, JOHN, Instructor in Criminal Justice and Paralegal Studies, Bloomington

JD, Louisiana State University

SIMMONS, CAROL A., Associate Professor in Academic Skills Advancement, Bloomington

BA, James Madison University; MA, Indiana University

SOTO, ROBERT, Assistant Professor in General Education, Bloomington

BS, MA, Texas Tech University

STRAIN, LARRY G., Associate Professor in Computer Information Systems, Bloomington

BS, Indiana University

SUTTON, MARY, Assistant Instructor in Radiologic Technology, Bloomington

AS, Ivy Tech State College

THOMPSON, PAM, Associate Professor in Practical Nursing, Bloomington

BSN, Morningside College

WORDEN, WILLIAM P., Instructor in Computer Information Systems, Bloomington

BS, MS, Ball State University

WRIGHT, JULIANNE, Assistant Instructor in Associate of Science in Nursing, Bloomington

BSN, University of Indianapolis

WRIGHT, KENTON, Assistant Professor in Design Technology, Bloomington

BS, Purdue University

YOUNG, DONNA K., Associate Professor in Office Administration, Bloomington

BS, MS, Indiana University
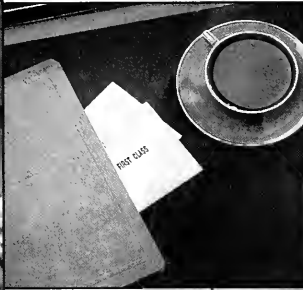
Accreditations and Memberships

Ivy Tech Community College is accredited by The Higher Learning Commission and is a member of The North Central Association. Other accrediting agencies and affiliates are listed below by regions. The college is a member of the American Association of Collegiate Registrars and Admissions Officers, the American Association of Community Colleges, the Association of Community College Trustees, CAUSE, the National Association of College and University Business Officers, the National Association of Colleges and Employers, the National Association of Financial Aid Administrators, the National Council for Research and Planning, the National Council on Student Development, and the Society for College and University Planning..

REGION 1 (GARY, EAST CHICAGO, MICHIGAN CITY, VALPARAISO)

Agency	Program Area
American Culinary Federation Educational Institute	Hospitality Administration
American Board of Funeral Services Education	Mortuary Science
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Committee on Accreditation for Respiratory Care	Respiratory Care
Accreditation Review Committee on Education in Surgical Technology	Surgical Technology
National League for Nursing Accrediting Commission	Practical Nursing, Associate of Science in Nursing
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
Commission on Accreditation in Physical Therapy Education	Physical Therapist Assistant
American Physical Therapy Association	Physical Therapist Assistant
Association of Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration

REGION 2 (SOUTH BEND, ELKHART, WARSAW)

Agency	Program Area
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
National Accrediting Agency for Clinical Laboratory Sciences	Medical Laboratory Technician
	Phlebotomy
Indiana State Board of Health	Nurse Aide
	Qualified Medication Aide
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
Association of Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
National Association of Industrial Technology	Technology Division
	Automotive Service Technology
	Design Technology
	Electronics and Computer Technology
	Manufacturing and Industrial Technology
American Culinary Federation Educational Institute	Hospitality Administration
HVAC Excellence	Manufacturing and Industrial Technology
National League for Nursing Accrediting Commission	Associate of Science in Nursing
Indiana Department of Homeland Security	Emergency Medical Technician, Ambulance
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology

Agency	Program Area
American Association for Medical Transcription	Medical Assistant
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Committee on Accreditation for Respiratory Care	Respiratory Care
American Welding Society	Welding Specialty
Association of Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
Dietary Managers Association	Dietary Manager
Indiana State Board of Nursing	Practical Nursing
	ASN
National League for Nursing	Practical Nursing
	ASN
National Automotive Technicians' Education Foundation, Inc.	Automotive Technology
National Association of Industrial Technology	Construction
	Design
	Industrial
	Automotive Service
	Electronics & Computer Technology
	Manufacturing and Industrial Technology
	Industrial Technology Specialties
Commission for Hotel, Restaurant and Institutional Education	Hospitality Administration
American Culinary Federation Educational Institute	Hospitality Administration
National Organization for Human Service Education	Human Services
Council for Standards in Human Services Education	Human Services
Commission on Massage Therapy Accreditation	Therapeutic Massage

Region 4 (Lafayette)

Agency	Program Area
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
Indiana State Board of Health	Qualified Medication Aide
National League for Nursing Accrediting Commission	Associate of Science in Nursing
	Practical Nursing
American Dental Association, Commission on Dental Accreditation	Dental Assistant
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Accrediting Review Committee on Education in Surgical Technology	Surgical Technology
Committee on Accreditation for Respiratory Care	Respiratory Care
Association of Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology
National Association of Industrial Technology	Automotive Technology
	Design Technology
	Manufacturing and Industrial Technology

Agency	Program Area
American Dental Association Committee on Dental Accreditation	Dental Assistant
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
Commission on Accreditation of Allied Health Education Programs	
Accrediting Review Committee on Education in Surgical Technology	Surgical Technology
American Association of Medical Assistants' Endowment	Medical Assistant
HVAC Excellence	Construction Technology - HVAC Specialty
Indiana State Board of Health	Certified Nurse Assistant
Indiana State Board of Nursing	Practical Nursing
	Associate of Science in Nursing
Indiana Department of Homeland Security	Paramedic Science
National League for Nursing Accrediting Committee	Associate of Science in Nursing
National Association of Industrial Technology	Technology Division Programs
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology

Agency	Program Area
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
Association for Gerontology in Higher Education	Human Services
Accreditation Review Committee on Education in Surgical Technology	Surgical Technology
National Association of Industrial Technology	Industrial Technology
Council for Standards in Human Services Education	Human Services
American Physical Therapy Association	Physical Therapy Assistant
Joint Review Committee on Education in Radiologic Technology	Radiologic Technology
Indiana Department of Homeland Security	Emergency Medical Technician Ambulance/Advance
Indiana State Board of Health	Nurse Aide
	Qualified Medication Aide
Indiana State Board of Nursing	Practical Nursing
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Commission on Accreditation in Physical Therapy Education	Physical Therapist Assistant
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology

Region 7 (Terre Haute)

Agency	Program Area
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
Federal Aviation Administration	Aviation Technology
Indiana State Board of Health	Nurse Aide
	Social Services/Long-Term Care
	Activity Director/Long-Term Care
	Qualified Medication Aide
Indiana Department of Homeland Security	Emergency Medical Technician
Indiana State Board of Nursing	Practical Nursing
	Nursing
National League for Nursing	AS Nursing
Council for Standards in Human Services Education	Human Services
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
	Surgical Technology
	Respiratory Care
National Accrediting Agency for Clinical Laboratory Sciences	Medical Laboratory Technician
Joint Review Committee on Education in Radiologic Technology	Radiologic Technology
National Association of Industrial Technology	Automotive Technology
	Manufacturing and Industrial Technology
	Design Technology
	Electronics Technology
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology
Committee on Accreditation for Respiratory Care	Respiratory Care
Joint Review Committee for Respiratory Therapy Education	Respiratory Care

Region 8 (Indianapolis)

Agency	Program Area
The American Culinary Federation Educational Institute	Hospitality Administration; Culinary Arts
International Association of Administrative Professionals	Office Administration
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assisting
Accreditation Review Committee on Education in Surgical Technology	Surgical Technology
Joint Review Committee on Education in Radiologic Technology	Radiologic Technology
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
Council for Standards in Human Services Education	Human Services
National Association of Industrial Technology	Manufacturing and Industrial Technology
	Design Technology
	Electronics Technology
	Machine Tool Technology
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology
National League for Nursing Accrediting Commission	Associate of Science in Nursing
	Practical Nursing
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
Indiana State Board of Health	Certified Nurse Aide
	Qualified Medication Aide
Council on Hotel/Restaurant and Insititutional Education	Hospitality Administration
Commission on Accreditation of Hospitality Management	Hospitality Administration

Agency	Program Area
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
National League for Nursing Accrediting Commission	Associate of Science in Nursing
	Practical Nursing
Indiana State Board of Health	Nurse Aide
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assisting
Indiana Department of Homeland Security	Basic Emergency Medical Technician
	Advanced EMT
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
National Association of Industrial Technology	Automotive Technology
	Construction Technology
	Manufacturing and Industrial Technology

Agency	Program Area
Indiana State Board of Nursing	Practical Nursing
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Indiana State Board of Health	Certified Nursing Assistant
Association for Continuing Education and Training	Corporate and Continuing Education Services
Association of Surgical Technologists	Surgical Technology
National League of Nursing	Nursing

Agency	Program Area
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
National League of Nursing	Practical Nursing
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Indiana Department of Homeland Security	Emergency Medical Technician, Basic and Advanced
Association of Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration

Agency	Program Area
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Accreditation Review Committee on Education in Surgical Technology	Surgical Technology
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology
National Association of Industrial Technology	Electronics Technology
	Design Technology
	Manufacturing Technology
Joint Review Committee for Educational Programs for the EMT-Paramedics	Paramedic
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
National League for Nursing Accrediting Commission	Associate of Science in Nursing
	Practical Nursing

REGION 13 (SELLERSBURG)

Agency	Program Area
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
Indiana State Board of Health	Nurse Aide
	Qualified Medication Aide
Indiana Department of Homeland Security	Emergency Medical Technician, Ambulance
National Institute for Automotive Service Excellence/	
National Automotive Technicians' Education Foundation	Automotive Technology
Commission on Accreditation of Allied Health Education Programs:	
American Association of Medical Assistants' Endowment	Medical Assistant
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration

REGION 14 (BLOOMINGTON)

Agency	Program Area
Indiana State Board of Nursing	Associate of Science in Nursing
	Practical Nursing
National League for Nursing Accrediting Commission	Practical Nursing
	Associate of Science in Nursing
Indiana State Board of Health	Nurse Aide
Indiana Department of Homeland Security	Emergency Medical Technician - Basic
	Paramedic
Association for Collegiate Business Schools and Programs	Accounting
	Business Administration
	Computer Information Systems
	Office Administration

Contact Information for Accrediting Organizations

Accreditation Review Committee on
Education in Surgical Technology
6 W. Dry Creek Circle, Suite 210
Littleton, CO 80120
(303) 694-9262

American Association of Medical Assistants' Endowment
20 North Wacker Drive, Suite 1575
Chicago, IL 60606
(312) 899-1500

American Association for Medical Transcription
100 Sycamore Avenue
Modesto, CA 95354-0550
(800) 982-2182

American Board of Funeral Services Education
Attn: George Connick, Ph.D., Executive Director
38 Florida Avenue
Portland, ME 04103-3810
(207) 878-6530

American Culinary Federation Educational Institute
180 Center Place Way
Saint Augustine, FL 32095
1-800-624-9458

American Dental Association,
Commission on Dental Accreditation
211 East Chicago Avenue
Chicago IL 60611-2678
(312) 440-2940

American Physical Therapy Association
1111 North Fairfax Street
Alexandria, VA 22314-1488
(703) 684-2782

American Welding Society
550 N.W. LeJune Road
Miami, FL 33126
(800) 443-9353

Association of Collegiate Business Schools and Programs
7007 College Boulevard, Suite 420
Overland Park, KS 66211
(913) 339-9356

Association for Gerontology in Higher Education
1030 15th Street, NW, Suite 240
Washington, DC 20005
(202) 289-9806

Association of Surgical Technologists
6 W. Dry Creek Circle
Littleton, CO 80120
(303) 694-9130

Commission for Hotel Restaurant Institutional Education
2613 N. Parham Rd.
Richmond, VA 23294
(804) 346-4800

Commission on Accreditation in Physical Therapy Education
1111 N. Fairfax Street
Alexandria, VA 22314
(703) 706-3245

Commission on Accreditation of
Allied Health Education Programs
35 East Wacker Drive, Suite 1970
Chicago, IL 60601-2208
(312) 535-9355

Commission on Massage Therapy Accreditation
1007 Church Street, Suite 302
Evanston, IL 60201
(847) 869-5039

Committee on Accreditation for Respiratory Care
1248 Harwood Road
Bedford, TX 76021-4244
(817) 283-2835

Council for Standards in Human Services Education
Attn: Susan Kincaid
PMB 703
1050 Larrabee Avenue, Suite 1004
Bellingham, WA 98225-7367

Federal Aviation Administration
Airman Certification Branch
P.O. Box 25082
Oklahoma City, OK 73125-0082

Higher Learning Commission of the North Central Association
30 North La Salle Street
Chicago, IL 60602-2504
(312) 263-0456

HVAC Excellence
P.O. Box 491
Mount Prospect, IL 60005-0491
(800) 394-5268

Indiana State Board of Health
Two North Meridian Street
Indianapolis, IN 46204
(317) 233-1325

Indiana State Board of Nursing
Health Professions Bureau
402 West Washington Street, Room 066
Indianapolis, IN 46204
(317) 234-2043

Indiana Department of Homeland Security
302 West Washington Street, Room E-208
Indianapolis, IN 46204
(317) 233-6545

International Association for Continuing Education and Training
1620 I Street N.W., Suite 615
Washington, D.C. 20006
(202) 463-2905

International Association of Administrative Professionals
10502 NW Ambassador Drive
P.O. Box 20404
Kansas City, MO 64195-0404
(816) 891-6600

Joint Review Committee for
Educational Programs for the EMT-Paramedic
7108-C South Alton Way, Suite 150
Englewood, CO 80112

Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
(312) 704-5300

National Accrediting Agency for Clinical Laboratory Sciences
8410 West Bryn Mawr Avenue, Suite 670
Chicago, IL 60631
(773) 714-8880

National Association of Industrial Technology
3300 Washtenaw Avenue, Suite 220
Ann Arbor, MI 48104-4200
(734) 677-0720

National League for Nursing Accrediting Commission
61 Broadway, 33rd Floor
New York, NY 10006
(212) 363-5555

National Institute for Automotive Service Excellence/
National Automotive Technicians' Education Foundation
13505 Dulles Technology Drive, Suite 2
Herndon, VA 22071-3415

National Organization for Human Services Education
5601 Brodie Lane, Suite 620-215
Austin, TX 78745
(512) 692-9361

INDEX

NOTES

NOTES

NOTES

NOTES

NOTES