# TRINE UNIVERSITY <br> SCHOOL OF PROFESSIONAL STUDIES 

## COURSE CATALOG ACADEMIC YEAR 2012- 2013

Effective August 27, 2012 - August 17, 2013

Trine University<br>One University Ave<br>Angola Indiana 46703<br>www.trine.edu<br>800.347 .4878 or 260.665 .4100<br>260.665.4578 (fax)

## Dear Future Trine Graduate,

Welcome to the Trine University family, where we are putting you into motion to revolutionize the 21 st century. We have taught generations of successful learners and plan to do so for years to come. With an educational heritage spanning 127 years, we will hold you to the same rigorous academic standards we have set for those who came before you.
Our expectations for academic excellence will serve you well, even before you graduate, as many of you will find jobs and internships with companies who know our reputation. After graduation you will find that having Trine University on your resume will carry immense clout with employers. Our job-placement numbers speak for themselves. In 2011, 91 percent of our graduates were enrolled in graduate school or found meaningful employment within six months of graduation. We expect those numbers to be even higher for our 2012 graduates, many of whom received multiple job offers before graduation at starting salaries above the national average. Several of our 2012 graduates went on to pursue doctorates at schools such as Yale, Stanford, University of Michigan and Case Western, to name a few.
In the last decade we have experienced some of the most substantial changes than any other time in our history. The changes will continue because of the vision of our administration, faculty, staff, trustees, community and - most importantly - you. We are focusing on your future. You are our most valuable asset and, quite frankly, the reason we're here.

Your professors will expect active participation, collaboration, theoretical study and creativity. Not only will you learn how to do, you'll learn what to do. We are giving you the tools - quality teaching, labs, resources, technology, and support - to be successful in your college career. It's up to you to use them. We believe in you and look forward to the day we receive word that you got your dream job or were accepted to graduate school.

That's why we're here - to send you out into the 21 st century, help you reach your goals and impact the world.
Please feel free to stop by my office anytime. My door is always open.


Sincerely,

Earl D. Brooks II, Ph.D., President

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## TRINE UNIVERSITY IN PROFILE

## DESCRIPTION

Trine University is a private, comprehensive, career-oriented, degree-granting institution. It offers degrees in over 35 academic programs through five schools-Allen School of Engineering \& Technology, Franks School of Education, Jannen School of Arts \& Sciences, Ketner School of Business, and the School of Professional Studies. The University is governed by a selfperpetuating Board of Trustees.

## MISSION STATEMENT

Trine University promotes intellectual and personal development through professionally-focused learning opportunities, preparing graduates to succeed, lead, and serve.

To achieve this mission, Trine University undergraduate and graduate students receive personal attention through small classes and excellent teaching. We focus on your future by providing career-oriented higher education that emphasizes:

1. active participation in classes, with a focus on teaming and collaboration
2. the useful and practical, to complement rigorous theoretical study
3. intentional co-curricular experiences to cultivate holistic student development
4. learning how to do, while learning what to do

## VISION

Trine University will be the very best mid-sized private university, contributing to local and regional economic and cultural development. We will be characterized as engaged, dynamic, growing, and adding value.

## VALUES

Trine University's mission and vision for the future rest on five core values that define our foundational beliefs and guide all that we aspire to accomplish.

1. Personal and professional growth with a focus on creative endeavors and lifelong learning
2. Quality teaching, learning, and scholarship
3. A highly responsive, dynamic environment
4. A trustworthy, secure, and caring community that embraces diversity
5. The highest ethical standards in all activities

## GOALS (specific, measurable, attainable, realistic, and timely=SMART)

To realize our mission and achieve our vision, the following operational goals have been established to guide our day-to-day activities:

- Provide a responsive and effective environment for student learning, living, and personal achievement through exceptional programs and services.
- Continue to enhance its processes, tools, and to complement the quality of academic programs; optimally utilizing information, technology, or both
- Build a community which exemplifies and celebrates diversity
- Develop and strengthen corporate and community partnerships
- Consistently and passionately engage all stakeholders in the mission and life of the University
- Support systematic planning, developmental, and assessment processes to assure ongoing improvement of the University and its programs
Adopted on May 7, 1999 and revised April 30, 2004, and September 2006, and October 2010 by the Board of Trustees


## ACCREDITATION

Trine University is accredited by the Higher Learning Commission and a member of the North Central Association, www.hlcommission.org. Telephone 312.263.0456.

## DISCLAIMER

The information contained in this catalog is subject to change. It is the responsibility of the student to ensure that information, particularly in regard to fees, is current. Up-to-date information is available through regional education center directors or on the Trine University Web site at trine.edu.

## HISTORY

The University was founded in 1884 by 12 private citizens. It was and is a product of the normal school movement of that time, a fact that was reflected in its original name, Tri-State Normal College.

As a result, the mission and focus differed radically from the prevailing concepts of higher education in that day. The first schools of higher education in this country were essentially in the British mold, with emphasis on the liberal arts and training for the learned professions, particularly the clergy. By contrast, normal schools provided higher education for students in the "normal occupations" of life, such as teaching, engineering, telegraphy, domestic science, and other practical arts.

Although they provided an unpretentious type of education, normal schools were generally bold and innovative. They simply took students in and encouraged them to do as much as they could through self-development. They also encouraged active student participation in classes, as opposed to the prevailing lecture format. For the convenience of their students, the schools operated on a year-round basis. Coeducation was another striking feature of the normal school movement.

But it was the emphasis on the useful and practical, rather than the traditional that enabled normal schools to flourish. By 1888, 30 normal schools had been founded in Indiana, including Ball State Teacher's College, Valparaiso, and, of course, Tri-State Normal College, located on six acres of land in the tiny village of Angola. Within 30 years, however, Tri-State was the only school to survive as an independent; all of the other schools had perished or had become state-or church-sponsored.

One reason that Trine University succeeded while the other schools failed was because of its early leader, Littleton M. Sniff. His fierce sense of independence and total devotion to this school is documented in hundreds of letters he wrote to prospective students, assuring them they could start college regardless of their academic background and that they could earn degrees in the shortest time possible at a cost they could afford. Most of these letters concluded with the simple command and exhortation of "Come."

Sniff, the institution's second president, presided over the school's first commencement ceremonies in 1888. By May 1922, Tri-State College-renamed in 1906-had more than 200 graduates, representing nearly every state in the Union and 30 countries. Sniff died on Sept. 14, 1922, in his 36th year as president, the longest tenure in school history. The strength of his character and the power of his convictions were part of his legacy to Trine University.

The original curricula featured teaching, bookkeeping, science, commercial law, penmanship, and some courses in the classics and music. Under Sniff's guidance, the institution kept pace with the needs of the new scientific era by adding or dropping courses of study according to demand, financial feasibility, and the needs of the marketplace. In 1927, the University reorganized to focus solely on its strengths in engineering and business; all other programs were discontinued, including teacher preparation, fine arts, music, and the School of Law. The School of Pharmacy opened in 1902 and closed in 1922.

The School of Engineering, which was established in 1902 by George Neihous (who had come to the College at the request of President Sniff), offered accelerated bachelor of science degree programs in civil, mechanical, electrical, and chemical engineering. There was also a new engineering need to be met in the expanding world of transportation: aviation. Ever flexible and alert, Tri-State College listed aeronautical engineering as a degree program in 1929, two years after Charles Lindbergh crossed the Atlantic. During this time, the school's flying clubs-the Stick and Wing Club and the Glider Club (later renamed the Thunderbirds)—were formed. In 1934, the University celebrated its 50th anniversary at the 1934 World's Fair in Chicago, with daily demonstrations of its miniature wind tunnel.

The School of Commerce, built around the objectives of the American private enterprise system, offered accelerated Bachelor of Science degree programs in business administration and accounting.

World War II could not have ended too soon for Tri-State College. By 1945 its enrollment sank to 170, putting its future in jeopardy. Several administrators had gone two years without pay. But the war ended, and more than 1,300 students-mostly GIs-swelled the campus in the fall of 1946. War surplus buildings were secured from the Federal Public Housing Agency to provide additional classroom buildings and student housing for an over-crowded campus. In 1947, due to the volume of students completing their coursework early, a Mid-Year Commencement was instituted. With its future secure, the stockholders agreed to reorganize the 60-year-old school into a nonprofit educational corporation, marking the first time the College was granted exemption from federal tax.

Dr. Richard M. Bateman began his 15-year tenure on campus in 1960. His era would prove to be of great significance. The campus underwent one of its largest expansions in history, adding Ford Library (1962), Stewart Hall (1965), Best Hall of Sciences (1967), Hershey Hall (1970) and Zollner Golf Course (1971). Five new dormitories were constructed in 1968 as student enrollment hit a record: 2,022 students.

In 1964, as a first step in gaining accreditation with the North Central Association of Colleges and Secondary Schools (NCA), the University discontinued its accelerated 27 -month programs and began enrolling students in standard 36 -month programs. While many had serious misgivings about ending the accelerated programs, most realized the importance of gaining accreditation. NCA accreditation was achieved in 1966.

In 1968, the Division of Arts and Sciences was formed to offer two-year transfer programs to students who planned to earn bachelor of science degrees in the liberal arts at other schools. The new programs proved popular, and, in 1970, the division was upgraded to a school with four-year degree programs. Teacher preparation returned to the curriculum in the 1970s. With three schools-Engineering, Business, Arts and Sciences-the institution had become more than a college. Shortly after Bateman's departure in 1975, Tri-State College was officially renamed Tri-State University.

During the 10 years leading up to its Centennial Celebration in 1984, the University continued to innovate and excel. The first Grand Prix go-kart race was held in 1971. The first International Students Association dinner was served in 1974. The first WEAX (student radio station) broadcast was heard in 1978. A free film series was inaugurated in 1980. The Trojans, known as the Engineers until 1967, had great success in golf, track and field, and particularly basketball, which collected eleven consecutive Mid-Central Conference titles and earned two appearances in the NAIA national tournament.

Tri-State University celebrated its 100th anniversary with the publishing of From Carriage to Computer: The First 100 Years of Tri-State University, written by Elizabeth Brown Orlosky.

In the early 1990s, the University received approval from NCA to offer adult degree programs outside of Angola. Between 1994 and 1998, the University opened four locations across northern Indiana-Angola, Fort Wayne, Merrillville, and South Bend. In 2002 the Masters of Science in Engineering Technology was approved as the first of five graduate programs currently offered.

Hershey Hall was the site of the 1996 and 1997 NAIA Division II women's basketball championship. The Tri-State University Thunder advanced to the Elite Eight in 1996. The women's golf team captured the University's first national championship in 1997. The men's volleyball team won the school's second national championship in 1998, the same year Thunder football rolled to an 11-3 record and a semi-final appearance in the national playoffs.

More than 120 years after its founding, TSU, now Trine University continues on a successful path. Since 2001 significant renovation has given the campus new life. The Keith E. Busse Athletic and Recreation Center with 200-meter indoor track and practice areas for tennis, volleyball, baseball and softball opened 'Fall 2009'. In Fall 2010, the new Fred Zollner Athletic Stadium will serve 5,000 fans of football, lacrosse, soccer and field hockey. The renovated Sniff Building now houses the school's executive offices once again, under the name C.W. Sponsel Administration Center. The school's newest and most modern building opened on Homecoming weekend in October 2007. The University Center and Center for Technology and Online Resources houses the new Library and Information Resources, 320-seat Fabiani Theatre, Trine Bookstore, Student Life and Student Success and Retention offices, a post office, IT help desk and department, Hornbacher Fitness Center, and Hornbacher studios, the new home for WEAX 88.3-FM, Trine University's radio station.

Trine university has completed a $\$ 2$ million technology upgrade, creating a campus-wide wireless environment. The Center for Digital Excellence, a technology classroom for group learning, is housed in the new University Center. SMART classrooms, new classrooms equipped with access to modern computers, projector systems, connectivity for laptops, and additional resources for electronic instruction such as DVD players, have been installed on the campus. The University provides more than 200 computers dedicated to student access in labs across campus.

Academics remain strong in all five schools: Allen School of Engineering \& Technology, Franks School of Education, Jannen School of Arts \& Sciences, Ketner School of Business, and School of Professional Studies. New master's degree programs in criminal justice, leadership and engineering (majors in civil, biomedical, and mechanical) have been added.

## CORPORATE STATUS

Trine University is an educational corporation organized and existing under the laws of the state of Indiana. The correct corporate name of the institution is Trine University, Incorporated. The University was founded in 1884 as Tri-State Normal College. The governing body of the University is the Board of Trustees, which has an authorized membership of 30 trustees,
each of whom serves without compensation and none of whom may be employed by the University in any administrative or teaching capacity. Two of the trustees are authorized to be elected by the alumni. Consistent with this form of organization and non-profit operation, Trine University has been granted exemption from federal income tax by the Commissioner of Internal Revenue, Treasury Department under Section 501 (c) (3) of the Internal Revenue Code. Contributions to the University are deductible to the extent provided by law; bequests, legacies, devices, or transfers to the University are deductible in arriving at the value of the net estate of a decedent for estate tax purposes in the manner and to the extent provided by law; gifts of property are deductible in computing net gift tax purposes in the manner and to the extent provided by the Internal Revenue Code.

## FINANCIAL INFORMATION

Selected financial data are available from the institution's annual report. That report may be obtained from the office of the President or of the Vice President for Finance.

## CAMPUS SECURITY

A copy of the annual campus security report is available by September 1st of each year on the Trine University Web site (trine.edu). It contains statistics, policies, and a description of programs that promote campus safety as well as drug prevention program information.

## SCHOOL OF PROFESSIONAL STUDIES (SPS)

## SCHOOL OF PROFESSIONAL STUDIES MISSION STATEMENT

In concert with Trine University, the mission of the School of Professional Studies is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## DESCRIPTION

The School of Professional Studies is designed to provide quality, continuous higher education learning opportunities for adults who want to advance in their careers and keep pace with the growing complexities of today's career environment. SPS programs are non-residential, providing services for domestic students. Nearly one-fourth of all students attending Trine University are School of Professional Studies students. The programs are designed primarily for adult returning students.

## SCHOOL OF PROFESSIONAL STUDIES EDUCATIONAL CENTER LOCATIONS

## Angola Education Center

1 University Avenue
322 Shambaugh Hall
Angola, Indiana 46703
260.665.4623

E-mail: trinenorth@trine.edu
Columbus Education Center
2222 Poshard Drive
Columbus, Indiana 47203
812.350.6387

E-mail: columbus@trine.edu

## Fort Wayne Regional Campus

9910 DuPont Circle Drive East
Fort Wayne, Indiana 46825
260.483.4949

E-mail: trinefw@trine.edu

Indianapolis Regional Education Center<br>7508 Beechwood Centre Road<br>Avon, Indiana 46123<br>317.775.8410<br>E-mail: trineavon@trine.edu

## Logansport Education Center

2815 East Market Street
Logansport, Indiana 46947
574.516.1218

Email: logansport@trine.edu

Peoria Regional Education Center<br>14100 North $83{ }^{\text {rd }}$ Avenue<br>Peoria Arizona 85381<br>480.209.3549<br>E-mail: Peoria@trine.edu

## Schererville Education Center

746 East U.S. Highway 30
Schererville, Indiana 46375
219.440.7180

E-mail: trinem@trine.edu

## South Bend Regional Campus

4101 Edison Lakes Parkway Suite 250
Mishawaka, Indiana 46545
574.243.0500

E-mail: trinesb@trine.edu

## Sturgis Education Center

107 W. West Street
Sturgis, Michigan 49091
260.350.4834

## SCHOOL OF PROFESSIONAL STUDIES ACADEMIC DEGREE PROGRAMS

Academic programs at all School of Professional Studies education centers include:

## Associate Degree Programs

- Associate in Accounting
- Associate in Business Administration
- Associate of Science in Engineering Technology


## Undergraduate Degree Programs

- Bachelor of Applied Management
- Bachelor of Arts in General Studies, General Social Studies concentration
- Bachelor of Arts in General Studies, Pre-Legal Studies concentration
- Bachelor of Arts in General Studies, Self-Designed Studies concentration
- Bachelor of Business Administration

Majors in:

- Accounting
- Auctioneering
- Entrepreneurship
- Healthcare Management
- Hospitality \& Tourism Management
- Human Resource Management
- Management
- Bachelor of Computer Science
- Bachelor of Engineering
- With a major in Biomedical Engineering Management
- With a major in Civil Engineering Management
- With a major in Mechanical Engineering Management
- Bachelor of Science in Criminal Justice
- Bachelor of Science in Engineering Technology
- Bachelor of Science
- With a major in Communication, Applied Communication Track
- With a major in Communication, Corporate and Organizational Communication Track
- With a major in Public Relations and Journalism Track
- Majors in:
- Emergency Management
- Psychology


## GRADUATE PROGRAMS

- Master of Science with a major in Criminal Justice

Concentrations in:

- Emergency Management
- Forensic Psychology
- Public Administration
- Master of Science in Leadership

Concentrations in:

- Athletic Administration
- Biomedical Regulatory Affairs
- Healthcare Systems Studies
- Instructional Leadership - Higher Education
- Instructional Leadership -K-12
- International Studies
- Non-Profit Organizational Studies
- Political Leadership \& Civic Engagement
- Strategic Foresight \& Entrepreneurship
- Sustainable Business Administration


## CLASS SCHEDULING

Geared to the working adult, most classes convene one night per week during an eight-week term of a 16-week semester. There are three semesters per year, but the eight-week terms provide for six entry points and increased flexibility for adult students.

## ACTIVITIES

SPS students are encouraged to participate in activities at their respective education centers, but may also participate in main campus activities. Students who qualify are eligible for memberships in various scholastic honoraries, such as those in business or criminal justice. Students may use student ID cards to attend main campus events.

## LIBRARY

All SPS students have the opportunity to use the main campus Library and Information Services, either in person or on the Web. Multiple resources are available to all students online through the library at trine.edu/lis. Students can access the Web-based catalog of the library's collection of books, media (tapes, DVDs, CDs, etc.), periodicals (journals, magazines, newspapers and other resources through magazines, newspapers), and other resources through computer labs on or off campus. Some electronic resources require a log-on for off campus use.

Students may request materials not available in the Trine University collection via the inter-library loan (ILL) service. Trine University library materials and ILL borrowed items and photocopies (periodical articles or book chapters) can be delivered to any education center. Trine University library books circulate for three-week periods and media for one-week periods. The lending library sets the loan periods for ILL borrowed items and these vary by institution. In addition, students can apply for a reciprocal borrowing card to access library collections in Indiana universities statewide. Librarians can provide research assistance and guides for using the library and its resources.

## BOARD OF TRUSTEES

Year in parentheses denotes when affiliation with board began.

## OFFICERS:

Jerry L. Allen (1995) Chair
Westfield Center, Ohio
B.S.M.E., Hon. D.E. (Tri-State University);

Vice President Product Development TVC Communications, Inc.,
Wadsworth, Ohio

James P. Fabiani (2001) Vice Chair
McLean, Virginia
B.S. (Harvard); M.Ed. (University of Massachusetts);

Chair and CEO, Fabiani \& Company, Washington, DC

Ralph D. Trine (1990) Secretary
Fremont, Indiana
B.S.M.E., Hon. D.E. (Tri-State University);
M.S.M.E., M.B.A. (Michigan State University);

Chair and CEO, Vestil Manufacturing Co.,
Angola, Indiana

## MEMBERS:

James D. Bock (2003)
Elkhart, Indiana
B.S.M.E. (Tri-State University);

President/Owner, Bock Engineering Co.,
Elkhart, Indiana

Lynn A. Brooks (2007)
Auburn, Indiana
B.S. (Tri-State University)

President and CEO, Rieke Packaging Systems, Auburn, Indiana

Tobias Buck (2010)
Pierceton, Indiana
A,A,S,(Red Wing Technical Institute);
B.S. (Purdue University, Fort Wayne);

Chairman, President/CEO and Founder, Paragon Medical, Inc.

Keith E. Busse (2003)
Fort Wayne, Indiana
B.S.B.A. (University of Saint Francis); M.B.A.
(Indiana University/Purdue University-Fort Wayne);

President and CEO, Steel Dynamics, Inc., Fort Wayne, Indiana

Suzanne Ehinger (2007)
Roanoke, Indiana
B.S. (Indiana University);
M.B.A. (Saint Francis College);

Ph.D. (Kennedy Western University)
Chief Operating Officer, Parkview Hospital, Fort Wayne, Indiana

Lawrence A. Franks (1984-2002) (2004) Chair Emeritus Sturgis, Michigan
B.S.M.E., Hon. D.E. (Tri-State University);

President, Burr Oak Tool and Gauge Company, Inc., Sturgis, Michigan

Tomas Furth (1997)
New York, New York
B.S.M.E., B.S.Ch.E., Hon. D.E. (Tri-State University);

President, Sudamtex Holding, Caracas, Venezuela

William A. Gettig (1984) Chair Emeritus
Spring Mills, Pennsylvania
B.S.M.E., Hon. D.E. (Tri-State University); Hon. Doctor of

Laws, (Susquehanna University);
President and C.E.O., Gettig Technologies Inc,
Spring Mills, Pennsylvania

John N. Hester (1999)
Orangevale, California
B.S.Ch.E., (Tri-State University); M.S.Ch.E.,
(Michigan State University); Ph.D. (Walden University);
Associate Dean Emeritus, College of Engineering, California
State University, Sacramento, California

Lou Holtz (2011)
Orlando Florida
ESPN Analyst

Rick L James (2010)
Auburn, Indiana
B.S.B.A. (Tri-State University)

Cairman/CEO, Metal Technologies, Inc.
Auburn, Indiana

Dennis Kruse (2010)
Auburn, Indiana
B.S., GRI and CAI (Indiana University

Indiana State Senator, Indianapolis, Indiana

Larry H. Lee (2011)
President/Owner
Leepoxy Plastics, Inc.
Fort Wayne, Indiana

Phillip H. Mayberry (2010)
Clear Lake, Indiana
B.A. (Indiana University)

President (ret.), Centennial Wireless;
Investor, Congeries LLC

John J. "Mike" McKetta, III (2004)
Austin, Texas
B.A. (Harvard University); J.D. (University of Texas);

President, Graves, Dougherty, Hearon \& Moody PC, Austin,
Texas

Richard L. Oeder (1995)
Morrow, Ohio
B.S.C.E. (Tri-State University);

Area Manager (ret.), Columbia Gas of Ohio,
Springfield, Ohio

John A. Pittman (1997) Chair
Austin, Texas
B.S.E.E., Hon. D.E. (Tri-State University);
M.B.A. (Baldwin-Wallace College);

President (ret.), The Fieldbus Foundation, Austin, Texas

Larry E Reiners (2009)
Tulsa Oklahoma
B.S.C.E. 1965, Tri-State University

Manager, Makoi Group, LLC

Mitchel E. Rhoads (2006)
Rockport, Texas
B.S.B.A. (Tri-State University);

Chairman, Rhoads Holding Ltd., Littleton, Colorado

Ian M. Rolland (2010)
Fort Wayne, Indiana
B.A. (DePauw University), M.S. (University of Michigan),

Hon. D.E. (Purdue University, University of St. Frances, DePauw University, Manchester College, Tri-State University, and Indiana Institute of Technology)
Chairman (ret.), Lincoln National Corp.
Clifford D. Ryan (2009)
Naples, Florida
B.S.B.A. 1966, Tri-State College

Manager, R.\&R. Real Estate, Ltd.

Jack Shaw (2010)
Coldwater, Michigan
B.S.E.E. (Purdue University)

President and CEO
Hughes Electronics Corp. (ret.)
Coldwater, Michigan

Wayne M. Shive (2008)
Fort Wayne, Indiana
Hon. D.B.Ad. (Tri-State University)
President, Nu-Tec Coatings, Fort Wayne, Indiana

Sheri Trine (2007)
Fremont, Indiana
Hon. D.H.L. (Tri-State University)
Director of Human Resources and Accounting, Vestil
Manufacturing Co., Angola, Indiana

Theresa E. Wagler (2011)
EVP and Chief Financial Officer
Steel Dynamics, Inc.
Fort Wayne, IN
R. Wyatt Weaver (2005)

Angola, Indiana
B.S. and M.D. (Indiana University);

Family Practice Physician, Angola, Indiana

## TRUSTEES EMERITI

(Dates denote years of active service as a trustee.)
Jimmie Caldwell (1976-2009) Chair Emeritus
Indianapolis, Indiana
B.S.C.E., Hon. D.E. (Tri-State University)

Registered Professional Engineer;
President and Chair (ret.), Chair Emeritus, Geiger and Peters, Inc., Indianapolis, Indiana

Joanne S. Crown (1969-1987)
Wilmette, Illinois
B.S. (Indiana University)

Morgan L. Fitch, Jr. (1968-1977)
Western Springs, Illinois
B.S.Ch.E. (Illinois Institute of Technology); J.D.
(U.S. Navy Law School, University of Michigan);

Senior Partner, Fitch, Even, Tabin, and Flannery, Chicago, Illinois

Leamen I. Forman (1984-2002)
Appleton, Wisconsin
B.S.B.Ad., Hon. D.B.Ad. (Tri-State University);

President \& Chair of the Board (ret.), Bank of Menasha,
Menasha, Wisconsin

William P. Himburg (1975-1985)
Naples, Florida
B.S. (Tri-State University);

Chair of the Board, Indian Trails, Inc.,
Owosso, Michigan

Paul R. Kahlenbeck (1983-1998)
Columbus, Indiana
B.S.M.E., Hon.D. E. (Tri-State University);

Vice President (ret.), Cummins Engine Company, Inc., Columbus, Indiana

John W. Kirsch (1965-1975)
Sturgis, Michigan
Ed. (Albion College); M.B.A. (Indiana University);
Chair of the Board (ret.), Kirsch Company,
Sturgis, Michigan

Wayne Larson (1981-1993)
Pasadena, California
B.S.B.Ad. (Tri-State University);

Owner, Wayne H. Larson Insurance Agency,
Pasadena, California

Earl F. McNaughton (1983-2003) Chair Emeritus
Fremont, Indiana
B.S.B.Ad., M.S.B.Ad., (Indiana University);
J.D. (Valparaiso University);

Hon. D.B.Ad. (Tri-State University);
Chair of the Board \& President (ret.),
The First National Bank of Fremont,
Fremont, Indiana

Gary L. Ray (1990-2002) Chair Emeritus
Medina, Ohio
B.S.M.E., Hon. D.E. (Tri-State University); M.B.A. (Wharton

Graduate Division, University of Pennsylvania);
President/Owner, Transformer Engineering Corp., Cleveland, Ohio

Richard A. Rosenthal (1971-1977)
Niles, Michigan
B.S. (University of Notre Dame);

Director of Athletics, University of Notre Dame, South Bend, Indiana

Clifford W. Sponsel (1978-1999)
Santa Barbara, California
B.S.C.E., Hon. D.E. (Tri-State University);

Investments and Consultant

Norman O. White (1980-1994)
Bloomfield Hills, Michigan
B.S.M.E., Hon. D.E. (Tri-State University);

Chair of the Board, H.M. White Inc., Detroit, Michigan

## UNIVERSITY

## ADMINISTRATION

Dr. Earl D. Brooks II ............................................ President
Dareen K. McClelland............................Executive Assistant
to the President

OFFICE OF ACADEMIC AFFAIRS
Dr. John Shannon ........ Vice President for Academic Affairs Dr. Jean Deller ........Assistant Vice President for Program Development \& Assessment, Assistant Vice President for Graduate Studies

Julie Pfafman
Administrative Assistant for Academic Affairs

## ACADEMIC DEANS

Scott Fergusson ...........................Ketner School of Business Craig Laker......... Interim Jannen School of Arts \& Sciences V.K. Sharma, Ph.D. ......................................Allen School of Engineering \& Technology
Suzanne Van Wagner, Ph.D. .....Franks School of Education David W. Wood School of Professional Studies

## BUSINESS OFFICE

Jody Greer ..................................Vice President for Finance
and Controller

## PEOPLE SERVICES

Jamie Norton ..................................Director, Human Resources
Linda Bateman ...................Director of Career Services
Teresa Johnson ........... Assistant Director of Career Services
Paul Viglianti...................... Employee Outreach Coordinator

## OFFICE OF FINANCIAL AID

Kimberly Bennett Chief Financial Aid AdministratorAlisa Mills
$\qquad$ Assistant Director of Financial Aid
INFORMATION TECHNOLOGY

$\qquad$
Chief Information Officer
Josh Beard

$\qquad$
Systems Administrator
Larry Johnson Help Desk Technician Angela Kiess

$\qquad$
Director of Technology Support Services Wendy Yagodinski

$\qquad$
Programmer/Analyst
Renee VanWagner.

$\qquad$
Telecommunications/PC Technician

## LIBRARY

Kristina Brewer Director
Matt Brockington .Technical Services
Lauren Magnuson Senior Information Services Librarian Connie Tharp Secretary, Acquisitions
MIDDLE COLLEGE
Andrea DeLancey Director
REGISTRAR
Debra Helmsing. Registrar
Karen Reinoehl Transfer Coordinator
Lucretia Shank Assistant Registrar
Renee Shipe ..... Assistant Registrar
WEAX RADIO STATION
Josh Hornbacher Operations Manager
ZOLLNER GOLF COURSE
Jennifer Lymangood Head Golf Professional
Barry Emerick Superintendent, Grounds

$\qquad$

$\qquad$
Assistant Superintendent, Grounds
Dan Zimmerman

$\qquad$
Maintenance

## SCHOOL OF PROFESSIONAL STUDIES




SCHOOL OF PROFESSIONAL STUDIES ADJUNCT FACULTY

A complete and current list of adjunct faculty can be found at http://EDGE.trine.edu.

# School of Professional Studies / Trine Virtual Campus Academic Calendar 2012-2013 

## Fall 2012

| August 27, 2012 | Monday | Term 1 begins |
| :---: | :---: | :---: |
| September 3, 2012 | Monday | Labor Day Holiday, No Class |
| October 20, 2012 | Saturday | Term 1 ends |
| October 22, 2012 | Monday | Term 2 begins |
| November 21-25 | Wed- Sun | Thanksgiving Holiday |
| December 15, 2012 | Saturday | Term 2 ends |

December 17-Jan 4 Student Break

## Spring 2013

| January 7, 2013 | Monday | Term 1 begins Face2Face (F2F) courses |
| :--- | :--- | :--- |
| January 8, 2013 | Tuesday | Term 1 begins online (TVC) courses |
| January 21, 2013 | Monday | MLK, Jr. Day, No class |
| March 2, 2013 | Saturday | Term 1 ends (F2F \& TVC) |
| March 4, 2013 | Monday | Term 2 begins (F2F \& TVC) |
| March 29, 2013 <br> April 27, 2013 | Friday <br> Saturday | Teod Friday - SPS offices closed |
| May 4, 2013 | Saturday | Commencement |

## Summer 2013

| April 29, 2013 | Monday | Term 1 (8-week) F2F begins |
| :--- | :--- | :--- |
| May 13, 2013 | Monday | Term 1 TVC (6-week) begins |
| May 13, 2013 | Monday | Main Campus Cohort (8-week) begins |
| May 27, 2013 | Monday | Memorial Day, No Class |
| June 22, 2013 | Saturday | Term 1 (8-week) F2F ends |
| June 22, 2013 | Saturday | Term 1 (6-week) TVC ends |
|  |  |  |
| June 24, 2013 | Monday | Term 2 (8-week) F2F begins |
| June 24, 2013 | Monday | Term 2 (6-week) TVC begins |
| July 4, 2013 | Thursday | Fourth of July, No class |
| July 6, 2013 | Saturday | Main Campus Cohort (8-week) ends |
| August 3.2013 | Saturday | Term 2 (6-week) TVC ends |
| August 17, 2013 | Saturday | Term 2 (8-week) F2F ends |

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## UNDERGRADUATE ADMISSION

Trine University admits applicants on the basis of scholastic achievement and academic potential, and selection is made without regard to race, religion, color, gender, sexual orientation, or age. Admission to Trine University is not an entitlement; attendance at Trine is a privilege. Prospective students are encouraged to visit the regional education center in their area. Those wishing to arrange a visit should call or e-mail the center of interest. Contact information can be found at edge.trine.edu.

Trine University accepts online applications only, accessible via the Internet at edge.trine.edu or through our Virtual campus at trine.edu/virtualcampus. Online applications may be sent by following the directions given on our Web site. No application fee is required.

## GENERAL APPLICATION PROCEDURES AND REQUIREMENTS

In addition to a completed application form, applicants must provide the following items:

- Evidence of graduation from an accredited high school or an acceptable score on the General Education Development (GED) examination.
- Official high school transcripts must be sent from the originating high schools or official documentation from GED provided directly to the student support specialist of the education center they plan to attend.
- Transfer students must request official transcripts from all post-secondary schools they attended, official transcripts must be sent directly to the Office of Admissions, Trine University, One University Avenue, Angola, IN 46703.

Results from the American College Aptitude Test (ACT) or the Scholastic Aptitude Test (SAT) are not required for the School of Professional Studies student.

A person may apply as a non-degree showing evidence of a high school diploma or an acceptable score on the GED test. Nondegree students who later apply for degree status must meet the degree requirements of the program to which they seek admittance. Information can be obtained through the education center director or student support specialist.

## AWARDING OF CREDIT BY EXAMINATION

## ADVANCED PLACEMENT (AP) EXAMINATION

An applicant for freshman standing who achieves a grade of 3, 4, or 5 on the College Entrance Examination Board's Advanced Placement (AP) Examination may be granted credit. Results of the examination should be sent to the student's chosen educational center director.

## CLEP AND DANTES TESTING

Trine University awards credits based upon the College Level Examination Program's (CLEP) general and subject matter examinations as well as all Defense Activity of Non-Traditional Education Support (DANTES) examinations. Trine University is not a testing site for either examination program. For information regarding CLEP or DANTES credits, contact the regional education center director.

Trine University accepts the American Council on Education's recommended passing score in effect at the time of the administration of the examination. Upon achieving a score considered "passing" by Trine University, CLEP or DANTES credit will be listed on the student's transcript for the number of semester hours recommended in the official CLEP or DANTES publications. The student's education center director will determine whether the CLEP or DANTES credit received will apply toward a portion of the requirements in the University's general education requirements, school requirements, major requirements, or electives. Students should contact their education center director for more information.

## NON-COLLEGIATE SPONSORED INSTRUCTION

Trine University awards credit for college-level courses offered by business and professional organizations as recommended by the American Council on Education in its National Guide to Educational Credit. Credit is awarded for course work offered by the military as recommended by the American Council on Education in its Guide to the Evaluation of Educational Experiences in the Armed Services. Credits are awarded subject to the approval of the Office of the Registrar.

## PRIOR LEARNING CREDITS

Students enrolled in any School of Professional Studies degree program may apply for prior learning credits. A student must have completed a minimum of 18 hours from Trine University before submitting prior learning documentation for consideration for credit. The School of Professional Studies does not charge a fee for the evaluation of prior learning. In addition, there is no fee for credit hours earned through the evaluation process. Applying for credit through prior learning does not guarantee that credit will be awarded. Once the documentation has been reviewed by a three-member committee, and all approvals, modifications, and additional proof have been submitted, the documentation is sent to the Dean of the School of Professional Studies, who submits the documentation to the Registrar. The credit becomes official upon the Registrar's acceptance of the final recommendation from the Dean. These credits may only be used in the portion of the degree designated "degree-related electives" or "prior learning." Hours earned will be listed on the student's Trine University transcript as "Prior Learning Credit." Regardless of the number of credits earned through Prior Learning Credits, the final 30 credit hours of any degree program must be earned by taking face 2 face or online classes at Trine University. Trine University cannot guarantee the transferability of prior learning credits to another institution.

## TRANSFER STUDENT ADMISSION

A transfer student follows Trine University's general application admission procedures. Students are eligible for admission only from approved schools of higher learning, and cannot be on academic probation from the previous institution(s). The applicant must have a satisfactory academic record at the previous institution(s) of higher learning.

Trine University encourages applications from community college graduates. It has transfer relationships that facilitate the application process and offer special benefits with the following two- and four-year institutions:

- Bethel College, Mishawaka, IN
- Genessee Community College, Batavia, NY
- Glen Oaks Community College, Centreville, MI
- Harrison College, all Indiana locations
- Ivy Tech Community College, all Indiana locations
- Jackson Community College, Jackson, MI
- Joliet Junior College, Joliet, IL
- Kellogg Community College, Battle Creek and Coldwater, MI
- Lansing Community College, Lansing, MI
- Lorain Community College, Elyria, OH
- Northwest State Community College, Archbold, OH
- Owens Community College, Toledo, OH
- Southwestern Michigan College, Dowagiac, MI
- Vincennes University, Terre Haute, IN


## TRANSFER CREDIT

Credits earned at an approved institution with grades of "C" or better may be transferred to Trine University. Credits acceptable toward a Trine University degree shall be determined by the School of Professional Studies. A preliminary transfer credit evaluation may be determined by the academic advisor located where the student is enrolled. A final evaluation of transfer credit shall be made when the University receives an official transcript of the completed course work. To facilitate the evaluation, the applicant should provide a catalog or guide which contains descriptions of the courses completed elsewhere.

## IVY TECH AND HARRISON COLLEGE DISCOUNTED TUITION

Students who have graduated from Ivy Tech Community College or Harrison College may be eligible for discounted tuition. Certain criteria apply to receiving and continuing to receive the discount.

A student must meet the qualifying criteria:

- Graduated from Ivy Tech Community College/Harrison College with an associate's degree and cumulative grade point average of 3.0 or better.
- Maintain a 3.0 while at Trine University
- Complete 30 hours at Trine University and fulfill all program requirements
- May be a full or part-time student
- Please note: To qualify for graduation honors a student must complete 40 hours at Trine University.

The Ivy Tech discount may be used for a second bachelor's degree if all other requirements are met. The discount may not be applied to Trine University's graduate programs.

## OTHER DISCOUNTS

Students who qualify for other discounted tuition must maintain a minimum 2.0 while as a Trine student in order be eligible for the discounted tuition.

## READMISSION

A student whose enrollment is interrupted for any reason for more than two consecutive eight-week terms, not including summer, is considered to have withdrawn and must be readmitted. Candidates for readmission must complete a readmission application through the student support specialist of the educational center where the student intends to enroll.

Any student dismissed for academic or other disciplinary reasons must make application through the student support specialist for readmission and receive the approval from university's readmit committee before being allowed to enroll in classes.

## TUITION AND FEES

## PAYMENT OF EDUCATION COSTS

Payment of tuition and fees is due at the Business Office on the date indicated on the student's bill. Any financial aid awarded will be deducted from the student's charges each semester. Each student is responsible for purchasing books using funds from personal and/or financial aid sources. Any student with outstanding financial obligations to the University will not be permitted to register for any subsequent semester or receive a transcript or diploma until the obligation is fulfilled. Students maintaining a balance owed to the University will be assessed late fees and will be responsible for collection and/or costs if such efforts should become necessary.

## APPLICATION FEE

There is no application fee for online applications.

## TUITION RATE

A per credit hour fee is charged for each course and is subject to change.
Beginning Fall 2012 tuition rates are as follows:

| Undergraduate Face to Face | $\$ 345.00$ |
| :---: | :---: |
| Undergraduate Online (TVC) | $\$ 445.00$ |
| Graduate Face to Face | $\$ 450.00$ |
| Graduate Online (TVC) | $\$ 550.00$ |
| Graduate Engineering Online | $\$ 650.00$ |

Please visit trine.edu to learn about the current rate.

## AUDITING FEE

A fee is charged per credit hour for auditing courses. To learn the amount of this fee, call the Business Office at 260.665.4108.

## TRANSCRIPT FEE

A per copy fee is assessed for issuance of official Trine University transcripts. A transcript will not be issued to a student with an outstanding financial obligation to the University.

## OTHER COSTS

## BOOKS AND SUPPLIES

Book and supply expenses vary depending on the number of courses taken and the major, and are the personal obligation of each student. Students can order books from the Trine University bookstore through the online order process by clicking on "Bookstore" at the bottom of the Web page at trine.edu. Students may also visit the bookstore in person or call the bookstore at 260.665 .4153 . Books ordered online or by phone will be mailed directly to the student. SPS students are encouraged to utilize e-Books which may be downloaded to their laptops at approximately one half the cost of a traditional textbook.

## SPS LAPTOP COMPUTER REQUIRMENT

Beginning June 2010, all School of Professional Studies students entering for Fall 2010 and all future semesters, are required to have or purchase a laptop computer for use in the classroom.

All laptops must (at a minimum) have the following specifications:

- Windows XP, Vista, or Windows 7 Operating System or Newer
- 2 GHz Processor or Larger
- 1GB RAM or Larger
- 200MB Hard Drive or Larger
- Optical Drive
- Webcam
- Microsoft Office 2010 or Newer
- 802.11 Wireless G or N Capable

To assist students, all branch campuses have available wireless internet access.
In addition, the Trine University bookstore offers an affordable laptop computer. School of Professional Studies students are able to use their financial aid money to purchase a laptop through the university bookstore.

All students are required to sign a "Laptop Policy - Statement of Understanding" and a copy is maintained in the student's file. The statement of understanding informs students that they are required to have or purchase a laptop.

## REFUNDS

Refunds of credit balances due to excess financial aid or overpayment will be refunded after the drop/add period. A student withdrawing from a course may be eligible for a full or partial refund of tuition, depending on when the official withdrawal takes place. The student must make all refund requests electronically. Directions and links will be emailed to the student's Trine University email address.

A student is not officially withdrawn until the necessary withdrawal forms, complete with the required signatures, have been filed with the Office of the Registrar. Nothing other than an official withdrawal permits refunds. Refunds follow the schedule below.

## TUITION ADJUSTMENT:

> . Week one- $100 \%$
> - Week two $-0 \%$

A \$50 administration fee will be assessed for "exception" drops (per occurrence).
Please note: If a student receiving financial aid withdraws during the semester, that aid is subject to the federal refund calculation.

Refunds are processed through the Business Office approximately one month after a student officially withdraws and all charges/credits are posted.
The official withdrawal form is required for a refund to be processed.
Any student who is dismissed or suspended for misconduct shall not be entitled to any refund. No refund is provided at any time on fees, books and supplies, or personal expenses.

## WITHDRAWAL

If a student decides to drop or withdraw after registering for classes:

- The student is responsible for completing the proper paperwork with the educational center director. By failing to do so, the student accepts financial responsibility for all charges incurred on their account.
- The student may be eligible for a refund depending on when the official withdrawal takes place.
- It may result in a change in the total amount due for the semester.
- It may result in a loss of financial aid from a federal or state source.
- Failure to attend classes does not constitute a drop/withdrawal.


## GRADUATE PROGRAM

All information listed above must be followed for the graduate program as well. (See Graduate Information section beginning on page 111)

## OFFICE OF FINANCIAL AID

## PURPOSE

The Office of Financial Aid provides assistance to students to make a college career at Trine University affordable. (It is important to reward students for exceptional academic accomplishments.) To provide such assistance allows students to attend who might otherwise not have the opportunity.

Grants and loans are awarded based upon financial need as determined by the federal and state governments after completion of the Free Application for Federal Student Aid (FAFSA).

The Office of Financial Aid provides a convenient location and several options for students. The office offers walk-in counseling, telephone counseling, and can be contacted via electronic mail.
The office of Financial Aid is located in Forman Hall and has a street address of Office of Financial Aid, 1 University Avenue, Angola, IN 46703

Normal hours of operation are Monday through Friday, 8 a.m. to 5 p.m. The Office of Financial Aid can be reached by phone at 1.877.294.4878 by email at millsa@trine.edu and accepts faxed documents at 1.260.665.4511.

## APPLICATION PROCEDURES

All students applying for financial aid must complete the Trine University Online Application for Admission to be accepted into a degree-seeking program and complete a FAFSA at www.fafsa.gov with school code 001839.

The FAFSA (Free Application for Federal Student Aid) for new applicants or returning applicants is the primary application for assistance. This can be filed online at www.fafsa.gov. It is used to determine eligibility for all Federal Title IV aid programs, such as Federal Pell Grant, and Federal Direct Education Loan Programs. It is also the application for undergraduate Indiana residents to apply for tuition assistance programs from the State of Indiana.

The priority application filing deadline is March 1 of each academic year for fall/spring/summer enrollment; however, aid is awarded throughout the school year. Current students need only complete the FAFSA once each academic year before March 1 to reapply for all aid.

The U.S. Department of Education's Central Processing System (CPS) reviews and analyzes the information provided on the FAFSA. The CPS uses this information to calculate an Expected Family Contribution (EFC) and the EFC is the index of the family's financial strength and not necessarily the amount a family will have to pay towards college. Once Trine University receives this information, it will be used to create an electronic award notification.

## AWARDING

Awards are processed by the Office of Financial Aid in accordance with University policy and the regulations governing the various aid programs. The University policy is established by the financial aid committee, and the Director of Financial Aid is responsible for determining financial aid eligibility based on the results the Department of Education submits to Trine University after a FAFSA is processed. An award notification detailing the type and amount of each award is posted on line at MyTrineFA with a postcard or an email being sent to the student as soon as the FAFSA is received.

Assistance derived from Trine University may only be used for the costs of tuition and fees during the academic year that it is issued. Additional descriptions of aid programs and satisfactory academic progress standards are included in the Trine University Student Handbook and on the University website.

## FEDERAL GRANTS

Federal Pell Grants - \$555 to \$5550

## STATE GRANTS

Indiana Higher Education Award (INHEA) - \$100 to \$706
Freedom of Choice (FOC) - \$100 to $\$ 6350$
Twenty-First Century Scholarship - Up to $\$ 7056$

## FEDERAL DIRECT LOAN PROGRAM

## STAFFORD LOANS

Students apply for the Stafford loan by first completing the FAFSA. When the financial aid office reviews the FAFSA, the student's eligibility for the Federal Direct Loan is then determined. Upon acceptance of the Direct Loan, a master promissory note (MPN) and an entrance counseling form need to be completed.

A Stafford loan can either be subsidized or unsubsidized. A student must be enrolled halftime ( 6 credit hours) to be eligible and the maximum amount a student can borrow is based upon grade level status.

A subsidized loan is awarded on the basis of financial need. A student must be enrolled half-time to be eligible. The student is not charged interest until repayment begins because the federal government "subsidizes" the interest. These loans have a 10-year payoff and a six-month grace period beginning after the student leaves college, either by graduation or withdrawal from the University. For Direct subsidized student loans borrowed on or after July 1, 2012 and before July 1, 2014, the interest subsidy will not be available during the six-month grace period. This means that interest WILL be charged during the grace period for subsidized loans borrowed during this time period.

An unsubsidized loan is not awarded on the basis of need. A student must be enrolled halftime to be eligible. The student is charged interest from the time the loan is fully disbursed until it is paid in full. A student can choose to pay the interest while enrolled in school or defer those payments until repayment. These loans also have a 10-year payoff and a six-month grace period beginning after the student leaves college, either by graduation or withdrawal from the University.

## PARENT LOANS

The Direct Parent Loan for Undergraduate Students (PLUS) is designed to help parents assist their dependent children with their educational expenses. Parents will need to go through a pre-approval process, which is based on specific credit criteria. There is no grace period with a PLUS loan. The interest rate is fixed at $7.9 \%$. Interest is charged from the date of the first disbursement until the loan is paid in full. The repayment period for a Direct PLUS Loan begins at the time the PLUS loan is fully disbursed, and the first payment is due within 60 days after the final disbursement. Parents must begin paying both principal and interest while the student is still in school, specifically 45 days after the second disbursement. However, for Direct PLUS Loans with a first disbursement date on or after July 1, 2008, the parent may defer repayment either when the student on whose behalf the parent borrowed the loan is enrolled on at least a half-time basis or for an additional six months after the student ceases to be enrolled at least half-time.

## ENROLLMENT STATUS

Each type of aid requires students to enroll for a certain number of credit hours per two-term semester. Most federal aid requires at least half-time status (six credit hours); state and private aid requires full-time enrollment (a minimum of 12 credit hours).

## MAINTAINING ELIGIBILITY

Currently enrolled students are required to maintain the appropriate grade point average for their aid. Students must maintain satisfactory academic progress by completing the required number of credit hours each academic year (see the Satisfactory Academic Progress Policy below) and reapply for aid in the spring for the next academic year.

## DISBURSEMENT

Aid will be disbursed as follows and based on eligibility at the time of disbursement: one half of Stafford Loans and Pell at approximately two weeks into the first term with all other state aid, other half of Stafford Loans and federal grants to disburse approximately two weeks into the second term. Aid is subject to change based on a student's enrolled hours at the time of disbursement. This aid is credited to the student's account in the Business Office.

## APPEALS

Appeals to financial aid decisions can be filed with the director of financial aid, who will present them the financial planning review committee. Appeals must be filed in a timely manner.

## REFUNDS AND REPAYMENTS

Students, who withdraw from the University or drop classes during the first 60 percent of a term, may be required to repay some or all of their financial aid. Refund and repayment amounts are calculated based upon a required federal formula to determine how much is to be refunded to the student or refunded back to various federal and state programs. (See the Fees section for information about the Tuition Refund Schedule and Residence Refund Schedule.)

Return of Title IV federal regulations require the Office of Financial Aid to review the aid packages of students who officially withdraw or unofficially withdraw from Trine University if they receive any type of federal aid, including federal grants and loans.

Examples of these calculations can be seen in the Office of Financial Aid.

## STUDENT RIGHTS AND RESPONSIBILITIES

Trine University is committed to working with each student to provide the best financial aid package possible. At the same time, each student has the responsibility to apply for the aid and to meet and maintain eligibility requirements. Following is a list of basic rights and responsibilities of the students in regard to financial aid:

- Students must apply for financial aid.
- Financial aid information and counseling will be available.
- Students will be considered for financial aid on a first-come, first-served basis.
- Students will be notified electronically or via postcard of their eligibility for financial aid.
- Students will be informed of the specific type of financial aid, the amount of each type of aid and the conditions to renew each type.
- Students will have the opportunity to review with the Office of Financial Aid the process by which awarded aid was determined.
. Students may request an additional review of their aid package with the director of the Office of Financial Aid.
- All students who receive financial aid are required to abide by the policies and regulations of Trine University.
- All Trine University financial aid policies and fund rules are either published on our website or available in our office. Aid recipients are required to be familiar with these policies. Information that is unclear should be brought to the attention of a financial aid staff member.
- The Office of Financial Aid will process financial aid requests without regard to race, religious affiliation, gender, age, or disability. All funds are subject to individual student need as well as the availability of funds.
- General information is communicated to students through their student e-mail account and financial aid information is communicated through their MyTrineFa account. It is recommended that students review their accounts daily. **For new students we use the email that was entered in on the FAFSA but after they receive their student email account we begin to communicate using that one.
- The student has the right to know what types of aid are available. That information is available on both our website and in our offices.
- Students are obligated to advise the Office of Financial Aid of any name, address, or phone number changes. Updating this information through the MyPortal will not update your financial aid records.
- Financial aid recipients are required to notify the Office of Financial Aid of any scholarships, loans, book allowances, employer assistance or other forms of assistance extended to them from sources outside the college. Adjustments of aid may occur as a result.
- The Office of Financial Aid reserves the right, on behalf of the Institution, to review and cancel any award at any time because of changes in a student's financial or academic status, state program rules, federal program rules or any other significant change. Students will be notified of any changes to their aid via an email communication to their Trine email account (refer to $* *$ in \#3 for new students). The email will include instructions on how to access MyTrineFA and review the changes. This will only show the changes made to your award notification and not your bill. If you want to know how this change will affect your bill you will need to log into your MyPortal account for that information.
- Financial aid is awarded to a student contingent upon maintaining standards set forth by the institution's Title IV Satisfactory Academic Progress (SAP) policies which complies with required Federal standards. Please refer to our website and/or student handbook for policy details.
- Disbursement of a student's financial aid award(s) (with the exception of CWSCollege Work Study) will be in the form of a direct payment to the student's account in the Business Office. Work-study earnings are paid directly to the student on a bi-weekly basis via direct deposit after a job is secured and hours are worked.
- Financial aid will be awarded and disbursed based on full-time enrollment. Should the student register for less than a full-time course load or drop classes that adjusts enrollment, costs and aid will be adjusted and an acknowledgement will be sent to the student via email communication. In some cases, students may be required to repay funds to the University.
- It is the student's responsibility to ensure that their tuition is paid in full by the due date either by financial aid, payment plan, cash or whatever resource they plan to use. Students can check their account status on My Portal.
- The student must complete all application forms accurately and submit them on time to the appropriate location.
- The student must provide correct information. The intentional misreporting of information on financial aid application forms is a violation of the law and is considered a criminal offense which could result in indictment under the U.S. Criminal Code.
- The student must return all additional documentation, verification, corrections, and/or new information requested by the Financial Aid Office in a timely manner. Any delay can affect eligibility for certain types of aid.
- $\square$ A student receiving federal financial aid earns their aid based on the number of days that they attend class. A recipient who fully withdraws from Trine University before $60 \%$ of the term is completed will be subject to an aid recalculation based on the number of days attended. The unearned aid will be refunded to the appropriate federal financial aid program by the institution and the student will repay the institution.
- A student receiving state financial aid earns those funds based on their enrollment at the end of the 28th class day. Therefore state aid will be affected should the student drop all of their coursework or below full time before that date.
- A student receiving a Federal Pell Grant earns those funds based on their enrollment as a first time bachelor degree seeking student. A student needs to begin enrollment in all of their coursework before Pell Grants will disburse to their student account. Therefore Pell Grants will be affected if you do not begin your enrollment in all of your coursework and/or drop some or all of the coursework for which you enrolled in.
- A student may be awarded employment under the CWS - Federal Work Study Program. The amount of CWS aid shown on the award letter is the maximum amount of money the student can expect to earn during the academic year as a result of work performed. The student will only be paid for hours worked and obtaining work is contingent on finding CWS approved employment Financial aid awards are made for one academic year only. One half of the award will be applied each semester. It is always the student's responsibility to apply annually for aid; applications submitted by March 1st will receive priority consideration. Renewal of aid depends upon the student maintaining Title IV Satisfactory Academic Progress, continued need for financial aid assistance and the availability of funds.
- Students planning to attend summer semester and wishing to receive financial aidmust complete a Request for Summer Aid Form in addition to the FAFSA. Applications are available on-line and in the Office of Financial Aid following spring break.
- Students who are incarcerated in a state or federal correctional institution are required by Federal law to inform the aid office of their incarceration.
- The student is responsible for reading and understanding all forms that he/she is asked to sign and for keeping copies of the forms.
- The student must accept responsibility for all agreements that he/she signs.
- The student must be aware of and comply with the deadlines for application or reapplication for aid.
- The student should be aware of the school's refund policy
- Students receiving financial aid must inform the Office of Financial Aid about additional awards
- Students must maintain satisfactory academic progress toward academic goals.
- Students must maintain good social standing.
- Students must reapply for financial aid between January 1 and March 1.
- Students must report to the Office of Financial Aid when transferring to another school.
- If applicable, students must participate in the Federal Stafford Loan entrance and exit interviews.

Satisfactory Academic Progress (SAP) Policy<br>Trine University - SPS/TVC<br>Office of Financial Aid<br>Effective July 1, 2011

Federal regulations mandate that all students make satisfactory, measurable academic progress toward completion of a degree in order to receive federal assistance through Title IV federal grant, work, and loan programs.

1. Trine's SAP standards comply with the requirements of the U.S. Department of Education.
2. These are financial aid standards and do not replace or override Trine's academic policies.
3. Academic progress will be reviewed at the end of each semester.
4. It is your responsibility to stay informed of the University's SAP standards and policy.

Beginning July 1, 2011, the 2011-2012 Satisfactory Academic Progress standards will change in accordance to new federal regulations. These new SAP standards will be monitored beginning with the fall 2011 term.

The academic progress of all financial aid applicants and recipients will be reviewed for

1. Cumulative Grade Point Average
2. Cumulative Credit Hour Completion Rate/Pace, and
3. Maximum Time Frame for Degree Completion.

You must maintain satisfactory progress in all three areas regardless of whether or not you have received financial aid in the past.

## 1. Cumulative Grade Point Average (GPA) - see chart a

If you fall below these standards you will be placed on Financial Aid Warning and a Notification will be sent to your Trine email.
2. Cumulative Credit Hour Completion Rate/Pace - see chart a

You must earn $75 \%$ of the credit hours that you enrolled for. This does not apply to Graduate students. To earn hours at Trine you will need either A, B, C, D or S. All other grades will not count towards hours earned but will count towards hours attempted. Note: withdrawing (W) from a course will affect your completion rate.
If a student repeats a course (allowed only one time), both courses count as attempted hours but only one of the grades count as hours earned.
Incompletes will be counted as attempted hours but won't count towards hours earned. If the student receives a grade for this course later that counts as credit it will be their responsibility to inform our office.
3. Maximum Time Frame for Degree Completion - see chart a

You are expected to earn your Bachelor's Degree before you exceed $150 \%$ of the hours required for completion. If your degree requires 120 hours then you are only allowed to attempt 180 hours or if your degree requires 132 hours then you are only allowed to attempt 198 hours. If you exceed this maximum timeframe you are no longer eligible for aid.
You are expected to earn your Master's Degree before you exceed $120 \%$ of the hours required for completion. If your degree requires 32 hours then you are only allowed to attempt 38 hours or if your degree requires 36 hours then you are only allowed to attempt 43 hours.

## The allowed time frame does not change or increase when you change maiors.

If you have completed all degree requirements but have not applied to graduate or received the degree you are no longer eligible for aid.
If you are not on track to complete your degree before your time frame expires you will no longer be eligible for aid.

| Revised Effective July 1, 2011 Chart A |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Under graduate | Graduate |
| 1. Minimum required cumulative GPA | 2.0 | 3.0 |
|  |  | $80 \%$ |
| 2. Minimum Pass Rate percentage of Total Hrs | $75 \%$ |  |
| Successfully Completed |  |  |
| Measured as Hrs Earned $\div$ Hrs Attempted |  |  |
|  |  | 2 years from start of program |
| 3. Maximum total Credit Hrs/Time allowed to <br> complete first academic degree | $150 \%$ of the specified <br> published program length |  |

**Transfer hours count in both number attempted and number earned. **

## Evaluation and Notification of Financial Aid Eligibility

The minimum progress standards will be checked after each semester of enrollment (Fall, Spring, and Summer). At the end of each semester of enrollment, students must earn the minimum cumulative GPA, minimum number of credit hours (pace), and be within the maximum timeframe (see chart above). At the time of each evaluation, a student who has not achieved the required GPA, or who is not successfully completing his or her educational program at the required pace, is no longer eligible to receive assistance under the Title IV programs unless the
student is placed on financial aid warning or the student has appealed and has been placed on financial aid probation.

Using the qualitative and quantitative measures of progress, a student may be placed in one of the following SAP statuses:

## Financial Aid Warning

Financial Aid Warning status is assigned to a student who fails to meet one or more of the SAP measures indicated above at the conclusion of a payment period (semester). A student assigned a Financial Aid Warning will be notified electronically to their school issued email address. The student may continue to receive financial aid for one subsequent payment period (semester) under this status despite the determination that the student is not making SAP. (Note: The assignment of a Financial Aid Warning status will go into effect at the conclusion of the 2011 fall semester).

## Financial Aid Probation

Financial Aid Probation status is assigned to a student who fails to make SAP (following Financial Aid Warning status) and who has successfully appealed and has had eligibility for financial aid reinstated. A student who is placed on financial aid probation may receive financial aid for one subsequent payment period (semester). A student on Financial Aid Probation may be required to meet certain terms and conditions while on financial aid probation, such as taking a reduced course load or taking specific courses. A student assigned a Financial Aid Probation status will be placed on a SAP Academic Plan. At the conclusion of the SAP Academic Probation payment period, the student must either meet the SAP standards or fulfill the requirements specified in the SAP Academic Plan.

## Financial Aid Suspension

Financial Aid Suspension status is assigned to a student who fails to make SAP or does not fulfill the requirements set forth in his or her academic plan when placed on Financial Aid Probation or has an unsuccessful appealed. Any student that has 90 credit hours or more and is below 2.0 will be on Financial Aid Suspension. A student who is placed on Financial Aid Suspension may only receive financial aid if the student re-establishes eligibility by meeting the standards set forth in this policy.

## SAP Appeal Procedures:

If a student fails one or more of the three measures (qualitative, quantitative and maximum time frame) or is placed on Financial Aid Probation, the student is not eligible for federal, state, and institutional financial aid, which include grants and loans. However, students failing SAP standards who have had mitigating circumstances (i.e., death in the family, illness, involuntary military leave, etc.) may request reinstatement of their financial aid eligibility by completing the SAP Appeal for Financial Aid Form and submitting it to the Financial Aid SAP Appeals Committee. The SAP Appeal for Financial Aid Reinstatement Form is available at www.trine.edu/forms.

The maximum number of times a student may appeal is twice (but not consecutively) during his or her undergraduate program. The appeal, which must be typed, includes the following student requirements:

1. Detailed explanation for failure to meet SAP standards for each payment period (semester) the student failed to perform satisfactorily
2. Documentation to support the reason for failure
3. A copy of 4-Year Graduation Plan (must be attached)
4. A copy of Academic Improvement Plan (must be attached)
5. Detailed explanation of what has changed that will now allow the student to comply with SAP standards, a statement of academic objectives, and corrective action plan
6. Meet and discuss appeal with Campus Director or Student Support Specialist and obtain his or her signature on the appeal form

## SAP Appeal Deadlines: Semester/Term

Fall Semester
Spring Semester
Summer Terms

## Date

One week prior to the start of fall semester
One week prior to the start of spring term
One week prior to the start of summer term

The Financial Aid Office is located in Forman Hall. Stop by the office, call us at 260-665-4810, or visit our website at http://www.trine.edu/admission/adult_student/financial_aid

## CAREER SERVICES

Career Services offers programs and services to assist students and alumni to make career decisions and pursue the skill development necessary to compete in a rapidly changing, competency-based, global workplace*. Career planning is an ongoing process that begins when the student is a freshman and continues throughout the student's senior year. The office of Career Services works collaboratively with academic departments, faculty members, student services, employers and other relevant constituents to enhance students' career development and participation in internships and other experiential education programs. Career Services accumulates and makes accessible information and resources pertaining to career exploration, workforce trends, the job search, employment opportunities, current salary trends, and graduate employment statistics. The resources of Career Services are available throughout the student's academic preparation and when the student becomes an alumnus.
*Job placement is not guaranteed to students upon graduation.

## INTERNSHIPS

Career Services advertises internship requests throughout the academic year on www.trinecareers.org and refers students to other internship resources that meet their individual needs. These major-related work experiences, which usually are limited to a three-month time period, build credentials that are essential to a graduate's job search. Internships for credit are also available for students who meet specific requirements within the student's discipline or major field of study.

## COUNSELING SERVICES

The purpose of Counseling Services is to provide students with short-term counseling that will enable them to overcome a variety of personal and interpersonal difficulties that may interfere with their pursuit of academic and career goals. Clinical counseling services, as well as prevention, outreach, and consultation, are provided free on the residential Angola campus.

## DISCIPLINE STRUCTURE

## PROCESS:

The disciplinary system at Trine University consists of a Judicial Review Committee, Judicial Review Board, Dean of Students, and the University Disciplinary Review Board. Disciplinary issues may be handled by one or more of the above groups depending on the severity of the offense. The Judicial Review Committee shall determine which group will hear the individual case(s). The University Disciplinary Review Board will hear cases involving potential dismissal or expulsion. In addition, for serious offenses, acts, or crimes against other people or the university are grounds for immediate dismissal or expulsion by the Dean of Students.

The Judicial System at Trine University is operating under a standardized point system. Points are assigned depending on the severity of the violation. Points are accumulated for the duration of time spent at Trine University.

## WARNING

Disciplinary Warning is an official sanction notifying the student or organization that certain behavior was unacceptable. Further misconduct may result in additional disciplinary sanctions.

## INTERVENTION: $\mathbf{1 - 7 4}$ judicial points

Disciplinary Intervention is an official sanction indicating to a student or organization that their behavior was unacceptable. Disciplinary sanctions will be imposed.

## PROBATION: $\mathbf{7 5}$ judicial points

When on Disciplinary Probation, a student or organization will meet with the Dean of Students and a disciplinary action plan will be developed. Probation is an official sanction notifying the student or organization that any additional inappropriate behavior may result in a referral to the University Disciplinary Review Board with a recommendation of possible dismissal from Trine University.

## FINAL NOTICE - REVIEW BOARD REFERRAL: 80 judicial points

Final Notice is an official sanction notifying the student that his or her inappropriate behavior has resulted in a referral to the University Disciplinary Review Board and a recommendation of possible dismissal or expulsion from Trine University.

Disciplinary Dismissal is an official determination canceling the student's registration at the university. In the instance of dismissal, all academic grades will revert to "F's" and monetary reimbursements may not be made for tuition, room and board, or any other university fees. Students who wish to return to the university at a later date must submit a written request to return to the Registrar and Dean of Students. Notification will be sent to appropriate university offices when a student is dismissed. The student's parents or guardians will also be notified. Disciplinary Expulsion is an official determination made by the Dean of Students that
permanently prohibits the student from attending Trine University. In the instance of expulsion, all academic grades will revert to "F's" and monetary reimbursements may not be made for tuition, room and board, or any other university fees. Notification will be sent to appropriate university offices when a student is expelled. The student's parents or guardians will also be notified of the decision.

## DISCIPLINARY SANCTIONS

Sanctions for misconduct may include, but not limited to fines, loss of privilege or participation in any university activities, sports, academic organizations, or trips for a set period of time, restitution, university service hours, educational/service activities, dismissal, and/or expulsion.

## JUDICIAL REVIEW MEETING

During the judicial review meeting, the Judicial Review Committee will meet with the student to review the charge(s). During this review, the case will be presented to the student and a decision regarding actions and sanctions will be determined. If the student chooses to accept, responsibility for the violation(s), appropriate sanction(s) will be issued. If the student chooses to deny responsibility, the student will then meet with a Judicial Review Board. During a disciplinary review meeting, students will:
a) Have the opportunity to state his/her side of the case and provide any additional information that might be helpful in resolving the case.
b) Receive written notification of the results of the judicial review meeting at the conclusion of the meeting.

## APPEAL PROCESS:

The Dean of Students will address appeals of decisions made by the Judicial Review Board. These appeals must be submitted in writing, via email, within three working days of the notification. Appeals will only be accepted for the following reasons:

1. Insufficient evidence to support decision
2. Harshness of sanction
3. Procedural irregularity

## 4. New evidence

The reason of a student's appeal must be included in the written appeal. It is up to the Dean of Students to determine whether the appeal statement clearly identifies and explains one or more of the above reasons for the appeal. In the absence of such demonstration, the appeal will be denied and the sanctions stand. The appeal is not an opportunity to argue that the initial decision was wrong. If the Dean of Students determines that there is an acceptable reason(s) for an appeal, based on those indicated above, he/she will refer the case back to the Judicial Review Board for further evaluation and possible adjustment of sanctions.

## UNIVERSITY DISCIPLINARY REVIEW BOARD PROCESS:

When a violation of university community or residential standards requires the convening of a University Disciplinary Review Board, the following procedure will be initiated by the Office of Student Services:

1. The University Disciplinary Review Board will be established consisting of the following five members: one administrator (who will serve as the chair of the board), one faculty member, one representative from the Athletic Department, a student resident director, and the President of Student Senate. Meeting minutes will be recorded.
2. The student accused of the violation will meet with the Dean of Students and charges and recommendations as a result of the violation(s) will be issued and explained.
3. A date and time of the hearing will be set.
4. The student is allowed to have two people present during the hearing.
5. The Dean of Students or Judicial Review Committee representative will introduce information about the disciplinary history of the accused and other relevant information. The Dean of Students or Judicial Review Committee will recommend a plan of action. The student will have the opportunity to provide his or her account of event(s). The Board will determine if the recommended sanctions will be imposed.
6. The accused student will receive written notice within 24 hours of the hearing.

The decision of the University Disciplinary Review Board is final with no avenue of appeal.

## ACADEMIC INFORMATION

## ACADEMIC ADVISING

Each student is assisted by the education center director or assigned faculty adviser in planning a program to meet graduation requirements and career goals. It is, however, the student's responsibility for meeting the academic program requirements presented in the catalog.

## CHANGING A MAJOR

To change a major, students must get the approval of the education center director or assigned faculty adviser. Change-ofmajor forms are available at the regional education center. Admission requirements for each major are available from the education center director.
A student who changes a major is subject to the program requirements in effect at the time of the major change.
When a student changes his or her major, all transcripts, including the Trine University transcript, are re-evaluated. When changing majors, courses with grades of less than a "C" can be dropped from the GPA calculation if one of the following two conditions is met:

1. When changing majors from one category of degrees to another category as follows:

Category 1: Business degrees (Bachelor of Applied Management, Bachelor of Business Administration, Associate in Accounting, Associate in Business Administration)
Category 2: Arts \& Sciences degrees
(Bachelor of Science in Criminal Justice, Bachelor of Science, Bachelor of Arts)
Category 3: Engineering and Technology degrees (Associate of Science, Associate of Science in Engineering Technology, Bachelor of Computer Science, Bachelor of Engineering, Bachelor of Science in Engineering Technology)
2. When changing from a four-year program to a two-year program or from a two-year program to a four-year program

Additional conditions:

- If courses are not required in the new major.
- If student is not currently enrolled in those courses.

Dropped courses may not be repeated in the new major.
In cases where a student is readmitted to a degree program in which he or she was previously enrolled, all grades earned during enrollment in that degree program must be included in the cumulative grade point average.

## FULL-TIME STUDENT

A full-time undergraduate student is one who is carrying a minimum of 12 academic credit hours or a graduate student who is carrying a minimum of nine credit hours over a two-term, 16 -week semester. If a student wishes to register for more than nine credit hours per eight-week term, he or she must have written permission as follows: 10 credits per term requires permission from the education center director; 11 credits per term also requires permission from the dean; and 12 or more credits per term requires permission from the Vice President for Academic Affairs.

## CLASSIFICATION OF STUDENTS

| CLASS | CREDITS |
| :---: | :---: |
| Freshman | $0-28$ |
| Sophomore* $^{*}$ | $29-59$ |
| Junior | $60-89$ |
| Senior | $90+$ |

*Students enrolled in associate degree programs remain sophomores when they have 60 or more credits.

## NON-DEGREE STUDENT

An applicant may be admitted to Trine University as a non-degree student in certain programs. The non-degree student is limited to a maximum of 30 semester credit hours attempted. To continue taking courses after 30 credit hours are earned, the non-degree student must apply for and be accepted to degree status. A change from non-degree to degree status is processed by the admission personnel. An official high school transcript is required for admission as a non-degree student. Any course requiring pre-requisite courses will require college transcripts before enrolling.

## GENERAL EDUCATION PHILOSOPHY

The purpose of the general education curriculum components is to provide the Trine University graduate with skills necessary to think critically and to communicate clearly with persons in all professions. The General Education requirements are designed to ensure breadth of knowledge and to promote intellectual inquiry and critical thinking

## GENERAL EDUCATION OUTCOMES

After completion of the general education curriculum, the student will be able to:

- present written thoughts in an effective manner using correct grammar, punctuation, and organization of ideas,
- communicate thoughts orally in an effective manner,
- demonstrate critical thinking skills utilizing information and thought processes by various perspectives listed in the philosophy, and
- demonstrate use of quantitative problem solving and reasoning skills.

The General Education Requirements consist of courses in two categories: skills and perspectives
Skills courses include written and oral communication courses as identified by individual degree programs.
Perspective courses are required for all degrees, with specific information identified in the General Education Requirement section of the catalog. Perspective courses are divided into the following areas:

Sciences - to learn to use analytical tools and applications in the study of that which is material.
Mathematics - to learn to connect mathematical ideas and applications in the study of that which is material.
Humanities - to learn to appreciate the achievements which humanity has accomplished.
Social Sciences - to gain insight into the effects of human behavior on the individual, society, and the world through history as well as in current times.

## GENERAL EDUCATION REQUIREMENTS FOR ALL BACHELOR DEGREES <br> Area <br> \# of semester hours

## Written Communication

(must include ENG 103 or ENG 104 and either ENG 113 or ENG 133)

## Oral Communication

(SP 203 or COM 163)

## Social Sciences \& Humanities

(*take at least two courses from Social Sciences
and at least two courses from Humanities.
See table that follows.)12

## Mathematics \& Science

(must include at least 1 course in mathematics and 1 course in science)10

## Other

(additional hours to be taken from the above categories*)11
TOTAL ..... 42

Any approved computer literacy course may be used to satisfy three (3) of the eleven (11) "Other" hours under General Education requirements.

## BACHELOR DEGREES

| Humanities | Social Sciences |
| :--- | :--- |
|  |  |


| ARC 293 | FLM 203 | SPN 203 | HIS 113 |
| :--- | :--- | :--- | :--- |
| ART 253 | FRN 113 | SPN 213 | HIS 203 |
| CHN 113 | FRN 123 | ECO 213 | HIS 213 |
| CHN 123 | GER 104 | ECO 223 | HIS 251 |
| COM 123 | GER 114 | ECO/SOC 243 | HIS 423 |
| COM 203 | GER 203 | ECO 323 | HIS 433 |
| COM 233 | GER 213 | ECO 363 | HNR X2X |
| COM 363 | HIS 253 | ECO 383 | PSY 113 |
| ENG 153 | HNR X1X | ECO/HIS 393 | PSY 313 |
| ENG 204 | MUS 123 | GEO 213 | PSY 323 |
| ENG 233 | MUS 223 | GEO 303 | PSY 333 |
| ENG 214 | MUS 272 | GEO 313 | PSY/SOC 343 |
| ENG 253 | PHL 203 | GEO 323 | PSY 353 |
| ENG 263 | PHL 251 | GEO/GOV 353 | PSY 383 |
| ENG 273 | PHL 313 | GOV 113 | PSY 403 |
| ENG 323 | PHL 323 | GOV 313 | PSY 413 |
| ENG 333 | PHL 333 | GOV 333 | SOC 103 |
| ENG 363 | PHL 343 | GOV /HIS 323 | SOC 313 |
| ENG 403 | SP 103 | GOV/HIS 343 | SOC 323 |
| ENG 423 | SPN 103 | GOV/HIS 363 | SOC 333 |
| ENG 433 | SPN 113 | GOV/PSY 373 | WS 103 |
| ENG 443 | SPN 123 | GOV/HIS 403 |  |
|  |  | HIS 103 |  |

# GENERAL EDUCATION REQUIREMENTS FOR ALL ASSOCIATE DEGREES* 

## Area

## \# of semester hours

Written Communication
(must include ENG 103 or ENG 104 and either ENG 113 or ENG 133)

6
Social Sciences \& Humanities 6
Mathematics \& Science
(must include at least 1 course
in mathematics and 1 course in science)
7
Other
3

## TOTAL

22
*The above choices must include at least one course from the following perspective areas: Social Sciences, Humanities, Mathematics, and Sciences.

ASSOCIATE DEGREES

| Humanities | Social Sciences |  |  |
| :--- | :--- | :--- | :--- |
| ARC 293 | FLM 203 | SPN 203 | HIS 113 |


| ART 253 | FRN 113 | SPN 213 | HIS 203 |
| :--- | :--- | :--- | :--- |
| CHN 113 | FRN 123 | ECO 213 | HIS 213 |
| CHN 123 | GER 104 | ECO 223 | HIS 251 |
| COM 123 | GER 114 | ECO/SOC 243 | HIS 423 |
| COM 203 | GER 203 | ECO 323 | HIS 433 |
| COM 233 | GER 213 | ECO 363 | HNR X2X |
| COM 363 | HIS 253 | ECO 383 | PSY 113 |
| ENG 153 | HNR X1X | ECO/HIS 393 | PSY 313 |
| ENG 204 | MUS 123 | GEO 213 | PSY 323 |
| ENG 233 | MUS 223 | GEO 303 | PSY 333 |
| ENG 214 | MUS 272 | GEO 313 | PSY/SOC 343 |
| ENG 253 | PHL 203 | GEO 323 | PSY 353 |
| ENG 263 | PHL 251 | GEO/GOV 353 | PSY 383 |
| ENG 273 | PHL 313 | GOV 113 | PSY 403 |
| ENG 323 | PHL 323 | GOV 313 | PSY 413 |
| ENG 333 | PHL 333 | GOV 333 | SOC 103 |
| ENG 363 | PHL 343 | GOV /HIS 323 | SOC 313 |
| ENG 403 | SP 103 | GOV/HIS 343 | SOC 323 |
| ENG 423 | SPN 103 | GOV/HIS 363 | SOC 333 |
| ENG 433 | SPN 113 | GOV/PSY 373 | WS 103 |
| ENG 443 | SPN 123 | GOV/HIS 403 |  |

## GRADUATION REQUIREMENTS

1. Specific degree requirements: Students must complete the degree requirements specific to their programs. Once in a program, if the requirements change, students have the option of graduating under the new requirements. Students who re-enter the University after an absence of more than one academic year are subject to the degree requirements in effect at the time of re-entry.
2. General Education Requirements: All Trine University students receiving a baccalaureate or associate degree must meet the General Education requirements. Details regarding the General Education philosophy and requirements are presented immediately before this section in the catalog.
3. A cumulative grade point average of not less than 2.0 must be achieved for all Trine University courses.
4. All required courses or approved substitutions must be completed as described in the respective degree programs.
5. Candidates for graduation must file with the registrar intent to graduate no later than one semester before the final semester of attendance in which degree requirements shall be completed.

## COMMENCEMENT PARTICIPATION

All spring and summer semester graduates are eligible to participate in the annual spring commencement ceremony. Fall semester graduates are eligible to participate in the spring commencement ceremony prior to completing their degrees only if, by the end of the spring semester, they have 18 or fewer credit hours to complete to earn their degrees. If a fall graduate has more than 18 credit hours to complete, the student is invited to attend the commencement ceremony the following spring. Graduate students may participate in commencement ceremonies after successful completion of degree requirements.

## COURSE SUBSTITUTIONS

An alternate course may be substituted for one required in a student's major if the student cannot schedule the required course without undue hardship. The substitution must be requested by the student's education center director. Proper notation must be
made in the student's record and approval granted prior to the substitution. The substitution cannot be made simply on the request of the student to take a different course from the one required.

## ACADEMIC RESIDENCY REQUIREMENT

- To be eligible for a baccalaureate degree, a student must earn a minimum of 30 credits at Trine University.
- To be eligible for an associate degree, a student must earn a minimum of 16 credits at Trine University.
- The last 30 credits of a four-year degree program or the last 16 credits of a two-year degree program must be taken at Trine University unless a waiver is granted by the academic dean, upon the recommendation of the education center director.


## THE SECOND DEGREE

A candidate for a second Trine University baccalaureate degree is required to complete a minimum of 30 credit hours in residence above the total credit requirements for the first baccalaureate degree. In addition, the candidate must complete all other requirements for the second degree. A candidate for a second Trine University associate degree is required to complete a minimum of 16 credit hours in residence above the total credit requirements for the first associate degree as well as meet all course requirements. A candidate for a Trine University baccalaureate degree who has already earned an associate degree from the University must complete a minimum of 46 Trine University credit hours.

Two baccalaureate degrees may be received at the same time provided all requirements for both degrees have been met, and the student has earned a minimum of 30 credit hours more than the degree with the lower minimum hour requirement. Two associate degrees may be received at the same time provided all requirements for both degrees have been met, and the student has earned a minimum of 16 credit hours more than the degree with the lower minimum hour requirement. A Second Degree Continuation form must be submitted to the Office of the Registrar prior to completing the first degree. Certain restrictions apply to students utilizing financial aid benefits.

## SCHOLASTIC AWARDS AT GRADUATION

GOLD KEYS-Gold Keys are awarded to bachelor degree students enrolled in the School of Professional Studies who have earned GPAs of 3.75 or better while carrying at least 12 credit hours in each of four consecutive semesters.

SILVER KEYS—Silver Keys are awarded to associate degree students enrolled in the School of Professional Studies who earn 3.75 grade point averages or better while carrying at least 12 credit hours in each of two consecutive semesters.

GRADUATION WITH HONORS-An undergraduate candidate for graduation will have his or her diploma inscribed as graduating cum laude if he or she achieves a cumulative grade point average of 3.50 to 3.749 , magna cum laude if he or she achieves a cumulative grade point average of 3.75 to 3.949 , or summa cum laude for a cumulative GPA of 3.950 or higher. The grade point average will be computed on the basis of all courses taken at Trine University. To qualify for the award, a candidate for a bachelor's degree must earn a minimum of 40 semester hours at Trine University, and a candidate for an associate degree must earn a minimum of 20 semester hours.

HONORS DAY-For the purpose of Latin Honors recognition at Honors Day, the grade point average requirement will be based upon the student's cumulative GPA before spring grades are posted. For such recognition, a minimum of 40 Trine University credits must be completed by the end of the spring term for a bachelor's degree or a minimum of 20 Trine University credits for an associate degree. Latin honors will be listed on the diploma and transcript based upon the student's cumulative GPA after the final term's grades are posted and the student has met all degree requirements.

## GRADING SYSTEM

The grading system is as follows:

| A | Excellent | 4.0 |
| :---: | :---: | :---: |
| B+ | Very Good | 3.5 |
| B | Good | 3.0 |
| C+ | Above Average | 2.5 |
| C | Average | 2.0 |
| D+ | Below Average | 1.5 |
| D | Poor (lowest passing grade) | 1.0 |
| F | Failure | 0.0 |
| FI | Failure (original grade of I) | 0.0 |
| S | Satisfactory | not figured into GPA |
| U | Unsatisfactory | not figured into GPA |
| I | Incomplete | not figured into GPA |
| IP | In progress (grade deferred) | not figured into GPA |
| W | Withdrawal before completion of $80 \%$ of the semester |  |
| WP | Withdrawal after completion of $80 \%$ of the semester with passing work at the time of withdrawal. |  |

## GRADING

Grades are reported to the Registrar by noon, on the Monday following the end of the term and made available to students by the end of the next day. The awarding of grades is the prerogative of the classroom instructor in accordance with policies posted in the SPS Trine University Course Catalog. Faculty members are responsible for informing students of their grading policy and become official when they are reported to the Registrar. If a faculty member discovers incorrectly reported grades due to miscalculation or clerical error, the error should be reported to the Registrar immediately on the prescribed form. The appropriate campus director must approve any adjustment of grades.

## GRADE APPEALS

A student who disagrees with an assigned grade will take the following steps:

- Approach the instructor and explain the problem.
- If the instructor and student do not come to an agreement, the student should write a letter to the appropriate campus director.
- Graduate students should write a letter to the appropriate program director, should they be unable to reach an agreement with the instructor.
- If the campus director mediation does not resolve the issue, the student should file a written appeal to the dean.

If these steps do not resolve the problem, or if impractical, the student may petition the Grade Review Board in writing for a hearing of the issue. Information regarding this may be obtained from the Vice President for Academic Affairs. The petition shall set forth in detail the basis for the review. This should be done by the midterm of the first regular term following the assignment of the grade. The Board may grant an extension on this time limit. If the Board agrees to hear the case, it will so
inform the student by the end of that term. In grade review cases, the student is responsible for presenting evidence to support his/her position.

At the Grade Review Hearing, the student shall present his/her argument followed by the instructor response. The Board shall promptly prepare a written recommendation and forward copies to all parties involved, including the dean for the School of Professional Studies and Vice President for Academic Affairs. The report shall include dissenting opinions on the Board, if any. Recommendations of the Board are advisory. In cases involving death, incapacity, or prolonged inaccessibility of the instructor, or in similar unusual circumstances, the instructor 's branch campus director is responsible for assigning the grade. Records of each case heard by the Board shall be maintained in the office of the Vice President for Academic Affairs. If the student or instructor involved wishes to appeal the decision on procedural grounds, he/she should file an appeal within two working days of the decision with the Vice President for Academic Affairs. If any procedural irregularities are discovered, he/she will notify the student and the Board within ten (10) working days after the appeal.

The Vice President for Academic Affairs shall appoint the faculty members who will serve on the Board. He shall choose one regular member and one alternate (who will be from a different department, if possible) from each school. In addition, the Student Senate shall elect two student members and their alternates. Student members must have junior or senior standing. The faculty members shall serve three-year, staggered terms, and the faculty members serving his/her third year will chair the committee. Student members shall serve one-year terms.

GRADE OF INCOMPLETE (issued only under special circumstances)
Any Trine University School of Professional Studies student who is granted an "Incomplete" course grade must have a documentable illness, emergency, or other situation beyond their control that prevents them from completing the course's requirements by the end of the academic term. An "Incomplete" is a temporary grade that is assigned at the instructor's discretion, with the approval of the Campus Director.

A student's request for an "Incomplete" will be approved only if ALL of the following circumstances are met:

1. An illness or other extenuating circumstance that legitimately prevents the student from completing required coursework by the due date. (Written documentation is required to be presented to the instructor and Campus Director); and
2. The student's attendance has been satisfactory (per Financial Aid standards); and
3. The course requirements specified in the syllabus are 75 percent successfully completed; and
4. The student submits their request in writing during the current term, prior to the final drop date of the term.

A plan for completion of the course must be prepared and attached to the student's request, which must include:

1. The course requirements that must be completed by the student in order to change the "Incomplete" to a letter grade; and
2. Specific due dates by which each course requirement must be completed by the student; and
3. Signatures indicating agreement and approval of the plan by the Student, Instructor, and Campus Director.

The remaining course requirements must be completed within eight weeks of the end of the semester in which the "Incomplete" was granted. If the student fails to meet any of the specific due dates, the "Incomplete" grade will be changed to the appropriate letter grade based on the work completed. The Instructor is responsible for completing the grade change form and submitting to the Campus Director who will then submit it to the Registrar's Office.

## GRADE OF "IN PROGRESS"

The "IP" (In Progress) grade is to be given only in courses so designated by the respective schools. The "IP" grade is designed for courses which require more than one semester for completion. An "IP" grade not removed within one year from the end of the semester in which the "IP" grade was issued will be converted to an "FI" by the registrar. An "IP" grade may not be removed by registering again for the course.

## COURSE REPEAT

Course repeat means that a student may retake a course at Trine University for a better grade. When a student has repeated a course, the honor points for the higher grade are substituted.
The student's record will not show additional hours attempted for the repeated course. Additional earned hours are given if a student passes a class where an "F" or "U" grade was originally received.

Courses which are repeated remain on the student's permanent record (transcript).

## FAILING GRADES

Credit for a course failed at Trine University may not be obtained by examination.

## WITHDRAWAL FROM CLASS

A student may withdraw from class through 80 percent of the term, provided the student obtains the proper form and obtains education center director approval. All students dropping below full-time status must have the approval of the Office of Financial Aid. The completed form shall be submitted by the education center director to the registrar before 80 percent of the semester is completed.

No classes shall be dropped after the completion of 80 percent of the semester except for circumstances beyond the control of the student, such as illness, family emergency, or other situations. Permission to withdraw after the completion of 80 percent of the semester must be obtained from the School of Professional Studies dean. If permission is granted, a grade of "WP" will be issued if the student was passing at the time of withdrawal.

A grade of " $F$ " will be issued if the student was failing and will count toward the student's cumulative and semester grade point averages. Any deviation from the policy will be considered an unofficial withdrawal, and a grade of " $F$ " will be issued.

## COURSE AUDIT

To audit is to take a course for no credit. A course may be audited only if space is available in the course. The approval of the student's academic advisor is required. A change to credit status is permissible if completed during the normal add period. Auditors shall receive a grade of "AU." At the discretion of the instructor, an auditor may participate in class discussion and take examinations.

## CLASS ATTENDANCE AND EXCUSED ABSENCES

Students are expected to attend all class and laboratory terms. Absences may be permitted for reasonable causes such as illness, disabling injury, death, or serious illness in the immediate family, or in the case of a court order. Participation in Universitysponsored activities shall also constitute a reasonable cause for absence from class. Written documentation of the reason for absence may be required and, in the case of University-sponsored events, such documentation will be provided by the University sponsor.

It is the student's responsibility to discuss pending absences (field trips, unavoidable business trips, etc.) with his/her professor prior to the missed class period. The faculty member may require the student to complete any work due prior to the absence.

It is the instructor's responsibility to present a class attendance policy to each class at the beginning of the semester. Decisions regarding submission of assignments will be at the instructor's discretion, but students may not be penalized for absences due to reasonable cause.

## SCHOLASTIC AWARDS AT THE END OF EACH SEMESTER

THE PRESIDENT'S LIST: A School of Professional Studies student whose semester grade point average is 3.75 or better while carrying at least 12 credit hours will be placed on the President's List.

THE DEAN'S LIST: A School of Professional Studies student whose semester grade point average is between 3.50 and 3.749 while carrying at least 12 hours will be placed on the Dean's List.

## TRANSCRIPTS

The Office of the Registrar is responsible for maintaining timely and accurate records of the academic progress of students while maintaining the privacy and security of those records.

## ORDERING TRANSCRIPTS

To order a transcript, a written request should be sent to the Registrar's Office by letter or by fax. No e-mail requests are being accepted at this time.

## Requests for transcripts should contain the following:

- The address where the transcript is to be mailed;
- The name and date of birth of the person ordering the transcript;
- Whether an official or personal copy is needed; and
- The signature of the person ordering the transcript.

There is a $\$ 3.00$ charge per copy for all official transcripts. (Pricing is subject to change.)
Enrolled (current) students may receive personal copies of their transcript at no charge, with a written request.
Mail transcript requests to the following address:
Trine University
Office of the Registrar
1 University Avenue
Angola, IN 46703-1764 or
260.665.4221 fax

## ACADEMIC PROBATION

The academic performance of every student is monitored by the registrar to determine satisfactory progress. Students with GPAs below 2.0 will receive a letter warning them that they have fallen below the standard required for graduation.

Degree students who have attempted 59 or fewer semester hours at Trine University will be placed on academic probation when their cumulative honor points are more than six below the 2.0 graduation standard.

Students are placed on probation in the following situations:

- Degree seeking students who have attempted 59 or fewer semester hours at Trine University and are more that six cumulative honor points below the 2.0 graduation standard.
- Degree seeking students who have attempted 60 or more semester hours of course work must maintain a cumulative grade point average of 2.0 or be placed on academic probation. Transfer hours accepted into a degree program are added to Trine University hours attempted for purposes of determining the 60 hours attempted. (See chart on this page for further explanation of required GPA.)

A student on academic probation will have a period of one semester (two consecutive eight-week terms) to reach minimum standards or be dismissed. Students on probation who achieve at least a 2.0 GPA in summer courses will not be dismissed. Students on probation who raise their cumulative GPA to acceptable academic graduation standards will be removed from probationary status.

After a period of not less than one semester (not including summer school), a dismissed student may apply for readmission to the program from which he or she was dismissed. A dismissed student may be readmitted without a waiting period in any other degree program to which the student can gain acceptance by the readmit committee.

Financial aid is not automatically reinstated when a dismissed student is readmitted.
Students on academic probation will have the following restriction placed on their attendance:

- They may not register for more than 12 credit hours. If they wish to take more, they must have permission from the School of Professional Studies dean.

The chart below lists the grade point average (GPA) required to be removed from probation. The required GPA is based on the number of GPA hours attempted at Trine University.

| GPA <br> HOURS <br> ATTEMPTED | GPA | GPA <br> HOURS <br> ATTEMPTED | GPA |
| :--- | :--- | :--- | :--- |
| 1 | 0.000 | 31 | 1.86 |
| 2 | 0.000 | 32 | 1.813 |
| 3 | 0.000 | 33 | 1.818 |
| 4 | 0.500 | 34 | 1.824 |
| 5 | 0.800 | 35 | 1.829 |


| 6 | 1.000 | 36 | 1.833 |
| :--- | :--- | :--- | :--- |
| 7 | 1.143 | 37 | 1.838 |
| 8 | 1.250 | 38 | 1.842 |
| 9 | 1.333 | 39 | 1.846 |
| 10 | 1.400 | 40 | 1.850 |
| 11 | 1.455 | 41 | 1.854 |
| 12 | 1.500 | 42 | 1.857 |
| 13 | 1.538 | 43 | 1.860 |
| 14 | 1.600 | 44 | 1.864 |
| 15 | 1.600 | 45 | 1.867 |
| 16 | 1.625 | 46 | 1.870 |
| 17 | 1.647 | 47 | 1.872 |
| 18 | 1.667 | 48 | 1.875 |
| 19 | 1.684 | 49 | 1.878 |
| 20 | 1.700 | 50 | 1.880 |
| 21 | 1.714 | 51 | 1.882 |
| 22 | 1.727 | 52 | 1.885 |
| 23 | 1.739 | 53 | 1.887 |
| 24 | 1.750 | 54 | 1.889 |
| 25 | 1.760 | 55 | 1.891 |
| 26 | 1.769 | 56 | 1.893 |
| 27 | 1.778 | 57 | 1.895 |
| 28 | 1.786 | 58 | 1.897 |
| 29 | 1.793 | 59 | 1.898 |
| 30 | 1.800 | 60 | 2.00 |

*When a student has attempted a total of 60 credit hours, INCLUDING transfer credits, a 2.0 GPA is required to be removed from probation.

## WITHDRAWAL FROM THE UNIVERSITY

## VOLUNTARY

A student wishing to withdraw from the University during a term may obtain a withdrawal form from the registrar.
A student who plans to return to Trine University within one calendar year may apply for a Planned Academic Leave (PAL). Details and application forms are available from the Office of the Registrar.

## UNAUTHORIZED

A student leaving the University during a term without officially withdrawing will receive " $F$ " grades in all courses and will not receive refunds of any kind, including fees and deposits.

The withdrawal procedure will not take place automatically for a student who leaves a regional education center because of illness or family emergency. If official notification of withdrawal cannot be made in person, the student should contact the registrar in writing.

## DISCIPLINARY

Students dismissed for disciplinary reasons during a term may be given " $F$ " grades and monetary reimbursement will not be made for tuition or any other university fee.

## THE ACADEMIC RECORD

A report of the student's grades earned in all courses taken during each eight-week term is posted online end of each term. Grade reports are mailed to the permanent addresses of first year students.

In cases of unsatisfactory work, at the end of the 16-week semester, a student may be warned, placed on probation, or dismissed from the University.

A permanent record of all the student's courses, credits, and grades earned is kept in the Office of the Registrar. The student should maintain a record of courses, credits, and grades each term and check from time to time to see that this record agrees with the University version. The official record may also help the student determine eligibility for any activity that requires meeting specific scholastic standards. Copies of the transcript are available to the student upon written request and advance payment, as determined per copy.

## RELEASE OF INFORMATION FROM STUDENT ACADEMIC RECORDS

To ensure compliance with the federal government's Family Education Rights and Privacy Act (FERPA), the following general principles and procedures govern the release of information from student academic records.

A written request signed by the student whose name appears on the transcript and that contains information such as date of birth and/or the Trine University student identification number, is required before a University transcript or other information from the student's academic record may be released. Trine University will not release copies of transcripts from another institution. Exceptions to the above statements are outlined below:

- The Office of the Registrar may release transcripts or information from academic records, including reports of academic standing, to administrative and faculty members of Trine University whose responsibilities require this information.
- Public directory information from student records may be released at any time unless restricted by the student. This includes the student's name, local and permanent addresses, telephone numbers, e-mail address, date and place of birth, major field of study, class year, participation in officially recognized activities, dates of attendance, degrees, awards received, and photographs.
- Information pertaining to graduation and honors achieved may be released for publication unless otherwise restricted by the student.
Upon proper identification, a student will be shown the following:
- His or her Trine University permanent academic record, including the student's file and transcript.
- His or her transcripts from another institution.

A hold may be applied to the release of a transcript, or other information requested from an academic record, for a student who has an overdue indebtedness to the University.

A current student may obtain a maximum of five unofficial (personal) copies of his or her Trine University transcript at no charge while attending the University. All official transcripts, bearing the registrar's signature and school seal, are $\$ 3$ per copy. Additional unofficial transcripts are also $\$ 3$ per copy. All pricing is subject to change.

## ACADEMIC PROGRAMS

The School of Professional Studies offers a variety of degrees, each with its own special merits and opportunities. All programs are designed to meet curriculum and career goals, to foster creative and critical thinking, and to promote positive human relations necessary in today's complex global society.

The School of Professional Studies offers the following four-year degrees:

- Bachelor of Applied Management
- Bachelor of Arts in General Studies General Social Concentration
- Bachelor of Arts in General Studies Pre-Legal Concentration
- Bachelor of Arts in General Studies Self-Designed Concentration
- Bachelor of Business Administration

Majors in:

- Accounting
- Auctioneering
- Entrepreneurship
- Healthcare Management
- Hospitality \& Tourism Management
- Human Resource Management
- Management
- Bachelor of Computer Science
- Bachelor of Engineering
- With a major in Biomedical Engineering Management
- With a major in Civil Engineering Management
- With a major in Mechanical Engineering Management
- Bachelor of Science in Criminal Justice
- Bachelor of Science in Engineering Technology
- Bachelor of Science
- with a major in Communication Applied Communication Track
- with a major in Communication Corporate and Organizational Communication Track
- with a major in Communication Public Relations and Journalism Track

Majors in:

- Emergency Management
- Psychology

The School of Professional Studies offers the following associate degrees:

- Associate in Accounting
- Associate in Business Administration
- Associate of Science in Engineering Technology

GRADUATE PROGRAMS (See Graduate Information section for full details)
The School of Professional Studies offers the following graduate degree programs through Trine University at all SPS locations.

- Master of Science with a Major In Criminal Justice

Concentrations in:

- Emergency Management
-Forensic Psychology
- Public Administration
- Master of Science in Leadership Concentrations in:
- Athletic Administration
- Biomedical Regulatory Affairs
- Healthcare Systems Studies
- Instructional Leadership - Higher Education
- Instructional Leadership - K-12
- International Studies
- Non-Profit Organizational Studies
- Political Leadership \& Civic Engagement
- Strategic Foresight \& Entrepreneurship
- Sustainable Business Administration


## DEGREE PROGRAM REQUIREMENTS

## BACHELOR OF APPLIED MANAGEMENT

The Bachelor of Applied Management degree is designed to prepare an individual with an interest in management in a field where technical competence has at a minimum been partially acquired. This program is available to individuals who have already completed some equivalent training in a business, health, technical field, or other specialty area not offered at Trine University. The degree is designed specifically for individuals who acquired training at community colleges, technical institutes, military service schools, industry related schools, etc., and who want to continue their education in the area of management.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Applied Management - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Applied Management profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Bachelor of Applied Management - Program Objectives

Objective \#1: Students will be able to seek professional career paths.
Objective \#2: Students will be able to use basic core of management skills.
Objective \#3: Students will be able to have a basic understanding of general education skills to encourage lifelong learning and career advancement.
Objective \#4: Students will be able to have a knowledge base specific to management.

## TECHNICAL SPECIALTY

Students completing the Bachelor of Applied Management degree program must complete a minimum of 28 semester hours in a business or technical field acquired through occupational, technical training or classroom instruction. As many as 17 additional semester hours in a technical specialty may count as electives.

In the degree program descriptions that follow, an asterisk $\left({ }^{*}\right)$ indicates that those courses satisfy the University's general education requirements.

Bachelor of Applied Management
Program requirements
Business core

| AC | 203 | Accounting I |
| :--- | :--- | :--- |
| AC | 213 | Accounting II |
| BA | 343 | International Business |
| FIN | 303 | Managerial Finance |
|  | $(3)$ |  |
| LAW | 203 | Business Law I |
| MGT | 353 | Designing Operations |
| MGT | 363 | Organizational Behavior |
| MGT | 453 | Strategic Management |
| MK | 303 | Marketing |

Additional Program Requirements
$\begin{array}{lll}\text { *ECO } & 213 & \text { Microeconomics } \\ \text { *ECO } & 223 & \text { Macroeconomics }\end{array}$

## Technical Specialty Area

## Additional Program Requirements/ Prior Learning (17 Hrs.)

UE 111 Adult Learning Orientation
(6 Hrs.)

## 120 Hours

## Required Hours

(27 Hrs.)
General Education Requirements
(42 Hrs.)
Written Communication ..... (6 Hrs.)

| *ENG | 103 | English Composition I |
| :--- | :--- | :--- |
| *ENG | 113 | English Composition II |

Oral Communication
*SP 203 Effective Speaking or
*COM 163 Interpersonal Communication

## Social Sciences and Humanities

(12 Hrs.)
*Social Science Elective
*Social Science
*Humanities Elective

* Humanities Elective


## Math and Science

(10 Hrs.)
$\begin{array}{lll}\text { *MA } & 103 & \text { Business Algebra } \\ \text { *MA } & 173 & \text { Applied Mathematics }\end{array}$
*Science Elective
*Math or Science
General Education Electives
(11 Hrs.)

## BACHELOR OF ARTS WITH A MAJOR IN GENERAL STUDIES

The General Studies program is an interdisciplinary program that educates and empowers students to become effective communicators and critical thinkers. The objective and intent of the Bachelor of General Studies degree is to encourage students to define clearly their own objectives and to design a course of study that will best achieve their objectives. The Bachelor of General Studies degree is for students who wish to develop new combinations of courses to serve personal or
occupational goals which are not met by traditional majors and minors. In consultation with faculty advisors, students may design four-year programs of study or select the Pre-Legal Studies to prepare for law school admissions.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Arts with a Major in General Studies General - Program Goal:

The goal is to introduce students to broad areas of knowledge in the humanities and fine arts, the social sciences, the natural sciences, and mathematics. The General Studies program promotes critical thinking skills, data analysis, creative problem solving, and may prepare a student for law school admissions.

## Bachelor of Arts with a Major in General Studies General - Program Objectives

Objective \#1: Prepare students for law school admissions and sound foundation for legal studies
Objective \#2: Graduates will attain a breadth and depth of knowledge of humanities and fine arts, the social sciences, the natural sciences, and mathematics

Objective \#3: Students will understand the ethical behavior patterns demanded in professional conduct
Objective \#4: Students will have skills necessary for good citizenship

## Bachelor of Arts with a Major in General Studies

*COM 163 Interpersonal Communication

General Social Studies Concentration

## Hrs.

## Program requirements

General Social Studies Core
15 Hours from 3 of the following:
ECO 300 or higher level courses
GEO 300 or higher level courses
GOV 300 or higher level courses
HIS 300 or higher level courses
PSY 300 or higher level courses
Additional Program Requirements
UE 111 Adult Learning Orientation
General Education Requirements
Written Communication

## Required Hours

(45 Hrs.)
(26 Hrs.)
(1)
(49 Hrs.)
(6
hrs)

$$
\begin{array}{lll}
\text { *ENG } & 103 & \text { English Composition I } \\
\text { *ENG } & 113 & \text { English Composition II }
\end{array}
$$

Oral Communication
(3 Hrs.)
*SP 203 Effective Speaking
(3)
or

## Social Sciences and Humanities

*ECO 213 Microeconomics
or
*ECO 223 Macroeconomics
*GOV 113 Introduction to Government
*HIS 103 American History I
and
*HIS 113 American History II
*PSY 113 Principles of Psychology
*ENG 153 Introduction to Literature
Humanities Elective
Humanities Elective
Math and Science
(10 Hrs.)

> *MA $113 \quad$ College Algebra
> *Science Elective
> *Science Elective

## General Education Electives

*Electives

## Total in Degree Program:

120 Hrs.


| *SP | 203 | Effective Speaking |
| :---: | :--- | :--- |
| or |  |  |
| *COM | 163 <br>  <br>  <br>  (3) |  |
|  | Interpersonal Communication |  |

(3)

Social Sciences and Humanities
(24 Hrs.)

| *ECO | 213 | Microeconomics |
| :--- | :--- | :--- |
| or |  |  |
| *ECO | 223 | Macroeconomics |
| *GOV | 113 | Introduction to Government |
| *HIS | 103 | American History I |
| and |  |  |
| *HIS | 113 | American History II |
| *PSY | 113 | Principles of Psychology |
| *ENG | 153 | Introduction to Literature |
| Humanities Elective |  |  |
| Humanities Elective |  |  |

Math and Science
(10 Hrs.)
*MA 113 College Algebra
(3)
*Science Elective
*Science Elective
(4)

| General Education Electives | (6 Hrs.) |
| :--- | ---: |
| Total in Degree Program: | $\mathbf{1 2 0}$ Hrs. |
| Bachelor of Arts with a Major in General Studies |  |
| Self-Designed Concentration | $\mathbf{1 2 0}$ Hrs. |
| Program requirements | Required Hours |
| Self-Designed Studies Core | $(\mathbf{4 5}$ Hrs.) |

15-30 hours must be taken from
two to three different academic departments
At the 300 level or higher

## Written Capstone Project

GS 4003 Senior Capstone Project

## Additional Program Requirements

(23 Hrs.)
UE 111 Adult Learning Orientation
(1)
$\begin{array}{lr}\text { General Education Requirements } & \text { (49 Hrs.) } \\ \text { Written Communication } & (6 \mathrm{Hrs} .)\end{array}$

| *ENG | 103 | English Composition I |  |
| :--- | :--- | :--- | ---: |
| *ENG | 113 | English Composition II | (3) |
| Oral Communication |  |  |  |
| *SP | 203 | Effective Speaking |  |
|  | or |  |  |
| *COM | 163 | Interpersonal Communication |  |
|  | $(3)$ |  |  |

Social Sciences and Humanities
(24 Hrs.)

| *ECO | 213 | Microeconomics |
| :--- | :--- | :--- |
| or |  |  |
| *ECO | 223 | Macroeconomics |
| *GOV | 113 | Introduction to Government |
| *HIS | 103 | American History I |

    and
    *HIS 113 American History II
    *PSY 113 Principles of Psychology
    *ENG 153 Introduction to Literature
    Humanities Elective
Humanities Elective

## Math and Science

*MA 113 College Algebra
(3)

## General Education Electives

(6 Hrs.)
120 Hrs.

## BACHELOR OF BUSINESS ADMINISTRATION

The Bachelor of Business Administration degree prepares students for responsible positions in business, industry, and public service. Majors for students in the School of Professional Studies are available in accounting, entrepreneurship, healthcare management, hospitality and tourism, human resource management, and management.

In the degree program descriptions that follow, and asterisk $\left({ }^{*}\right)$ indicates that those courses satisfy the University's general education requirements.

The Bachelor of Business Administration Accounting Major degree offers students a foundation of theoretical and applied business and accounting knowledge and skills which are crucial to today's accounting profession. Out of the total 120 credit hours, 33 credit hours consist of business core coursework and 30 credit hours of accounting coursework.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Business Administration Accounting Major - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Accounting profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Bachelor of Business Administration Accounting Major - Program Objectives

Objective \#1: Students will be able to seek professional career paths.
Objective \#2: Students will be able to use basic core of management skills.
Objective \#3: Students will be able to have a basic understanding of general education skills to encourage lifelong learning and career advancement.

Objective \#4: Students will be able to have a knowledge base specific to the accounting major.
Bachelor of Business Administration
Accounting Major
Program Requirements
Business Core

|  | AC | 213 | Accounting II |
| ---: | :--- | :--- | :--- |
| $\mathbf{1 2 0 ~ H r s . ~}$ | BA | 343 | International Business |
| Required Hours | COM | 213 | Business Communication |
| $\mathbf{( 3 6 ~ H r s . )}$ | FIN | 303 | Managerial Finance |
| $(3)$ | LAW | 203 | Business Law I |


| MGT | 353 | Designing Operations | $(3)$ |
| :---: | ---: | :--- | ---: |
| MGT | 363 | Organizational Behavior | $(3)$ |
| MGT | 453 | Strategic Management | $(3)$ |
| MK | 303 | Marketing | $(3)$ |
| MGT | 473 | Capsim Business Simulation | $(3)$ |
| MGT | 483 | Capstone |  |
| Major in Accounting | (30 Hrs.) |  |  |
| AC | 303 | Cost Accounting | $(3)$ |
| AC | 323 | Intermediate Accounting I | $(3)$ |
| AC | 333 | Intermediate Accounting II | $(3)$ |
| AC | 343 | Intermediate Accounting III | $(3)$ |
| AC | 373 | Accounting Information Systems | $(3)$ |
| AC | 403 | Advanced Accounting | $(3)$ |
| AC | 423 | Income Tax | $(3)$ |
| AC | 433 | Corporate Income Tax | $(3)$ |
| AC | 463 | Auditing | $(3)$ |
| 300 or 400 level elective prefixed by |  |  |  |
| AC, BA, INF, FIN, LAW, MGT, MK | $(3)$ |  |  |
| Additional Program Requirements |  |  |  |
| UE | 111 | Adult Learning Orientation | $(12$ |

## UNIFORM CERTIFIED PUBLIC ACCOUNTING EXAMINATION CANDIDATES

Indiana and many other states require that a first time uniform certified public accounting (CPA) Examination candidate must have at least 150 semester hours of college education, including a baccalaureate or higher degree, with an accounting concentration or its equivalent. An accounting major wishing to meet this requirement should plan an individualized program with his or her regional education center director or assigned faculty advisor. This program will encompass an additional 30 semester hours of course work in humanities, mathematics, social sciences, business, and accounting.

The Bachelor of Business Administration with a major in Auctioneering Management is designed to prepare graduates for management careers within the dynamic auctioneering management field. Learners develop a solid knowledge of auctioneering business operations, coupled with effective leadership and management skills. A strong experiential component provides the context for learners to integrate theory and practice and apply their learning via a variety of business situations. Graduates are equipped with the skills, knowledge and experience required to succeed in auctioneering management. Graduates build skills in public relations, ethics, advertising, federal laws, bankruptcy, and auction math. The program incorporates a business administration core with a concentration in hospitality \& tourism management course work.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

Bachelor of Business Administration with a major in Auctioneering Management Program Goal:

The goal is to provide a challenging and progressive course of study which integrates the major functional areas of business with the technological and analytical skills required for auctioneering management.

## Bachelor of Business Administration with a major in Auctioneering Management - Program Objectives

Objective \#1: Graduates have experienced a rigorous academic and experiential learning program, including a supervised internship prior to graduation.
Objective \#2: Graduates are proficient in the use and development of technology, critical thinking and communication skills in auctioneering management.
Objective \#3: Graduates are proficient in the basic operations of an auction business.
Objective \#4: Students will demonstrate a willingness to work cohesively and communicate interpersonally with members of an auction team
Objective \#5: Graduates recognize current trends and issues relative to auctioneering management

## Bachelor of Business Administration Auctioneering Major

Program Requirements
Business Core

| AC | 203 | Accounting I |
| :--- | :--- | :--- |
| AC | 213 | Accounting II |
| BA | 343 | International Business |
| COM | 213 | Business Communication |
| FIN | 303 | Managerial Finance |
| LAW | 203 | Business Law I |
| MGT | 353 | Designing Operations |
| MGT | 363 | Organizational Behavior |
| MGT | 453 | Strategic Management |
| MGT | 473 | Capsim Business Simulation |
| MK | 303 | Marketing |

Auctioneering Core

| AU | 103 | Introduction to Auctioneering |
| :--- | :--- | :--- |
| AU | 203 | Asset Appraising |
| AU | 213 | Auctioneering Specialties |
| AU | 303 | Real Estate of Auction |
| AU | 313 | Auction Arena Management |
| AU | 403 | Externship |
| BA | 323 | Real Estate |
| BA | 423 | Entrepreneurship |
| LAW | 313 | Auction Law |
| LAW | 323 | Bankruptcy |
| MK | 473 | E-Marketing |

(33 Hrs.)
(3)

MK 473 E-Marketing

UE 111 Adult Learning Orientation Electives or Related Prior Learning
(11)

## General Education Requirements

Written Communication
(42Hrs.)
*ENG 103 English Composition I
*ENG 113 English Composition II
Oral Communication
*SP 203 Effective Speaking
Or
*COM 163 Interpersonal Communication
Social Sciences and Humanities
*ECO 213 Microeconomics
*PSY 113 Principles of Psychology
Humanities Elective
Humanities Elective
Math and Science
*MA 103 Business Algebra
*MA 173 Applied Mathematics
*MA 253 Statistics
*Science Elective
General Education Electives
*ECO 223 Macroeconomics
Total In Degree Program:
120 Hrs.
(12 Hrs.)

The Bachelor of Business Administration with a major in Entrepreneurship degree provides students with sound business knowledge and abilities to start a new venture and turn the venture into a sustainable business. Through an intergraded approach of teaching and learning, students enhance their critical thinking, leadership and business knowledge and skills associated with functions within Marketing, Management and Entrepreneurship occupations.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Business Administration Entrepreneurship Major - Program Goal:

The goal is to equip graduates with sound business knowledge and abilities to become effective leaders knowledgeable in the art of science of creation, innovation, leadership, venturing, service, visioning, and risk taking, all which are required to be successful entrepreneurs in the $21^{\text {st }}$ century work place.

## Bachelor of Business Administration Entrepreneurship Major - Program Objectives

Objective \#1: Graduates will be able to recognize and apply theoretical and practical business concepts in a small business setting.
Objective \#2: Graduates will demonstrate an understanding of the process of establishing and growing a new entrepreneurial venture.

Objective \#3: Graduates will be able to identify and communicate effectively with external and internal constituencies of an entrepreneurial venture.
Objective \#4: Graduates will be able to formulate and analyze business and marketing plans.
Objective \#5: Graduates will be able to identify and explain critical areas of production and marketing management, as well as statutory requirements in enterprise management.

## Bachelor of Business Administration <br> Entrepreneurship Major

Program Requirements
Business Core
Required Hours
(33 Hrs.)

| AC | 203 | Accounting I |
| :--- | :--- | :--- |
| AC | 213 | Accounting II |
| BA | 343 | International Business |
| COM | 213 | Business Communication |
| FIN | 303 | Managerial Finance |
| LAW | 203 | Business Law I |
| MGT | 353 | Designing Operations |
| MGT | 363 | Organizational Behavior |
| MGT | 453 | Strategic Management |
| MGT | 473 | Capsim Business Simulation |
| MK | 303 | Marketing |

## Major Requirements

(33 Hrs.)
Entrepreneurship
(27 Hrs.)

| AC | 353 | Tax and Legal Issues for |
| :---: | :---: | :--- |
|  |  | Small Business |
| ENT | 303 | Entrepreneurship Leadership |


| ENT | 323 | Engineering Concepts |
| :--- | :--- | :--- |
| ENT | 413 | Creativity - Product/Service |
|  |  | Development |

(3)
(3)

| ENT | 423 | Entrepreneurship Venture Planning |
| :--- | :--- | :--- |
| ENT | 463 | Internship |
| FIN | 363 | Venture Finance |
| MGT | 333 | Supervision |
| MGT | 463 | Marketing Research |

## Business Electives

(6 Hrs.)

## Choose two of the following

| AC | 303 | Cost Accounting | $(3)$ |
| :--- | :--- | :--- | :--- |
| AC | 423 | Income Tax | $(3)$ |
| FIN | 323 | Money and Banking | $(3)$ |
| FIN | 353 | Personal Finance | $(3)$ |
| MGT | 313 | Human Resource Management | $(3)$ |
| MGT | 443 | Managing Operations | $(3)$ |
| MK | 313 | Retail Management | $(3)$ |
| MK | 333 | Buyer Behavior | $(3)$ |
| MK | 423 | Personal Selling |  |

(3)

Additional Program Requirements
(12 Hrs.)

| BA | $311 x$ | Internship |
| :--- | :--- | :--- |
| BA | 123 | Business Concepts |
| BA | 301 | Professional Development |
| UE | 111 | Adult Learning Orientation |
| Electives |  |  |

## General Education Requirements

(42 Hrs.)

| Written Communication |  |  |
| :--- | :---: | :---: |
| *ENG |  |  |
| *ENG |  |  | $1133 \quad$ English Composition I

Oral Communication
COM 163 Interpersonal Communication
(3)

## Social Sciences and Humanities

*ECO 213 Microeconomics
*PSY 113 Principles of Psychology
(3)
*Humanities Elective
*Humanities Elective
Computer Literacy
(3)

INF 233 Advanced Spreadsheet for Business

Math and Science
(12)
*MA 103 Business Algebra
*MA 173 Applied Mathematics
*MA 253 Statistics
*Science Elective
General Education Electives
*ECO 223 Macroeconomics

## Total In Degree Program:

(3)

Total In Degree Program: 120 Hrs.

The Bachelor of Business Administration with a major in Healthcare Management degree prepares students for responsible positions to manage the availability, accessibility and quality of health services. The core coursework in Business and Healthcare Management Major provide knowledge, skills, and competencies that can be used by professionals in a multitude of roles within the healthcare field, which will enable them to interact with their medical counterparts and maintain operational and financial stability within healthcare facilities. Out of the total 120 credit hours, 33 credit hours consist of business core coursework and 36 credit hours in Healthcare Management major core.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Business Administration Healthcare Management Major - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Healthcare profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Bachelor of Business Administration Healthcare Management Major - Program Objectives

Objective \#1: Students will be able to manage a variety of ancillary support departments within a healthcare facility.
Objective \#2: Students will be able to analyze programs and/or facilities and offer recommendations for improvements.
Objective \#3: Students will be able to contribute to and impact team cohesiveness within the employee population of a healthcare facility.

Objective \#4: Students will be able to contribute to and impact quality and level of service provided to external service area customers.

## Bachelor of Business Administration <br> Health Care Management Major

Program Requirements
Business Core

AC 203 Accounting I
120 Hours AC 213 Accounting II

## Required Hours

(33 Hrs.)

| FIN | 303 | Managerial Finance | (3) |
| :---: | :---: | :---: | :---: |
| LAW | 203 | Business Law I | (3) |
| MGT | 353 | Designing Operations | (3) |
| MGT | 363 | Organizational Behavior | (3) |
| MGT | 453 | Strategic Management | (3) |
| MGT | 473 | Capsim Business Simulation | (3) |
| MK | 303 | Marketing | (3) |
| Major In Health Care Management |  |  |  |
| BA | 403 | Business \& Public Policy | (3) |
| HC | 333 | Management Techniques \& Principles | (3) |
| HC | 413 | Health Care Accounting | (3) |
| HC | 423 | Health Care Finance | (3) |
| HC | 443 | Health Care Delivery Systems | (3) |
| HC | 483 | Program \& Facilities Management | (3) |
| HR | 403 | Project Management | (3) |
| MGT | 313 | Human Resource Management | (3) |
| MGT | 323 | Leadership | (3) |
| MGT | 413 | Management of Quality | (3) |
| MGT | 443 | Managing Operations | (3) |
| BA | 3113 | Business Internship | (3) |

Additional Program Requirements (9 Hrs.)
UE 111 Adult Leaning Orientation
(3)

Electives or Related Prior Learning
(6)

General Education Requirements
(42 Hrs.)

## Bachelor of Business Administration <br> Hospitality \& Tourism Management Major

|  |  | 120 Hrs. <br> Program Requirements <br> Business Core | Required Hours <br> (33 Hrs.) |
| :--- | :--- | :--- | ---: |
| AC | 203 | Accounting I | $(3)$ |
| AC | 213 | Accounting II | $(3)$ |
| BA | 343 | International Business | $(3)$ |
| COM | 213 | Business Communication | $(3)$ |
| FIN | 303 | Managerial Finance | $(3)$ |
| LAW | 203 | Business Law I | $(3)$ |
| MGT | 353 | Designing Operations | $(3)$ |
| MGT | 363 | Organizational Behavior | $(3)$ |
| MGT | 453 | Strategic Management | $(3)$ |
| MGT | 473 | Capsim Business Simulation | $(3)$ |

Written Communication
*ENG 103 English Composition I
*ENG 113 English Composition II
Oral Communication ..... (3)
*SP 203 Effective Speaking ..... (3)OrCOM 163 Interpersonal Communication
Social Sciences and Humanities
*ECO 213 Microeconomics ..... (3)
*PSY 113 Principles of Psychology ..... (3)
*Humanities Elective ..... (3)
*Humanities Elective ..... (3)
Math and Science
*MA 103 Business Algebra ..... (3)*MA 173 Applied Mathematics*MA 253 Statistics*Science Elective(6)(3)(3)(3)(12)(12)(3)(3)(3)
General Education Electives ..... (9)
*ECO 223 Macroeconomics
*Electives from any of the above categories ..... (3)

## Total In Degree Program:

120 Hrs.

$$
\begin{equation*}
\text { MK } 303 \text { Marketing } \tag{3}
\end{equation*}
$$

## Hospitality \& Tourism

| HOS | 103 | Current Trends in Tourism | (3) |
| :--- | :--- | :--- | ---: |
| HOS | 203 | Lodging Management | (3) |
| HOS | 213 | Sophomore Internship in <br> Hospitality Management | $(3)$ |
| HOS | 303 | Hospitality and Tourism <br> Marketing | $(3)$ |
| HOS | 313 | Catering | $(3)$ |
| HOS | 322 | Meeting and Event Planning | $(2)$ |
| HOS | 402 | Beverage Management | $(2)$ |
| HOS | 404 | Quality Food Preparation | $(4)$ |
| HOS | 404 L | Quality Food Preparation Lab |  |
| HOS | 413 | Casino, Spa, and Resort Management | (3) |
| HOS | 423 | Sanitation and Health in the Food Service |  |
|  |  | Lodging, and Tourism Industry | (3) |
| HOS | 474 | Senior Internship in Hospitality |  |



## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Business Administration Human Resources Management Major - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Human Resources profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Bachelor of Business Administration Human Resource Major - Program Objectives

Objective \#1: Students will be able to plan, organize, direct Human Resources functions within a work environment.
Objective \#2: Students will be able to create, implement, and assess strategies to recruit and retain employees.
Objective \#3: Students will demonstrate knowledge of regulatory and legal parameters governing employment activities.
Objective \#4: Students will be able to create implement, and evaluate tools in relationship to job performance, performance appraisals, and career planning.

Objective \#5: Students will demonstrate knowledge of various compensation strategies, including plans and law applicable to employment.

Objective \#6: Students will demonstrate knowledge of appropriate accounting practices as they apply to payroll and benefits.

Objective \#7: Students will demonstrate knowledge of strategies resulting in a positive work environment (both union and non-union environments).

Objective \#8: Students will be able to create, implement and assess health and safety programs.

| Bachelor of Business Administration Human Resource Management Major |  |  | 120 Hrs. | *ENG | 103 | English Composition I | (3) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | *ENG | 113 | English Composition II | (3) |
| Program Requirements Required Hours <br> Business Core (36 Hrs.) |  |  |  | Oral Communication |  |  | (3) |
|  |  |  |  |  |  |  |  |
|  |  |  |  | *SP | 203 | Effective Speaking | (3) |
| AC | 203 | Accounting I |  | (3) | or |  |  |
| AC | 213 | Accounting II | (3) | * COM | 163 | Interpersonal Communication |  | (3) |
| BA | 343 | International Business | (3) |  |  |  |  |  |
| COM | 213 | Business Communication | (3) | Social Sciences and Humanities |  |  | (12) |  |
| FIN | 303 | Managerial Finance | (3) | $*$ PSY$*$ ECO | 113 | Principles of Psychology | (3) |  |
| LAW | 203 | Business Law I | (3) |  | 213 | Microeconomics | (3) |  |
| MGT | 353 | Designing Operations | (3) | *Humanities Elective |  |  | (3) |  |
| MGT | 363 | Organizational Behavior | (3) | *Humanities Elective |  |  | (3) |  |
| MGT | 453 | Strategic Management | (3) | Math and Science |  |  | (12) |  |
| MK | 303 | Marketing | (3) |  |  |  |  |  |  |  |
| MGT | 473 | Capsim Business Simulation | (3) | *MA | 103 | Business Algebra | (3) |  |
| MGT | 483 | Capstone | (3) | *MA | 173 | Applied Mathematics | (3) |  |
| Major in Human |  | Resource Management (30 Hrs.) |  | *MA |  | Statistics <br> ve | (3)(3) |  |
| FIN | 403 | Investments | (3) | *Science Elective |  |  |  |  |
| HR | 303 | Compensation and Benefits | (3) | General Education Electives |  |  | (9) |  |
| HR | 313 | Training and Development | (3) |  |  |  |  |  |  |  |
| HR | 323 | Safety and Health Management | (3) | *ECO | 223 | Macroeconomics | (3) |  |
| HR | 403 | Project Management | (3) | Electives |  |  | (6) |  |
| LAW | 403 | Employment Law | (3) | Total in Degree Program: |  |  | 120 Hrs. |  |
| MGT | 313 | Human Resources Management | (3) |  |  |  |  |  |  |  |
| MGT | 323 | Leadership | (3) |  |  |  |  |  |  |  |
| PSY | 363 | Counseling | (3) |  |  |  |  |  |  |  |
| 300 or 400 level Business or Management Elective (3) |  |  |  |  |  |  |  |  |  |  |

## Additional Program Requirements <br> UE 111 Adult Learning Orientation <br> Electives or related prior learning <br> (12 Hrs.)

## General Education Requirements

Written Communication

The Bachelor of Business Administration Management Major degree provides students with knowledge and competencies to manage and develop a good understanding of all areas of business and develop people skills necessary to head the organization and people into the right direction and accomplish its goals with efficiency and effectiveness. Out of the total 120 credit hours, 33 credit hours consist of business core coursework and 30 credit hours of management major coursework.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Business Administration Management Major - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Management profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Bachelor of Business Administration Management Major - Program Objectives

Objective \#1: Students will be able to seek professional career paths.
Objective \#2: Students will be able to use basic core of management skills.
Objective \#3: Students will be able to have a basic understanding of general education skills to encourage lifelong learning and career advancement.

Objective \#4: Students will be able to have a knowledge base specific to the management major.

## Bachelor of Business Administration <br> Management Major

120 Hrs.
Program Requirements

## Required Hours

Business Core
(33 Hrs.)

| AC | 203 | Accounting I |
| :--- | :--- | :--- |
| AC | 213 | Accounting II |
| BA | 343 | International Business |
| COM | 213 | Business Communication |
| FIN | 303 | Managerial Finance |
| LAW | 203 | Business Law I |
| MGT | 353 | Designing Operations |
| MGT | 363 | Organizational Behavior |
| MGT | 453 | Strategic Management |
| MK | 303 | Marketing |
| MGT | 473 | Capsim Business Simulation |
| MGT | 483 | Capstone |

Major In Management
(30 Hrs.)

| BA | 403 | Business and Public Policy |
| :--- | :--- | :--- |
| BA | 423 | Entrepreneurship |
| LAW | 403 | Employment Law |
| MGT | 313 | Human Resource Management |
| MGT | 323 | Leadership |
| MGT | 413 | Management of Quality |

Management Elective
Management Elective
Business Administration/Informatics Elective
Business Administration/Informatics Elective

## Additional Program Requirements

UE 111 Adult Learning Orientation
Electives or related prior learning
(12 Hrs.)

## General Education Requirements <br> Written Communication

(42 Hrs.)
*ENG 103 English Composition I
*ENG 113 English Composition II

## Oral Communication

*SP 203 Effective Speaking
or
*COM 163 Interpersonal Communication

## Social Sciences and Humanities

| *PSY | 113 | Principles of Psychology |
| :--- | :--- | :--- |
| *ECO | 213 | Microeconomics |

*ECO 213 Microeconomics
*Humanities Elective
*Humanities Elective
Math and Science
*MA 103 Business Algebra
*MA 173 Applied Mathematics (3)
*MA 253 Statistics
*Science Elective

## General Education Electives

*ECO 223 Macroeconomics
(3)

The Bachelor of Science in Computer Science exposes students to the development and analysis of computer software, algorithms, and technologies. Most information, - age technologies -social networking, Web browsing, ecommerce - are the end result of years of work by computer scientists and engineers. The Bachelor of Science in Computer Science program offers students a sound foundation in computer science complemented by a broad core of courses in the sciences and liberal arts. A background in mathematics enables students to deal with scientific applications as well as the theoretical basis of computer science.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Science in Computer Science Program Goal:

The goal is to prepare students for employment as computer scientists in engineering, scientific, industrial, and business environments as software developers, programmers, and systems analysts.

In addition, the program seeks to advance students' practice in cutting-edge techniques while emphasizing the historically important core knowledge for the creation of systems that process, transform, and describe data and information.

## Bachelor of Science in Computer Science - Program Objectives

Objective \#1: Graduates have experienced in formulating, implementing and analyzing computing solutions to problems
Objective \#2: Graduates can formulate abstractions and construct and use mathematical models
Objective \#3: Graduates can extrapolate and apply knowledge to new situations
Objective \#4: Graduates can communicate effectively and collaborate in teams
Objective \#5: Graduates identify and interpret ethical and social issues associated with the computing field

|  |  | ECE | 263 | Digital Systems |
| :--- | :--- | :--- | :--- | :--- |
| BACHELOR OF COMPUTER SCIENCE | ECE | 271 | Microcontrollers Lab |  |
| Bachelor of Computer Science | $\mathbf{1 2 0 ~ H r s}$ | ECE | 273 | Microcontrollers |
| Program requirements | ECE | 393 | Software Analysis \& Design |  |
|  | Required Hours | CS | 4903 | Capstone Project |

## General Engineering

## Computer Science Core <br> (38 Hrs.)

| CS | 1123 | C++ \& Object Oriented Programming | (3) |
| :--- | :--- | :--- | :--- |
| CS | 1303 | Introduction to the World Wide Web |  |

CS
2103 Algorithm Design \& Analysis
CS
CS
2213 Architecture and Operating Systems
2503 Software Engineering \& User Interfaces
(3)

2613 AI \& Information
3223 Network Architecture
3303 Net-Centric Computing

ECE
261 Digital Systems Lab
(1)
GE 101 Introduction to Engineering
GE 401 Professional Practice

Computer Science Advance Technical Elective
CS 4033 Special Topics
or
CS 4023 Compiler Construction
or
CS 4013 Computer Graphics

## Additional Program Requirements

(3 Hrs.)
UE 111 Adult Learning Orientation
Elective


## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Engineering - Biomedical Engineering Management - Program Goal:

The goal is to provide graduates with quality preparation for the practice of biomedical engineering, to provide graduates with opportunities to pursue graduate studies, and to provide technical and educational services to their profession and communities.

## Bachelor of Engineering - Biomedical Engineering Management - Program Objectives

Objective \#1: Graduates have the ability to work professionally in applying engineering approaches to solve problems in medicine and/or biology

Objective \#2: Graduates have the ability to design, analyze, and test experimental processes and products for observing and discovering important structural and behavioral properties of physiologic systems, biological materials, or biomaterials

Objective \#3: Graduates have the ability to design, analyze, and test processes and products directed toward the prevention of injury or disease, or to enhance healing and/or quality of healthcare

Objective \#4: Graduates can clearly and effectively communicate design ideas and test results
Objective \#5: Graduates can evaluate and implement engineering-oriented research and development in the biomedical sciences.

## BACHELOR OF ENGINEERING

| With a major in Biomedical Engineering Management |  |  |  | 127 Hrs. |
| :---: | :---: | :---: | :---: | :---: |
| Program requirements |  |  | Require | ed Hours |
| Engineering Science Core |  |  |  | (23 Hrs.) |
| ES | 213 | Statics |  | (3) |
| ES | 223 | Dynamics |  | (3) |
| ES | 233 | Engineering Materials |  | (3) |
| ES | 243 | Solid Mechanics |  | (3) |
| ES | 313 | Thermodynamics |  | (3) |
| ES | 323 | Fluid Mechanics |  | (3) |
| ES | 253 | Electrical Science |  | (3) |
| ES | 382 | Engineering Economics |  | (2) |
| Biomedical Engineering Management |  |  |  | (21 Hrs.) |
| BE | 313 | Bio-medical Materials |  | (3) |
| BE | 323 | Bio-medical Kinematics |  | (3) |
| BE | 333 | Bio-medical Electricity |  | (3) |
| BE | 403 | Bio-medical Imaging \& Measurement Systems |  |  |
|  | (3) |  |  |  |
| BE | 423 | Bio-medical Human Mech | chanics | (3) |
| BE | 463 | Bio-medical Design Fund | damentals | als (3) |
| GE | 403 | Engineering Project |  | (3) |


| Management Core |  |  |
| :--- | :--- | :--- |
| LAW | 203 | Business Law I |
| MGT | 323 | Leadership |
| MGT | 353 | Designing Operations |

Degree Related Requirements
UE 111 Adult Learning Orientation
Degree Related Electives
(9 Hrs.)
(3)
(3)
(3)
(6 Hrs.)
(1)

## Additional Math \& Science

(26 Hrs.)
*PH 224 University Physics I

| *PH | 234 | University Physics II |
| :--- | ---: | :--- |
| MA | 393 | Probability \& Statistics |
| Math | Elective | $(200$ Level or Above) |
| BIO | 244 | Human Anatomy I |
| BIO | 254 | Human Anatomy II |
| CH | 104 | General Chemistry |

## General Education Requirements <br> Written Communication <br> *ENG 103 English Composition I <br> *ENG 133 Technical Communication

(42 Hrs.)

Oral Communication
*SP 203 Effective Speaking
(3 Hrs.)
(3)
or
*COM 163 Interpersonal Communication

## Social Sciences and Humanities

(12 Hrs.)
*ECO 213 Microeconomics
*ECO 223 Macroeconomics
(3)
(3)
*Humanities Elective
*Humanities Elective
Math \& Science Core
(12 Hrs.)
*MA 134 Calculus I
*MA 164 Calculus II
*BIO 104 General Biology
(4)
(4)

## Additional Requirements

(9 Hrs.)
MA 213 Calculus III
MA 233 Differential Equations
General Education Elective
Total in Degree Program:
127 Hrs.

## Bachelor of Engineering with a major in Civil Engineering Management

The civil engineering profession provides for our basic needs: housing, cities, commerce, transportation, education, recreation, clean air, water, environmental projects, and energy production. Civil engineers plan, design, and construct safe and purposeful civic facilities that add to the quality of life.

Today, civil engineers explore the frontiers of high technology for solutions to global needs. They deal with the techniques of modern computer-integrated design, as well as do research for new methods and materials of construction. They design and conduct experiments to study the wind effects on tall buildings and the hydrodynamic effects on offshore structures. They use computer simulations to predict hydrologic events, assess flood damage, and manage transportation systems. They employ computers to monitor treatment facilities, lasers for precision surveying, and remote sensing technologies for geodetic surveying.

Civil engineers, individually, cannot be accomplished in all of the above areas. Therefore, they concentrate on specific areas of civil engineering, such as structures, hydraulics, environmental engineering, highway and transportation engineering, urban planning, or construction management. Yet, civil engineering projects require a combined knowledge of many of these areas, as well as managerial skills, which include the ability to make decisions that are based not only on sound engineering principles, but also on an understanding of the social, ethical, and economical makeup of society. Therefore, it is essential that students receive a broad foundation in the areas of mathematics, physical and engineering sciences, analytical and design methods, communication skills, and the social sciences and humanities.

The Bachelor of Engineering - Civil Engineering Management degree offered by the School of Professional Studies is a uniquely designed degree that gives graduates a broad foundation of civil engineering and management skills.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Engineering - Civil Engineering Management - Program Goal:

The goal is to provide graduates with quality preparation for the practice of civil engineering, to provide graduates with opportunities to pursue graduate studies, and to provide technical and educational services to their profession and communities.

## Bachelor of Engineering - Civil Engineering Management - Program Objectives

Objective \#1: Graduates have the ability to effectively prepare and present written and verbal proposals, design reports, drawings and other technical information to a diverse audience.

Objective \#2: Graduates understand the importance of teamwork and leadership in executing projects, including their role within the team and their impact on the scope, budget, and schedule of the project.

Objective \#3: Graduates can effectively use state of the practice engineering tools.
Objective \#4: Graduates can analyze and design a structure, system or process, taking into consideration the legal, ethical and other societal impacts of the design.

Objective \#5: Graduates take an active role in professional development including achieving professional licensure and active participation in professional societies.

Objective \#6: Graduates are engaged in business aspects of the profession, including marketing, budgeting, client or public interaction, and contracting.

## BACHELOR OF ENGINEERING

## With a major in

Civil Engineering Management

## Program requirements

Engineering Science Core

| ES | 213 | Statics |
| :--- | :--- | :--- |
| ES | 223 | Dynamics |
| ES | 233 | Engineering Materials |
| ES | 243 | Solid Mechanics |
| ES | 313 | Thermodynamics |
| ES | 323 | Fluid Mechanics |
| ES | 253 | Electrical Science |
| ES | 382 | Engineering Economics |

(3)
(2)

Civil Engineering Stem

EGR 153 Civil Engineering Graphics
CE 3203 Civil Engineering Materials
CE 3503 Structural Analysis
CE 3513 Structural Steel Design
CE 3533 Reinforced Concrete Design
GE 403 Engineering Project
CE 3201 Civil Engineering Materials Lab

## Management Core

(18 Hrs.)
LAW 203 Business Law I
MGT 323 Leadership
MGT 353 Designing Operations

Degree Related Requirements
(10 Hrs.)
UE 111 Adult Learning Orientation (1)
Degree Related Elective

| Degree Related Elective |  |  | (3) | *ECO |  | Microeconomics | (3) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Degr | Relat | d Elective | (3) | *ECO | 223 | Macroeconomics | (3) |
| Additional Math \& Science |  |  | (14 Hrs.) | * Humanities Elective |  |  | (3) |
| PH | 224 | University Physics I | (3) | *Hum | nities | ective | (3) |
| PH | 234 | University Physics II | (3) | Math \& | cienc | Core | (12 Hrs.) |
| MA | 393 | Probability \& Statistics | (3) | *MA | 134 | Calculus I | (4) |
| Math Elective (200 level or above) |  |  | (3) | *MA | 164 | Calculus II | (4) |
|  |  |  | * CH | 104 | General Chemistry I | (4) |
|  |  |  |  | Additional Requirements |  |  | (9 Hrs.) |
| General Education Requirements |  |  |  | (42 Hrs.) | MA | 213 | Calculus III | (3) |
| Written Communication |  |  | (6 Hrs.) | MA | 233 | Differential Equations | (3) |
| *ENG | 103 | English Composition I | (3) | Genera | Educ | on Elective | (3) |
| *ENG | 133 | Technical Communication | (3) | Total in | egree | Program: | 126 Hrs. |
| Oral Communication |  |  | (3 Hrs.) |  |  |  |  |
| *SP | 203 | Effective Speaking | (3) |  |  |  |  |
| or |  |  |  |  |  |  |  |
| *COM | 163 | Interpersonal Communication | (3) |  |  |  |  |
| Social S | ences | nd Humanities | (12 Hrs.) |  |  |  |  |

(3)

## BACHELOR OF ENGINEERING with a major in Mechanical Engineering Management

Mechanical engineering is, perhaps, the most diverse and general of all the engineering fields. Mechanical engineers can be found working in almost any company. Manufacturing, transportation, health care, and insurance are some of the types of firms that employ mechanical engineers. No other field of engineering provides a better professional base for interdisciplinary activities.

Mechanical engineers design machines of all types, from paper clips to space shuttles. They plan, design, and direct the manufacture, distribution, and operation of these machines. Mechanical engineers also design the power sources needed to operate the machines and provide for the environment in which they function. In fact, mechanical engineering involves all phases of energy production and utilization: engines, power plants, electrical generation, heating, ventilating, and air conditioning.

The Bachelor of Engineering - Mechanical Engineering Management degree offered by the School of Professional Studies is a uniquely designed degree that gives graduates a broad foundation of mechanical engineering and management skills.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Engineering - Mechanical Engineering Management - Program Goal:

The goal is to is to enable students to become productive mechanical engineers, to advance to leadership roles in the profession, and to provide service to society.

## Bachelor of Engineering - Mechanical Engineering Management - Program Objectives

Objective \#1: Graduates have the ability to communicate ideas clearly and effectively in writing, orally, and graphically
Objective \#2: Graduates have an awareness of the engineer's social responsibilities with an appreciation of human achievements and insight into human behavior and culture

Objective \#3: Graduates have knowledge of multivariate calculus and differential equations and familiarity with linear algebra and statistics and the ability to apply this knowledge to the solution of engineering problems

Objective \#4: Graduates have fundamental knowledge of natural phenomena and their quantitative expression in chemistry and physics

Objective \#5: Graduates have knowledge of the engineering sciences, including electrical science, and the ability to apply this knowledge creatively

Objective \#6: Graduates have an ability to work professionally in the areas of both thermal and mechanical systems design
Objective \#7: Graduates have the ability to integrate technical knowledge through tradeoff studies leading to an engineering design

Objective \#8: Graduates have a broad knowledge of contemporary analytical, computational, and experimental practices
Objective \#9: Graduates have a broad competence in experimental design, data collection, data analysis, and the use of computational tool

## BACHELOR OF ENGINEERING

With a major in Mechanical Engineering

| Management |  |  |
| :---: | :---: | :---: |
| Program requirements |  |  |
| Engineering Science Core |  |  |
| ES | 213 | Statics |
| ES | 223 | Dynamics |
| ES | 233 | Engineering Materials |
| ES | 243 | Solid Mechanics |
| ES | 313 | Thermodynamics |
| ES | 323 | Fluid Mechanics |
| ES | 253 | Electrical Science |
| ES | 382 | Engineering Economics |

126 Hrs.
Required Hours
( 23 Hrs.)
(3)
(3)
(3)
(3)
(3)
(3)
(3)
(2)

Mechanical Engineering Stem
$\begin{array}{lllr}\text { EGR } & 143 & \text { Engineering Graphics } & \text { (3) } \\ \text { MAE } & 303 & \text { Mechanics of Machinery } & \text { (3) } \\ \text { MAE } & 343 & \text { Menaf }\end{array}$
MAE 343 Manufacturing Process and Equipment(3)
MAE 353 Computer-Aided Machine Design
MAE 463 Measurement Laboratory
GE 403 Engineering Project
$\begin{array}{cll}\text { Management Core } \\ \text { LAW } & 203 & \text { Business Law I } \\ \text { MGT } & 323 & \text { Leadership } \\ \text { MGT } & 353 & \text { Designing Operations }\end{array}$
BA/MGT Electives
Degree Related Requirements
Hrs.)
UE $\quad 111 \quad$ Adult Learning Orientation
Degree Related Electives
(3)
(3)
(18 Hrs.)
(3)
(3)
(3)
(9)
(11

| Additional Math \& Science |  |  |
| :--- | :--- | :--- |
| *PH | 224 | University Physics I |
| PH | 234 | University Physics II |
| MA | 393 | Probability \& Statistics |
| Math Elective (200 Level or Above) |  |  |

(14 Hrs.)
(3)

General Education Requirements (42 Hrs.)
Written Communication (6 Hrs.)
*ENG 103 English Composition I (3)
*ENG 133 Technical Communication
(3)

Oral Communication (3 Hrs.)
*SP 203 Effective Speaking or
*COM 163 Interpersonal Communication
(3)

Social Sciences and Humanities
(12 Hrs.)
*ECO 213 Microeconomics
*ECO 223 Macroeconomics

* Humanities Elective
*Humanities Elective
(3)

Math \& Science Core
(20 Hrs.)

| *MA | 134 | Calculus I |
| :--- | :--- | :--- |
| *MA | 164 | Calculus II |
| *CH | 104 | General Chemistry I |

Additional Requirements
(6 Hrs.)
MA 213 Calculus III
MA 233 Differential Equations
(3)

Total in Degree Program:
126 Hrs.

The Bachelor of Science with a major in Communication degree enables graduates to master a variety of communication skills required for success in a wide range of exciting careers. Courses focus on understanding the communication process and developing skills to communicate effectively. Out of a total of 120 credit hours, 46 hours consist of communication subject matter concentration.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Science with a major in Communication - Program Goal:

The goal is to equip graduates with the knowledge, attitudes, and skills necessary to successfully compete in the workplace, to communicate in multiple ways with diverse audiences, and to prepare students with communication and analytical competencies to be contributing citizens of local, regional and international communities.

## Bachelor of Science with a major in Communication - Program Objectives

Objective \#1: Students will be able to articulate the historical, philosophical, and theoretical foundation upon which all communication activity is based.

Objective \#2: Students will be aware of and skillful in the use of new technologies relevant to the major.
Objective \#3: Students will be able to explain communication concepts and theories.
Objective \#4: Students will be able to explain, evaluate and apply the process involved in productive conflict in communication contexts (interpersonal, small group, public, corporate and organizational).

Objective \#5: Students will be able to integrate oral, written, and visual skills to produce effective professional communication in the contemporary workplace.

## BACHELOR OF SCIENCE WITH A MAJOR IN COMMUNICATION

Bachelor of Science with a major in Communication, Applied Communication Track

|  | 120 Hrs. |  |  |
| :--- | :--- | :--- | :--- |
| Program requirements | Required Hours |  |  |
| Communication Subject Matter Concentration (21 Hrs.) |  |  |  |
| COM | 123 | Introduction to Electronic Media | $(3)$ |
| COM | 153 | Principles of Public Relations | $(3)$ |
| COM | 163 | Interpersonal Communication | $(3)$ |
| COM | 213 | Business Communication | (3) |
| COM | 263 | Theories \& Practices in |  |
|  |  | Communication | (3) |
| COM | 363 | Persuasion \& Argumentation | $(3)$ |

Three hours in Communication Practica (From the following)

| COM | 101 | Freshman Media Practicum |
| :--- | :--- | :--- |
| COM | 301 | Campus Media Internship |
| COM | 422 | Campus Media Management |

## Applied Communication Track

COM 183 Writing for Public Media
COM 353 Public Relations Writing \& Production
(3)

Choose one of the following:

| COM | 413 | Corporate \& Organizational <br> Communication |
| :---: | :---: | :--- |
| or |  |  |
| COM | 453 |  <br> Campaigns |

## Choose three hours from:

| COM | $4281 \quad$Senior Communication Project <br> Proposals |
| :--- | :--- |
| COM | 4292 Senior Communication Project |
| COM | 4013 Senior Capstone Internship <br> in Communication |

## Communication Electives

Choose 13 hours of Communication Related Electives

| Additional Program Requirements | (32 Hrs.) |  |  |
| :---: | :---: | ---: | ---: |
| UE | 111 | Adult Learning Orientation | (1) |
| Electives |  | $(31)$ |  |

General Education Requirements
(42 Hrs.)
Written Communication (6
hrs.)
*ENG 103 English Composition I
*ENG 113 English Composition II

## Oral Communication

*SP 203 Effective Speaking
Social Sciences and Humanities
*ECO 213 Microeconomics
or
*ECO 223 Macroeconomics

| or |  |  |
| :--- | :--- | :--- |
| *GOV | 113 | Introduction to Government |
| *COM | 203 | Media \& Communication |
| *COM | 233 | Intercultural Communication |
| *FLM | 203 | Film Appreciation |
| *PSY | 113 | Principles of Psychology |
| $(3)$   <br> Math and Science   <br> *MA 103 Business Algebra <br> or   <br> *MA 113 College Algebra. |  |  |

(13 Hrs.)

## Bachelor of Science with a major in <br> Communication, Corporate and Organizational Communication Track 120 Hrs.

Program requirements Required Hours

| Communication Subject Matter Concentration (21 Hrs.) |  |  |  |  |
| :---: | :---: | :--- | :--- | :---: |
| COM | 123 | Introduction to Electronic Media | (3) |  |
| COM | 153 | Principles of Public Relations | $(3)$ |  |
| COM | 163 | Interpersonal Communication | $(3)$ |  |
| COM | 213 | Business Communication | $(3)$ |  |
| COM | 263 | Theories \& Practices in |  |  |
|  |  | Communication |  |  |
| COM | 363 | Persuasion \& Argumentation |  |  |

Three hours in Communication Practica
(From the following)

| COM | 101 | Freshman Media Practicum |
| :--- | :--- | :--- |
| COM | 301 | Campus Media Internship |
| COM | 422 | Campus Media Management |

COM 301 Campus Media Internship

Corporate \& Organizational Communication Track
(25 Hrs.)

| COM | 353 | Public Relations Writing \& Production (3) |
| :--- | :--- | :--- |
| COM | 413 | Corporate \& Organizational <br>  |
| Communication |  |  |

COM 453 Public Relations Planning \& Campaigns
(3)

MGT 313 Human Resource Management (3)
MGT 363 Organizational Behavior
Choose three hours from:

| COM 4281 | Senior Communication Project |
| ---: | :--- |
|  | Proposals |

COM 4292 Senior Communication Project
COM 4013 Senior Capstone Internship in Communication

| or |  |  |
| :--- | :--- | ---: |
| *MA | 153 | Finite Mathematics |
| *MA | 253 | Statistics |
| *Science Elective | $(3)$ |  |
| Math or Science Elective | $(4)$ |  |
| General Education Electives | $(3)$ |  |
| *Electives | $(5$ Hrs.) |  |

## Total in Degree Program:

120 Hrs.

| Choose seven hours from the following: |  |  |  |
| :--- | :--- | :--- | ---: |
| COM | 183 | Writing for the Media | (3) |
| COM | 301 | Campus Media Internship | $(1)$ |
| COM | 323 | Business of Electronic Media | $(3)$ |
| COM | 373 | Topics in Communication | $(3)$ |
| COM | 422 | Campus Media Management | $(2)$ |
| COM | $400 x$ | Elective Internship |  |
| COM | $410 x$ | Independent Studies in Communication |  |
| INF | 273 | Video Editing I | $(3)$ |
| ENT | 303 | Entrepreneurial Leadership | $(3)$ |
| ENT | 313 | Business Concepts | $(3)$ |
| MGT | 323 | Leadership | $(3)$ |
| MGT | 343 | Human Resource Development | (3) |
| PSY | 343 | Social Psychology | $(3)$ |

Additional Program Requirements
(32 Hrs.)

## General Education Requirements

(42 Hrs.)
Written Communication
hrs.)

| *ENG | 103 | English Composition I |
| :--- | :--- | :--- |
| *ENG | 113 | English Composition II |

Oral Communication (3 Hrs.)
*SP 203 Effective Speaking
(3)

Social Sciences and Humanities
(14 Hrs.)
*ECO 213 Microeconomics
or
*ECO 223 Macroeconomics

| Math and Science |  |  | (13 Hrs.) |
| :---: | :---: | :---: | :---: |
| *MA <br> or | 103 | Business Algebra |  |
| *MA | 113 | College Algebra |  |
| *MA | 153 | Elements of Math | (3) |
| *MA | 253 | Statistics | (3) |
| *Science Elective |  |  | (4) |
| Math or Science Elective |  |  | (3) |
| General Education Electives |  |  | (5 Hrs.) |
| Electives |  |  | (5) |
| Total in Degree Program: |  |  | 120 Hrs. |
| Bachelor of Science with a major in |  |  |  |
| Track |  |  | 120 Hrs. |
| Program requirements Requir |  |  | ed Hours |
| Communication Subject Matter Concentration (21 Hrs.) |  |  |  |
| COM | 123 | Introduction to Electronic Media | - (3) |
| COM | 153 | Principles of Public Relations | (3) |
| COM | 163 | Interpersonal Communication | (3) |
| COM | 213 | Business Communication | (3) |
| COM | 263 | Theories \& Practices in |  |
|  |  | Communication | (3) |
| COM | 363 | Persuasion \& Argumentation | (3) |
| Three hours in Communication Practica |  |  |  |
| (From the following) |  |  |  |
| COM | 101 | Freshman Media Practicum | (1) |
| COM | 301 | Campus Media Internship | (1) |
| COM | 422 | Campus Media Management | (2) |
| Public Relations |  | \& Journalism Track | (25 Hrs.) |
| COM | 183 | Writing for the Media | (3) |
| COM | 253 | Sports Media \& Promotion | (3) |
| COM | 353 | Public Relations Writing \& Productiol | duction (3) |
| COM | 413 | Corporate \& Organizational |  |
|  |  | Communication | (3) |
| COM | $453$ <br> (3) | Public Relations Planning \& Campaigns |  |
| Choose three hours from: |  |  |  |
| COM | 4281 | Senior Communication Project |  |
|  |  | Proposals | (1) |
| and |  |  |  |
| COM <br> or | 4292 | Senior Communication Project | (2) |

$\begin{array}{ll}\text { COM } 4013 \text { Senior Capstone Internship } \\ & \text { in Communication }\end{array}$
Choose seven hours from the following:

| COM | 283 | Sports Writing | $(3)$ |
| :--- | :--- | :--- | :--- |
| COM | 301 | Campus Media Internship | $(1)$ |
| COM | 323 | Business of Electronic Media | $(3)$ |
| COM | 373 | Topics in Communication | $(3)$ |
| COM | 422 | Campus Media Management | $(2)$ |
| COM | $400 x$ | Internship in Communication |  |
| COM | $410 x$ | Independent Studies in Communication |  |
| INF | 273 | Video Editing I | $(3)$ |
| ENG | 463 | Creative Writing | $(3)$ |
| ENT | 313 | Business Concepts | $(3)$ |
| HPE | 313 | Principles of Sport \& Recreation |  |
|  |  | Management | $(3)$ |
| MK | 303 | Marketing | $(3)$ |
| MK | 323 | Integrated Marketing Communication | $(3)$ |
| MK | 433 | Personal Selling | $(3)$ |
| MK | 463 | Marketing Research | $(3)$ |
| PSY | 343 | Social Psychology |  |
|  | $(3)$ |  |  |

Additional Program Requirements
(32 Hrs.)
UE 111 Adult Learning Orientation Electives

## General Education Requirements

(42 Hrs.)
Written Communication (6
Hrs.)
*ENG 103 English Composition I (3)
*ENG 113 English Composition II
Oral Communication (3 Hrs.)
*SP 203 Effective Speaking
(3)

Social Sciences and Humanities
(14 Hrs.)
(3)
(13 Hrs.)
*ECO 213 Microeconomics
*ECO 223 Macroeconomics
or
*GOV 113 Introduction to Government
*COM 203 Media \& Communication
*COM 233 Intercultural Communication
*FLM 203 Film Appreciation
*PSY 113 Principles of Psychology
Math and Science
*MA 103 Business Algebra
or
*MA 113 College Algebra
or
*MA 153 Elements of Math
*MA 253 Statistics
*Science Elective
Math or Science Elective

General Education Electives
*Electives

## Total in Degree Program:

120 Hrs.

## BACHELOR OF SCIENCE IN CRIMINAL JUSTICE

The Bachelor of Science in criminal justice degree is ideal for the law enforcement professional. Successfully completed police academy and other law enforcement training are applicable toward this degree. The major provides a strong theoretical background along with broad-based learning through general education, electives, and degree-related prior learning.

The Bachelor of Science in Criminal Justice degree provides students a strong theoretical background with broad-based learning through the general education requirements, electives and degree-related prior learning to prepare them to start in their chosen criminal justice career path, move up quickly in the ranks, or go to law school. Successfully completed police academy and other law enforcement training are applicable toward this degree as prior learning credits. Four concentration areas are offered in psychology, emergency management, management/leadership and academy training/professional training. The course work for the program consists of 39 credit hours of core/major coursework and 18 credit hours in a selected concentration. 124 credit hours of coursework are required for completion of the degree.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Science in Criminal Justice - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Criminal Justice profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge that compliments their chosen field of study.

## Bachelor of Science in Criminal Justice - Program Objectives

Objective \#1: Graduates will be able to pursue professional career paths in the criminal justice field.
Objective \#2: Graduates will be able to demonstrate a familiarity with criminal justice administration.
Objective \#3: Graduates will demonstrate knowledge of general education that provides a foundation for lifelong learning.
Objective \#4: Graduates will exhibit knowledge of law enforcement procedures.
Objective \#5: Graduates will exhibit an understanding of the relationship between psychology and criminal justice.
Objective \#6: Graduates will be able to interface with governmental agencies and policies.

In the degree program descriptions that follow, an asterisk $\left(^{*}\right)$ indicates that those courses satisfy the University's general education requirements.

## Bachelor of Science in Criminal Justice 120 Hrs.

| Program Requirements | Required Hours |
| :--- | ---: |
| Major Area | $(39 \mathbf{H r s}$ ) |


| LE | 253 | Probation, Parole \& Community <br> Corrections |
| :--- | :---: | :--- |
| LE | 263 | Introduction to Criminal <br> Law \& Justice |
| LE | 273 | Criminal Procedures and Evidence |
| LE | 343 | Criminalistics \& Crime Scene <br> Investigations I |


| LE | 353 | Criminalistics \& Crime Scene |
| :---: | :---: | :---: |
|  |  | Investigations II |
| LE | 363 |  |
|  |  | Correctional Law |
| LE | 423 | Criminal Justice Agency |
|  |  | Administration |
| LE | 433 | Criminal Justice Capstone |
|  |  | Demonstration |
| LE | 453 | Topics in Criminal Justice |
| PSY | 323 | Abnormal Psychology |
| PSY | 383 | Forensic Psychology |

## Degree Related Electives or

Prior Learning Credit
(15 Hrs.)
UE 111 Adult Learning Orientation

## Concentration Option <br> (18 Hrs.)

## Choose from one of the $\mathbf{1 8}$ credit hour options listed

 below
## Psychology Module

| PSY | 333 | Psychology of Personality |
| :--- | :--- | :--- |
| PSY | 343 | Social Psychology |
| PSY | 353 | Child \& Adolescent Psychology |
| PSY | 363 | Counseling |
| PSY | 413 | Psychology of Addiction |
| PSY | 423 | Counseling Theories \& Practices |

## Emergency Response Module

EM $103 \begin{aligned} & \text { Introduction to Emergency } \\ & \text { Management }\end{aligned}$
EM 223 Risk Assessment \& Vulnerability (3)
EM 383 Preparedness \& Response Operations
(3)

EM 403 Managing the Consequences of Terrorism
Emergency Management Elective
Emergency Management Elective

## Academy Training / Professional Training Module

This module can only be filled by documented Academy
(Fire, Police, EMT) or Military Training and/or Prior Learning.

| COM | 213 | Business Communication |
| :--- | :--- | :--- |
| MGT | 313 | Human Resource Management |
| MGT | 323 | Leadership |
| MGT | 333 | Supervision |
| MGT | 363 | Organizational Behavior |

(3)

Choose one course from below

| PHL | 313 | Ethics |
| :--- | :--- | :--- |
| FIN | 333 | Public Finances |

## General Education Requirements <br> (48 Hrs.)

Written Communication (6Hrs.)
*ENG 103 English Composition I (3)
*ENG 113 English Composition II

| Oral Communication |  |  | (3) |
| :---: | :---: | :---: | :---: |
| Hrs.) |  |  |  |
| *SP | 203 | Effective Speaking |  |
| or |  |  |  |
| *COM | 163 | Interpersonal Communication | (3) |

Social Science and Humanities
(18 Hrs.)
*ECO 213 Microeconomics
or
*ECO 223 Macroeconomics
*GOV 113 Introduction to Government
*HIS 103 American History I
and
*HIS 113 American History II
*Humanities Electives
*Humanities Electives
(3)

Mathematics and Science
*MA 103 Business Algebra
or
*MA 113 College Algebra
or
*MA 153 Elements of Math
*BIO 103 General Biology (no lab) (3)
*Science Elective
*Mathematics or Science Elective
(3)

General Education Electives
(3 Hrs.)
(3)

Total in Degree Program:
120 Hrs.

## Management / Leadership

## BACHELOR OF SCIENCE WITH A MAJOR IN EMERGENCY MANAGEMENT

The Bachelor of Science with a major in Emergency Management degree prepares individuals in the areas of mitigation, preparedness, response, and recovery for emergency situations. Graduates will acquire leadership skills and a wide range of
knowledge about emergency and disaster situations necessary to succeed in the emergency management professions. The emergency management core of courses stresses strategic and practical approaches to hazardous situations. The capstone course requires the graduates to bring together theory and practice by working collaboratively with peers to solve simulated disasters. The course work for the program consists of 30 credit hours of core/major coursework and 36 credit hours in two selected modules. 120 credit hours of coursework are required for completion of the degree.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Science with a major in Emergency Management - Program Goal:

The goal is to equip students with the skills needed to develop a career of leadership in Emergency Management professions, provide them with a depth of studies that prepares them to meet the contemporary needs of the community in case of an emergency, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge that compliments their chosen field of study.

## Bachelor of Science with a major in Emergency Management - Program Objectives

Objective \#1: Graduates will be able to plan, organize, direct, and control emergency management functions within the public or private sectors.

Objective \#2: Graduates will be able to mitigate, prepare, respond and recover from an emergency in order to protect citizens.

Objective \#3: Graduates will be knowledgeable of intentional, natural and technological hazards and disasters.
Objective \#4: Graduates will demonstrate knowledge of the public, private, and voluntary actors involved in an emergency situation.

Objective \#5: Graduates will be able to create, implement and assess emergency management plans.
This degree enables a graduate to:

- Acquire the skills necessary for developing a career of leadership in emergency management professions
- Acquire a wide-range of knowledge within emergency and disaster situations
- Acquire a depth of study through the general education components


## Bachelor Of Science <br> Emergency Management Major

## Program Requirements

Major Area

## 120 Hrs. <br> Required Hours <br> (30 Hrs.)

| EAS | 253 | Weather and Climate | $(3)$ |
| :--- | :---: | :--- | :---: |
| EM | 103 | Introduction to Emergency |  |
|  |  | Management | $(3)$ |
| EM | 113 | Introduction to Hazard Mitigation | $(3)$ |
| EM | 223 | Risk Assessment \& Vulnerability | $(3)$ |
| EM | 253 | Disaster Relief \& Recovery | $(3)$ |
| EM | 313 | Hazardous Materials Operations | $(3)$ |
| EM | 383 | Preparedness \& Response Operations | $(3)$ |
| EM | 403 | Managing Consequences of Terrorism | $(3)$ |
| EM | 423 | Social Dimensions of Disaster | $(3)$ |
| EM | 453 | Emergency Management Capstone | $(3)$ |


| Module 1 |  |  |
| :---: | :---: | :---: |
| Module 2 |  |  |
| Choose any two modules listed |  |  |
| Business Continuity Module |  |  |
| AC | 203 | Accounting I |
| AC | 213 | Accounting II |
| FIN | 303 | Managerial Finance |
| LAW | 403 | Employment Law |
| MGT | 323 | Leadership |
| MGT | 363 | Organizational Behavior |
| Emergency Response Module |  |  |
| EM | 303 | Natural \& Man-Made Disasters |
| EM | 323 | Hazardous Materials \& WMD |
| EM | 333 | World Terrorism |
| EM | 343 | Incident Management |
| EM | 363 | Public Information \& Media |

(18 Hrs.)
(18 Hrs.)
Choose any two modules listed

## Business Continuity Module

| HR |  | Safety \& Health Management | (3) | or |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academ |  | ng/Prior Learning Module | (18 Hrs.) | *ECO | 223 | Macroeconomics | (3) |
| This module can only be filled by documented academy |  |  |  | *GOV | 113 | Introduction to Government | (3) |
| (fire, police, EMT) or military training and/or prior learning, |  |  |  | *HIS | 103 | American History I |  |
| includes Ivy Tech and other certified fire training |  |  |  |  | (3) |  |  |
| Additional Program Requirements |  |  | (18 | and |  |  |  |
| Hrs.) |  |  |  | *HIS | 113 | American History II | (3) |
|  |  |  |  | or |  |  |  |
|  |  |  |  | *HIS | 203 | World Civilization I | (3) |
|  |  |  |  | and |  |  |  |
|  |  |  |  | *HIS | 213 | World Civilization II | (3) |
|  |  |  |  | *SOC | 103 | Introduction to Sociology | (3) |
|  |  |  |  | *Huma | ities | ectives | (6) |
|  |  |  |  | Human | ies or | Social Science Elective | (3) |
|  |  |  |  | Mathem | ics an | d Science |  |
|  |  |  |  | *MA | 103 | Business Algebra |  |
|  |  |  |  | or |  |  |  |
| PSY | 113 | Principles of Psychology | (3) | *MA | 113 | College Algebra | (3) |
| UE | 111 | Adult Learning Orientation | (1) | *MA | 253 | Statistics | (3) |
| Electiv |  |  | (2) | *BIO | 103 | General Biology (no lab) | (3) |
| General Education and |  |  | (48 Hrs.) | *Math | matics | or Science Elective | (3) |
| Written Communications |  |  | (6 Hrs.) | General Education Elective |  |  | (3 Hrs.) |
| *ENG | 103 | English Composition I | (3) |  |  |  | (3 Hrs.) |
| *ENG | 113 | English Composition II | (3) | *Electi |  |  | (3) |
| Oral Communication |  |  | (3 Hrs.) | Total in Degree Program: |  |  | 120 Hrs. |
|  |  | Effective Speaking |  |  |  |  | 120 Hrs. |
| or |  |  |  |  |  |  |  |
| *COM | 163 | Interpersonal Communication | (3) |  |  |  |  |
| Social Sc | ence | d Humanities | (24 Hrs.) |  |  |  |  |
| *ECO | 213 | Microeconomics |  |  |  |  |  |

Bachelor of Science in Engineering Technology degree program prepares graduates with the applied problem solving knowledge and hands-on skills necessary to meet the engineering design challenges of the future with flexibility and creativity. Utilizing state of the art computers and industry focused design based software, the program offers challenging, applied learning experiences in three dimensional, graphic communication. The curriculum is relevant to current engineering practice and to those elements of management and general education program required for a well rounded education.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Science in Engineering Technology - Program Goal:

The goal is to provide graduates with applied knowledge and technological competencies necessary for professional engineering careers in industry with the potential to advance to leadership positions.

## Bachelor of Science in Engineering Technology - Program Objectives

Objective \#1: Graduates will demonstrate competency in applying mathematical, scientific, critical thinking, technological knowledge, techniques and skills and modern tools to engineering technology projects.

Objective \#2: Graduates will demonstrate teamwork, leadership skills and commitment to contributing to their profession.
Objective \#3: Graduates will recognize professional, ethical, societal and global impacts of their practice in engineering technology.
Objective \#4: Graduates will demonstrate effective communication, in both written and oral form.
Objective \#5: Graduates will be prepared to pursue a lifetime of self-directed learning and professional development.
Objective \#6: Graduates will demonstrate a commitment to quality, timeliness, and improved effectiveness.

## BACHELOR OF SCIENCE IN ENGINEERING TECHNOLOGY

Bachelor Of Science Engineering Technology

Program Requirements
Engineering Fundamentals Core

| MGT | 363 | Organizational Behavior |
| :--- | :--- | :--- |
| MGT | 413 | Management of Quality |

Degree Related Electives
UE 111 Adult Learning Orientation
Degree Related Electives

## General Education <br> (52 Hrs.)

Written Communication
*ENG 103 English Composition I
*ENG 133 Technical Communication
Oral Communication
*SP 203 Effective Speaking
or
*COM 163 Interpersonal Communication (3)
Social Sciences and Humanities
( 15 Hrs.)
*ECO 213 Microeconomics
*ECO 223 Macroeconomics
*PSY 113 Principles of Psychology
Humanities Elective
Humanities Elective
(3)
(8 Hrs.)
(7)
(6 Hrs.)
(3)
(3)

ETD 113 Geometric Dimensioning \& Tolerancing
(3)

ETD 123 Manufacturing Materials \& Processes (3)
ETD 163 Environmental Health \& Safety (3)
ETD 173 Computer Aided 3-D Modeling (3)
ETD 203 Basic Mechanisms (3)
ETD 233 Engineering \& Manufacturing Systems (3)
ETD 243 Statics \& Strength of Materials

ETD 253 Dimensional Metrology (3)
ETD 263 Design, Analysis, and Prototyping (3)
ETD 273 Electrical Fundamentals (3)
ETD 323 Product Design \& Development (3)
ETD 363 Elements of Machines (3)
ETD 423 Senior Design Project (3)
ETD 433 Computer Numerical Control Principles
(3)

EGR 453 Advanced Parametric Design
(3)

## Management Core

(12 Hrs.)

| MGT | 333 | Supervision |
| :--- | :--- | :--- |
| MGT | 353 | Designing Operations |

(3)

Mathematics Core
(13 Hrs.)
*MA 113 College Algebra (3)
*MA 123 Trigonometry (3)
*MA 134 Calculus I (4)
*MA 253 Statistics (3)
Science Core ( 12 Hrs.)
*CH 144 Chemistry—Ideas and Applications (4)
*PH 154 College Physics I (4)
*PH 164 College Physics II (4)
General Education Elective
Total in Degree Program
120 Hrs.

## BACHELOR OF SCIENCE PSYCHOLOGY MAJOR

The Bachelor of Science Psychology Major degree provides graduates the opportunity to study human behavior and teaches them how to put hat knowledge to use. Students study the mind, its behavior and emotion and learn about cognitive development and research methods, statistics and data interpretation. In addition, students study theory, research and learn how to apply the principles for improvement of human, animal, and environmental welfare. Out of the total 120 credit hours, 39 credit hours consist of psychology core coursework.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Bachelor of Science Psychology Major - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Psychology profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Bachelor of Science Psychology Major - Program Objectives

Objective \#1: Students will have competency in psychology, including requisite skills in analyzing human behavior.
Objective \#2: Students will be able to use a broad range of research and skills relating to psychology.
Objective \#3: Students will understand and be able to apply psychological concepts and principles.
Objective \#4: Students will understand the ethical questions and issues in psychology.
Objective \#5: Students will know the history of psychology.
Objective \#6: Students will have a broad understanding of all major areas of psychology.
Objective \#7: Students will recognize the link between biology and psychology.

## BACHELOR OF SCIENCE PSYCHOLOGY MAJOR

| Bachelor Of Science |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Psychology Major |  |  | 120 Hrs. |  |
| Program Requirements |  |  | Required Hours |  |
| Psychology Core |  |  |  |  |
| PSY | 113 | Principle |  |  |
| PSY | 303 | Research | ychology |  |
| PSY | 473 | Psycholo | monstrat |  |

Choose two: ( 6 Hrs.)

| PSY | 323 | Abnormal Psychology |
| :--- | :--- | :--- |
| PSY | 403 | Human Sexuality |
| PSY | 413 | Psychology of Addiction |
| PSY | 423 | Counseling Theories and Practices |

Choose two: ( 6 Hrs.)

| PSY | 333 | Psychology of Personality |
| :--- | :--- | :--- |
| PSY | 343 | Social Psychology |
| PSY | 373 | Political Psychology |
| PSY | 313 | Topics in Psychology |

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Choose one:(3 Hrs.)
    PSY 353 Child and Adolescent Psychology
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SOC 323 The Family(3)

Choose 18 hours from any 300 level or higher psychology or sociology course not previously chosen

> Psychology or Sociology Electives 300 or 400 Level
> Psychology or Sociology Electives 300 or 400 Level
> Psychology or Sociology Electives 300 or 400 Level
> Psychology or Sociology Electives 300 or 400 Level
> Psychology or Sociology Electives 300 or 400 Level
> Psychology or Sociology Electives 300 or 400 Level

## Additional Program Requirements

(27 Hrs.)
UE 111 Adult Learning Orientation

## General Education Requirements (51 Hrs.)

Written Communication (6 Hrs.)
*ENG 103 English Composition I (3)
*ENG 113 English Composition II (3)
Oral Communication
*SP 203 Effective Speaking
or
*COM 163 Interpersonal Communication
(3)

Social Science and Humanities
(3 Hrs.)
*ECO 213 Microeconomics
or
*ECO 223 Macroeconomics

| *GOV | 113 | Introduction to Government |
| :--- | :--- | :--- |
| *HIS | 103 | American History I |
|  | $(3)$ |  |
| and |  |  |
| *HIS | 113 | American History II |
|  | $(3)$ |  |
| or |  |  |
| *HIS | 203 | World Civilization I |
|  | $(3)$ |  |
| and |  |  |
| *HIS | 213 | World Civilization II |
| *SOC | 103 | Introduction to Sociology |
| *Humanities Elective |  |  |
| *Humanities Elective |  |  |


| Mathematics And Science |  |  |
| :---: | :---: | :---: |
| *MA | 103 | Business Algebra |
| or |  |  |
| *MA | 113 | College Algebra |
| or |  |  |
| *MA | 153 | Elements of Mathematics |
| *BIO | 103 | General Biology |
| *Math or *Science Elective |  |  |
| Science Elective |  |  |

(12 Hrs.)

## General Education Elective

Electives

## Total in Degree Program:

120 Hrs.

## ASSOCIATE IN ACCOUNTING

The associate in accounting degree program is designed to prepare students for immediate entry into the accounting field. It combines a concentration in accounting and computer science with business, economics, and general education requirements. This program is especially appropriate for positions in businesses requiring a small but knowledgeable accounting staff. All of the courses apply to the four-year accounting major at Trine, so this degree also serves as an excellent beginning for students who subsequently plan to seek the Bachelor of Business Administration degree with an accounting major.

In the degree program descriptions that follow, an asterisk (*) indicates that those courses satisfy the University's general education requirements.

Associate in Accounting degree offers students a foundation of accounting knowledge and competencies, as well as technical, managerial, communication, and leadership skills needed to excel in the field of accounting. Out of the total 60 credit hours, 18 credit hours consist of business core coursework and 15 credit hours of accounting coursework.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Associate in Accounting - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Accounting profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Associate in Accounting - Program Objectives

Objective \#1: Students will be able to seek professional career paths.
Objective \#2: Students will be able to have a basic understanding of general education skills to encourage lifelong learning and career advancement.
Objective \#3: Students will be able to have a knowledge base specific to accounting.

| Associate In Accounting | 60 Hrs. |
| :--- | ---: |
| Program Requirements | Required Hours |
| Associate Business Core | $(15$ Hrs.) |


| AC | 203 | Accounting I |
| :--- | :--- | :--- |
| AC | 213 | Accounting II |
| BA | 123 | Business Concepts |
| LAW | 203 | Business Law I |
| MGT | 363 | Organizational Behavior |

## Accounting Core

(15 Hrs.)

| AC | 303 | Cost Accounting | (3) |
| :--- | :--- | :--- | :--- |
| AC | 323 | Intermediate Accounting I | (3) |
| AC | 333 | Intermediate Accounting II | (3) |
| AC | 373 | Accounting Information Systems |  |
| AC | 423 | Income Tax |  |

## Additional Program Requirements

*UE 111 Adult Learning Orientation

(3)

General Education Requirements (22 Hrs.)
Written Communication (6 Hrs.)
*ENG 103 English Composition I (3)
*ENG 113 English Composition II
Social Sciences and Humanities (6 Hrs.)
*Humanities elective
*ECO 213 Microeconomics
Mathematics and Science
*MA 103 Business Algebra
*Science Elective
*Math or Science Elective

| General Education Additional Requirements |  |  |
| :--- | :---: | :--- |
| *SP | 203 | Effective Speaking |
| or |  |  |
| *COM | 163 | Interpersonal Communication |

Total in Degree Program:
60 Hrs.

## ASSOCIATE IN BUSINESS ADMINISTRATION

The associate in business administration degree program is designed to prepare a person for entry into business with a broad understanding of the various business activities and their interrelationships. All of the courses apply to the four-year management major at Trine University, so this degree also serves as an excellent beginning for students who subsequently plan to seek the bachelor of business administration degree.

In the degree program descriptions that follow, an asterisk (*) indicates that those courses satisfy the University's general education requirements.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Associate in Business Administration - Program Goal:

The goal is to equip students with the quality educational tools needed to develop a career of leadership in the Business Administration profession, provide them with a depth of studies that prepares them to meet the contemporary needs of the business and community they will serve as professionals, and to enable them to be contributing citizens of local, regional and international communities with a valuable and diverse knowledge.

## Associate in Business Administration - Program Objectives

Objective \#1: Students will be able to seek professional career paths.
Objective \#2: Students will be able to use basic core of management skills.
Objective \#3: Students will be able to have a basic understanding of general education skills to encourage lifelong learning and career advancement.
Objective \#4: Students will be able to have a knowledge base specific to business administration.
Associate In Business Administration 60 Hrs.
Program Requirements $\quad$ Required Hours

Associate Business Core (21 Hrs.)

| AC | 203 | Accounting I | $(3)$ |
| :--- | :--- | :--- | :--- |
| AC | 213 | Accounting II | $(3)$ |
| BA | 123 | Business Concepts | $(3)$ |
| BA | 233 | Business Capstone Demonstration | $(3)$ |
| LAW | 203 | Business Law I | $(3)$ |
| MK | 303 | Marketing | $(3)$ |
| MGT | 363 | Organizational Behavior | (3) |

## Business Electives (9 Hrs.)

Electives prefixed by AC, BA, INF, ECO, FIN, LAW, MGT, or MK.

## Additional Program Requirements (9 Hrs.)

| *ECO | $223 \quad$ Macroeconomics | $(3)$ |
| :--- | ---: | ---: |
| General Education Requirements | $(\mathbf{2 2}$ Hrs.) |  |
| Written Communication | (6 Hrs.) |  |
| *ENG $103 \quad$ English Composition I | $(3)$ |  |
| *ENG $\quad 113 \quad$ English Composition II | $(3)$ |  |
| Social Sciences and Humanities | (6 Hrs.) |  |
| *Humanities elective | $(3)$ |  |
| *ECO $213 \quad$ Microeconomics | $(3)$ |  |
| Mathematics and Science | (6 Hrs.) |  |
| *MA $\quad$ 103 $\quad$ Business Algebra | $(3)$ |  |
| *Science Elective | $(3)$ |  |
| *Math or Science Elective | $(1)$ |  |
| General Education Additional Requirements | (3 Hrs.) |  |
| *SP $\quad 203 \quad$ Effective Speaking | $(3)$ |  |
| or |  |  |
| *COM $163 \quad$ Interpersonal Communication | $(3)$ |  |


| UE | 111 | Adult Learning Orientation |
| :--- | :--- | :--- | ---: |
| BA | 301 | Professional Development \& Strategies (1) |
| *COM | 213 | Business Communication |

Associate of Science in Engineering Technology degree program prepares graduates with the applied problem solving knowledge and hands-on skills to enter into careers as Engineering Technicians. The focus for this career will be in the design, manufacturing, testing, technical sales or maintenance industries and satisfies an industry demand for engineering technicians. Graduates of the associate degree program will typically have skill levels that will allow for specifying, testing, documenting, operating, selling or maintenance of engineering systems.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Associate of Science in Engineering Technology - Program Goal:

The goal is to offer students a scientific and mathematical foundation along with applied skills to fulfill the competencies needed for Engineering technician's career.

## Associate of Science in Engineering Technology - Program Objectives

Objective \#1: Graduates will demonstrate competency in applying mathematical, scientific and creative problem solving aspects to engineering technology projects.
Objective \#2 Graduates will effectively communicate technical information in both written and oral form.
Objective \#3 Graduates will be prepared to pursue a lifetime of self-directed learning and professional development.
Objective \#4 Graduates will apply their practical education, analytical reasoning and creative skills toward resolution of issues that are scientific, technological and social.

ASSOCIATE OF SCIENCE IN ENGINEERING TECHNOLOGY<br>Associate of Science in

Engineering Technology<br>Program Requirements<br>Engineering Technology Core

66 Hrs.
Required Hours
(33 Hrs.)

| ETD | 103 | Basic Technical Drawing | (3) |
| :--- | :--- | :--- | ---: |
| ETD | 113 | Geometric Dimensioning \& Tolerancing | (3) |
| ETD | 123 | Manufacturing Materials \& Processes | (3) |
| ETD | 163 | Environmental Health \& Safety | (3) |
| ETD | 173 | Computer Aided 3-D Modeling | $(3)$ |
| ETD | 203 | Basic Mechanisms | $(3)$ |
| ETD | 233 | Engineering \& Manufacturing Systems (3) |  |
| ETD | 243 | Statics \& Strength of Materials | (3) |
| ETD | 263 | Design, Analysis \& Prototyping |  |
| ETD | 273 | Electrical Fundamentals | (3) |
| ETD | 293 | Introduction to CNC | (3) |

$\begin{array}{lr}\text { Additional Program requirements } & \text { (1 Hrs.) } \\ \text { UE } 111 \quad \text { Adult Learning Orientation } & (1) \\ \text { General Education } & \mathbf{( 3 2 ~ H r s . )} \\ \text { Written Communication } & \mathbf{( 6 ~ H r s . )}\end{array}$

$$
\begin{array}{lll}
\text { *ENG } & 103 & \text { English Composition I } \\
\text { *ENG } & 133 & \text { Technical Communication } \tag{3}
\end{array}
$$

| Oral Communication |  |  |
| :--- | :--- | :--- |
| *SP | 203 | Effective Speaking |
| Or |  |  |
| *COM | 163 | Interpersonal Communication |

Social Sciences and Humanities
*Humanities Elective
*ECO 213 Microeconomics
Math and Science
*MA 113 College Algebra
*MA 123 Trigonometry
*CH 144 Chemistry-Ideas and Applications
*PH $154 \quad$ College Physics I
Total in Degree Program
66 Hrs.

## UNDERGRADUATE COURSE DESCRIPTIONS

## KEY TO COURSE PREFIXES

| AC | Accounting | ENG | English | INF | Informatics |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ARC | Architecture | ENT | Entrepreneurship | LAW | Law |
| ART | Art | ES | Engineering Science | LE | Law Enforcement |
| AST | Astronomy | ETD | Engineering Technology | MA | Mathematics |
| AU | Auctioneering | FIN | Finance | MAE |  |
| BA | Business Administration | FLM | Film |  | Aerospace Engineering |
| BIO | Biology | GE | General Engineering | MGT | Management |
| BE | Biomedical Engineering | GEO | Geography | MK | Marketing |
|  | Management | GLY | Geology | MUS | Music |
| CE | Civil Engineering | GS | General Studies | PH | Physics |
| CH | Chemistry | GOV | Government | PHL | Philosophy |
| COM | Communication | HC | Healthcare | PL | Pre-Legal Studies |
| CS | Computer Science |  | Management | PSY | Psychology |
| EAS | Earth Science | HIS | History | SOC | Sociology |
| ECE | Electrical \& Computer | HOS | Hospitality and | SP | Speech |
|  | Engineering |  | Tourism | SPN | Spanish |
| ECO | Economics | HPE | Health \& Physical | UE | University Experience |
| EGR | Engineering Graphics |  | Education |  |  |
| EM | Emergency Management | HR | Human Resource |  |  |

## COURSE NUMBERING SYSTEM

Course numbers are found at the beginning of the course description immediately following the course prefix.
Courses numbered 000: preparatory, non-credit

Courses numbered 100: freshman-level courses
Courses numbered 200: sophomore-level courses
Courses numbered 300: junior-level courses
Courses numbered 400: senior-level courses
Courses numbered 500: graduate-level courses
Courses numbered 600: graduate-level courses

## EXAMPLE OF COURSE PREFIX AND NUMBER

AC 303: This course prefix and number means that this is an Accounting junior level course.

## COURSE TITLE

The course title follows the course prefix and number.

## COURSE LEVEL REQUIREMENTS

Courses at the 100 level within the student's major may not be taken in the senior year without permission of the department chair of the student's major.

## COURSE DESCRIPTIONS

## ACCOUNTING

## AC 203 ACCOUNTING I 3 CR

This course is a study of the accounting process and the use of accounting information in business decisions. Topics include the processing of accounting information, income measurement, accrual accounting and accounting for assets, liabilities and equity in the corporate environment. The complete accounting cycle for a service and merchandising business and software applications are included. Prerequisite: MA 103

## AC 213 ACCOUNTING II 3 CR

This course includes the accumulation and use of accounting information by management in planning, control and decision-making. Topics include product costing, budgeting, cost-volume-profit relationships, variable costing and statement of cash flows. Software applications are included. Prerequisite: AC 203

## AC 303 COST ACCOUNTING 3 CR

Managerial accounting concepts, objectives, techniques, and systems are examined to provide information about financial and nonfinancial performance measurement. Cost accumulation, allocation, and variance analysis are studied in the context of performance evaluation and responsibility accounting in an organization. Emerging cost concepts and systems are also examined. The course uses computer applications. Prerequisite: AC 213

## AC 323 INTERMEDIATE ACCOUNTING I 3 CR

This course introduces comprehensive accounting theory and practice with emphasis on financial statement preparation and analysis. Current problems of corporate accounting and reporting are thoroughly covered, including cash, inventories, fixed assets, intangible assets, and marketable securities. The course uses computer applications. Prerequisite: AC 213

## AC 333 INTERMEDIATE ACCOUNTING II 3 CR

This is a continuation of Intermediate Accounting I. Areas covered include contingent liabilities, capital structure, leases, revenue recognition, earnings per share, pensions, and income taxes. This course uses computer applications. Prerequisite: AC 323

## AC 343 INTERMEDIATE ACCOUNTING III 3 CR

This is a continuation of Intermediate Accounting II. This course continues in-depth coverage of complex topics such as earnings per share, pensions, leasing, accounting for income taxes, accounting changes and full disclosures. The course uses computer applications. Prerequisite: AC 333

## AC 353 TAX AND LEGAL ISSUES FOR SMALL BUSINESS 3 CR

This course covers tax and legal topics pertinent to small businesses, including; form of business organization, creating or acquiring a small business, tax planning, benefit and retirement plans, personal asset protection, and estate and succession planning.
Prerequisite: AC 213

## AC 373 ACCOUNTING INFORMATION SYSTEMS 3 CR

This course is designed to provide a working knowledge of accounting information system concepts. The course will emphasize designing and/or evaluating accounting systems in terms of both system controls and meeting internal control objectives. The course uses computer applications. Prerequisites: BA113, FIN 303

## AC 403 ADVANCED ACCOUNTING 3 CR

This course covers specialized topics in accounting including branches, segment reporting, business combinations, consolidated financial statement preparation and accounting for partnerships. This course uses computer applications. Prerequisite: AC 333

## AC 413 GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING 3 CR

This course introduces fund accounting and covers the theory and accounting process for governmental and not-for-profit organizations. The accounting for estates and trusts is also included. This course uses computer applications. Prerequisite: AC 333

## AC 423 PERSONAL INCOME TAX 3 CR

This course introduces basic concepts of tax law with the emphasis on the underlying concepts common to all entities as they relate to everyday economic life. Special emphasis is placed on taxation of individuals and corporations. Computerized income tax preparation and research are included. Prerequisite: AC 213

## AC 433 CORPORATE INCOME TAX 3 CR

This course includes specialized topics including taxation of partnerships and other conduit entities. Property transactions, specialized topics and tax research are covered. Computerized preparation of tax returns for various entities is included. Prerequisite: AC 423

## AC 463 AUDITING 3 CR

Auditing theory, objectives, and procedures leading to the auditor's opinion on the financial statements are studied. Internal control and its evaluation, auditing standards, and the use of statistical sampling in the audit process are covered in depth. This course uses auditing software applications. Prerequisite: AC 323

## ARCHITECTURE

## ARC 293 ARCHITECTURE APPRECIATION 3 CR

An introduction to the built environment, prehistoric to modern, focusing on public/reverential, commercial and residential architecture. Students will be introduced to terminology, some construction techniques, socio-legal implications of high-rise structures, and architectural styles from ancient to postmodern. Structures from around the world will be viewed and discussed.

## ART

## ART 253 ART APPRECIATION 3 CR

Designed as an introduction to the arts, this course develops aesthetic-critical responses and seeks to enhance the enjoyment of works of art. Painting, sculpture, architecture and other types of art are analyzed in terms of the elements of art, subject, function, medium, organization, style and aesthetic response.

## ASTRONOMY

AST 201 ASTRONOMY LABORATORY 1 CR

An introductory laboratory study of basic observational astronomy and the tools of astronomy as students explore the sky. The stars, the planets and the universe of galaxies are observed and measured by observation or computer simulation.

## Co requisite or Prerequisite: AST 203

## AST 203 ASTRONOMY 3 CR

An introduction to the field of astronomy, this course is a study of the planets and the stars and their formation and life cycles. The history of the Milky Way Galaxy and the history of the cosmos are studied, with an emphasis on the solar system and methods of observation and measurement.

## AUCTIONEERING

## AU 103 INTRODUCTION TO AUCTIONEERING 3 CR

A general overview of the auctioneering profession, including an introduction to professional behavior, ethics, business management, and auctioneering specialties. The history of the auction method of marketing will also be discussed.

## AU 203 ASSET APPRAISING 3 CR

This course is an overview of asset appraisal and valuation methods. Exploration of marketing strategies and options based on the classification of the item being appraised. Basic appraisal policies of the Uniform Standards of Professional Appraisal Practices will be examined. Prerequisite: AU 103

## AU 213 AUCTIONEERING SPECIALTIES 3 CR

An in-depth examination of the specialty disciplines within the auctioneering environment. Specialty area include estate or household auctions, liquidations, consignments, and auction houses. Also included will be the sale of auto, livestock, antiques, furniture, jewelry, and fine art. Prerequisite: AU 103

## AU 303 REAL ESTATE OF AUCTION 3 CR

An in-depth study of the role of the auctioneering profession in relation to real estate, including discussion of property and land appraisals. Includes marketing, multi-parcel sales, disclosures, and environmental issues. Prerequisite: AU 103

## AU 313 AUCTION ARENA MANAGEMENT 3 CR

This course explores the management of activities involved in the actual auction process. Topics will include bid calling, the role of the "spotter", managing the flow of product through the auction arena, record management of seller/bidder/buyer activities from introduction of the product through completed sale, and payment for goods received. Voice use, care, and management will be explored. Prerequisite: AU 103

## AU 403 EXTERNSHIP 3 CR

A project or an interactive experience conducted under the supervision of a faculty advisor in partnership with the auctioneering profession. This project offers the student the opportunity to integrate theory and coursework with practice. Prerequisite: Senior standing

## BUSINESS ADMINISTRATION

## BA 113 BUSINESS COMPUTER APPLICATIONS 3 CR

This course emphasizes predominant software packages in word processing, spreadsheets, presentation graphics, database management, and e-mail usage, with an eventual goal of the student gaining certification in those areas.

## BA 123 BUSINESS CONCEPTS 3 CR

A survey course designed to introduce the student to business issues and practices in the United States. All major functions of business are included (management, marketing, law, finance, economics, operations, accounting, information technology) as well as issues facing the business person (ethics, globalization, motivation, etc.) Suitable for students considering a career in business
as well as for non-business majors who will interact with the business enterprises (e.g., educators, engineers). Planning for a business career through the creation of a portfolio is initiated. A major focus of this course is on career planning, beginning at the student's current career stage. A career plan is required for completion of the course.

## BA 233 BUSINESS CAPSTONE DEMONSTRATION 3 CR

This capstone course will provide students the opportunity to integrate and synthesize previous course work in business. In addition, to the Capstone Demonstration Project, students will be required to take the Major Field Test for the associate in business degree program. Prerequisite: All required coursework in the Associate of Business Core

## BA 301 PROFESSIONAL DEVELOPMENT \& STRATEGIES 1 CR

This is a practical course to assist the student in the development of a professional job search portfolio (i.e. résumé, cover letter, follow-up letters). The course includes self-appraisal and career goal setting, job interview techniques, and familiarization with employment resources. Professional strategies are emphasized in the areas of business attire, etiquette and protocol, ethics, human relations, and corporate culture. Prerequisites: Business major, junior or senior standing or permission of the instructor

## BA 3113 BUSINESS INTERNSHIP 3 CR

The course involves a meaningful work experience related to the student's field of study or other functional areas of business in an approved company. The assignment and company must be approved by the School of Business Internship Coordinator. A maximum of 6 semester credit hours can be counted toward degree requirements, with a maximum of 3 credit hours for any one work term. Prerequisites: Business Major, Sophomore or above class standing, GPA 2.5 or above, and permission of the advisor

## BA 313 INSURANCE 3 CR

This course includes the fundamental principles and practices as they relate to life, compensation, fire, marine, and automobile insurance. Prerequisites: LAW 203, MK 303 or permission of the instructor.

## BA 323 REAL ESTATE 3 CR

This course is the study of problems of buying and leasing real property for residence or investment purposes, including the principal commercial and financial transactions involved.
Prerequisites: LAW 303, MK 303, or permission of the instructor

## BA 333 SOCIAL MEDIA FOR BUSINESS 3 CR

Concepts include using digital and social media in a business/industry setting. Concepts include setting up and using wikis, blogs, Facebook, MySpace, Twitter, YouTube, Linkedin, Ning, Flickr, and other online modalities as a way to increase business, marketing, research, and customer service opportunities. Group work at local businesses will be required. Prerequisites: BA 113

## BA 343 INTERNATIONAL BUSINESS 3 CR

This course discusses economic principles of trade as applied to international business, world international trade environment and trends, world geography and culture as it impacts international trade, knowledge of the operation of importing and exporting, aspects of manufacturing and marketing in foreign markets, and the application of the functions of business to an international business operation. Prerequisites: ECO 213, ECO 223 or concurrent with ECO 223

## BA 403 BUSINESS AND PUBLIC POLICY 3 CR

This course includes an analysis of the legal, political, and economic framework that has shaped public policy toward business in the United States. It will include the methods as to how public policy is created and its implications for management decision making. The issues that this course will be concerned with are: how public policy is related to societal, community, employee, consumer, and environmental concerns and their implication for business. Prerequisites: MGT 363, ECO 223, LAW 203, MK 303, or permission of the instructor (same as ECO 453)

## BA 423 ENTREPRENEURSHIP 3 CR

This course focuses on entrepreneurship and small business management. Through case studies, simulations, guest lectures, reading and business plan development, students become aware of the unique challenges facing small business owners and entrepreneurs. Students become familiar with the resources available to small business owners, by developing and presenting a business start-up plan. Prerequisites: MGT 353, MGT 363, MK 303, Senior business major or permission of the instructor

## BIOLOGY

## BIO 103 GENERAL BIOLOGY (NO LAB) 3 CR

An introduction to the basic principles of biology with an emphasis on: biological chemistry, cell biology, metabolism, genetics, diversity of organisms, evolution, and ecology. A background in high school chemistry is strongly recommended.
Open to non-science majors only.

## BIO 104 GENERAL BIOLOGY 4 CR

An introduction to the basic principles of biology with an emphasis on: biological chemistry, cell biology, metabolism, genetics, diversity of organisms, evolution, and ecology. A background in high school chemistry is strongly recommended. Open to nonscience majors only. This course cannot be substituted for BIO 114 for either science or engineering majors.

## BIO 113 PRINCIPLES OF BIOLOGY (NO LAB) 3 CR

Five basic topics are discussed in some detail: the chemical logic of living systems, structure and function at the sub-cellular and cellular levels, cell energetics, cell division, genetics, and evolution. Laboratory exercises designed to introduce the student to scientific investigation and the structure and function of biological systems are an essential part of the course.

## BIO 203 OCEANOGRAPHY 3 CR

A description of the oceans and their relation to humans. The principles of physical, chemical, geological, and biological oceanography are used to explain the ocean environment. Society's effect on the oceans and problems and potentials of utilizing the natural resources of the sea. Prerequisites: A laboratory science and MA 113 (Same as EAS 203 and GEO 203)

## BIO 213 CONSERVATION 3 CR

A study of biodiversity, including the negative impact of human society and what can be done to preserve it. Topics include measurement of biodiversity, extinction, habitat destruction, fragmentation, degradation, overexploitation, and invasive species. Lab focuses on communities and small populations by using GIS, GPS, computer modeling and the design, management and restoration practices of natural areas.

## BIO 243 HUMAN ANATOMY AND PHYSIOLOGY(NO LAB) 3 CR

The anatomical and physiological features of each organ system are identified. Prerequisite: BIO 103 or BIO 113

## BIO 244 HUMAN ANATOMY AND PHYSIOLOGY 4 CR

The anatomical and physiological features of each organ system are identified. Microstructure observation and detailed dissection in the laboratory. Prerequisite: BIO 104 or BIO 114

## BIO 253 HUMAN ANATOMY (NO LAB) 3 CR

The anatomical features of each organ system are identified. Prerequisite: BIO 103 or BIO 113

## BIO 254 HUMAN ANATOMY 4 CR

The anatomical features of each organ system are identified. Microstructure observation and detailed dissection in the laboratory. Prerequisite: BIO 104 or BIO 114

## BIO 274 GENERAL ECOLOGY 4 CR

A study of the interactions of organisms and environments, this course focuses on individuals, populations, communities, ecosystems, landscapes and cycling of matter within energy systems. Investigations focus on techniques to gauge interactions
between the biological and physical environments, field and conceptual sampling methods, statistical analysis, population models, and an exploration of emerging technologies in ecology. Prerequisites BIO 113, MA 253

## BIO 283 MARINE BIOLOGY 3 CR

An introduction to organisms and processes in the marine environment, including function, biodiversity, and ecology of rganisms. Topics include: the chemical and physical environment; the ecology of pelagic and benthic organisms, including those from rocky coasts, unconsolidated shores, and coral reefs; benthic plants and phytoplankton; zooplankton and nekton; marine invertebrates, fishes; marine productivity and fisheries; marine pollution and conservation. Prerequisite: BIO 103 or BIO 113

## BIO 434 BIOCHEMISTRY 4 CR

A study of the chemistry, kinetics, energetics, and metabolic pathways of biological molecules such as carbohydrates, lipids, proteins, nucleic acids and enzymes are discussed and supported by laboratories that illustrate biochemical reactions, separations, enzyme kinetics, and analysis. Prerequisites: CH 211, CH 213 (Same as CH 434)

## BIOMEDICAL ENGINEERING

## BE 313 BIO-MEDICAL MATERIALS 3 CR

The basic mechanical, electrical, optical, thermal, and magnetic properties of engineering materials; structure of matter; crystalline structure and imperfections; environmental effects; selection and application of materials for biomedical prosthetics. Prerequisites: All Engineering Science Core (ES223, ES233, ES243, ES313, ES323, ES253, ES382)

## BE 323 BIO-MEDICAL KINEMATICS 3 CR

Kinematic and dynamic analysis of mechanisms. Computer-aided kinematic design. Experimental studies of mechanical properties of structural elements and prosthetics. Prerequisites: All Engineering Science Core (ES223, ES233, ES243, ES313, ES323, ES253, ES382) Co requisites: BE 313

## BE 333 BIO-MEDICAL ELECTRICITY 3 CR

Advanced electrical circuit theory. Examples will include bioelectric systems and signals and models of biological systems. Prerequisites: All Engineering Science Core (ES223, ES233, ES243, ES313, ES323, ES253, ES382) and BE 313 Co requisites: BE 323

## BE 403 BIO-MEDICAL IMAGING \& MEASUREMENT SYSTEM 3 CR

An introduction to concepts of imaging, sensing, and measurement systems that underlie a wide range of biomedical imaging modalities. Topics covered include cell imaging, multiphoton microscopy for biomedical studies, molecular imaging, infrared imaging, biomedical magnetic imaging, X-ray imaging, nuclear medicine, magnetic resonance imaging, and ultrasound imaging. Prerequisites: All Engineering Science Core (ES223, ES233, ES243, ES313, ES323, ES253, ES382) and BE 313, BE 323 Co requisites: BE 333

## BE 423 BIO-MEDICAL HUMAN MECHANICS 3 CR

Mechanics of deformable bodies. Uniaxial tension, compression, bending, and torsion applied to orthopedic biomechanics. Rigid body planar kinematics and dynamics, finite element techniques with applications to the biomechanics of walking, running, cycling, and other athletic activities. Prerequisites: All Engineering Science Core (ES223, ES233, ES243, ES313, ES323, ES253, ES382) and BE 313, BE 323, BE 333 Co requisites: BE 403

## BE 463 BIO-MEDICAL DESIGN FUNDAMENTALS 3 CR

Introduction to Design Concepts in Biomedical Engineering. This course aims to educate students on project definition, and on the design, development and technology transfer of potential biomedical products in the context of the student's major capstone project. Students will learn best practices for designing a marketable medical device, including the design process from the clinical problem
definition through prototype and clinical testing to market readiness. Prerequisites: All Engineering Science Core (ES223, ES233, ES243, ES313, ES323, ES253, ES382) and BE 313, BE 323, BE 333, BE 403 Co requisites: BE 423

## CIVIL ENGINEERING

## CE 3201 CIVIL ENGINEERING MATERIALS LAB 1 CR

Testing and evaluation of physical and mechanical properties of engineering materials such as steel, portland cement, concrete, masonry, asphaltic concrete, and timber. Corequisite: CE 3203

## CE 3203 CIVIL ENGINEERING MATERIALS 3 CR

Testing and evaluation of physical and mechanical properties of engineering materials. Origin, manufacture, and structural applications of metals, aggregates, bituminous materials (including superpave), portland cement, and concrete.
Corequisite: CE 3201; ES 243

## CE 3503 STRUCTURAL ANALYSIS 3 CR

Concept of work and reciprocal theorems. Influence functions and elastic deformations. Analysis of statically determinate and indeterminate structures. Study of the load flow in typical building systems and the idealization of the structural members. Prerequisite: Grade of "C" or better in ES 243

## CE 3513 STRUCTURAL STEEL DESIGN 3 CR

Analysis and design of structural steel members. Column buckling and lateral stability of beams. Codes and specifications. Prerequisite: CE 3503; Corequisite: CE 3203

## CE 3533 REINFORCED CONCRETE DESIGN 3 CR

Material properties. Analysis, design and serviceability of reinforced concrete flexural members and columns. Design and development of reinforcement. Codes and specifications. Prerequisite: CE 3503; Corequisite: CE 3203

## CHEMISTRY

## CH 104 GENERAL CHEMISTRY I 4 CR

Fundamentals of chemistry with emphasis on atomic structure, stoichiometry, thermochemistry, properties of solution, properties of matter. The laboratory is quantitative in nature. Prerequisite: MA 113

## CH 144 CHEMISTRY - IDEAS AND APPLICATIONS 4 CR

An integrated view of organic and biological chemistry for non-science majors, emphasizing the importance of chemistry to daily living and chemical principles related to everyday experiences. Simulated chemical problems in the laboratory. This course cannot be substituted for CH 104 or CH 114 for either science or engineering majors.

## COMMUNICATION

## COM 101 FRESHMAN MEDIA PRACTICUM 1 CR

Individual participation in work at WEAX, the Triangle, or the Modulus, involving at least 30 hours of work during the semester. Prerequisite: Communication major or minor

## COM 123 INTRODUCTION TO ELECTRONIC MEDIA 3 CR

This course addresses the development and use of radio, television and new electronic/digital media in American society. It also explores the technical basis of inventions as well as pioneers who fueled growth and direction of broadcasting, cable and emerging electronic media systems throughout the U.S. leading to a myriad of programming choices and employment opportunities.

Role of public relations as a communication device within organizations including theory, identification of audiences, sophisticated techniques, planning and execution of public relations programs and evaluation of effects. The course introduces students to various communications tools with special emphasis given to methods that practitioners use to promote their products and organizations, including the development of new technologies that are rapidly replacing conventional mass media.

## COM 163 INTERPERSONAL COMMUNICATION 3 CR

Communication concepts and principles are pragmatically applied to interpersonal communication in work, college, dating, family, and social settings. Communication exercises, role plays, and case studies enable students to analyze communication dynamics and improve communication skills employing language, nonverbal communication, listening, perception of self and others, relationship development, and assertiveness. Extensive training in conflict management skills and analysis.

## COM 183 WRITING FOR THE MEDIA 3 CR

Provides a brief introduction to the principles, practices, and professional requirements of the journalism profession, but the focus is on discussion and application of reporting and writing techniques for print and electronic media. Work on The Triangle, The Modulus, and/or WEAX is required. Prerequisite: ENG 113 or 133

## COM 203 MEDIA AND COMMUNICATION 3 CR

Provides an introductory historical and expository survey of key mass media and popular art forms (including books, newspapers, magazines, radio, film, television, photography, music, advertising, and the Internet). Emphasizes, through exercises in becoming "media literate," the persuasive, often insidious, power of society's "consuming images," both visual and aural. Prerequisite: ENG 113 or ENG 133

## COM 213 BUSINESS COMMUNICATION 3 CR

Emphasis on effective research, writing, and document design in project management, including proposals, periodic and progress reports, formal completion reports, and correspondence. Also considers communication in meetings, the employment process, and presentation using PowerPoint. Prerequisite: ENG 113 or 133

## COM 233 INTERCULTURAL COMMUNICATION 3 CR

Considers interrelationships between communication and culture, the diversity between and within cultures, and both the challenges and the richness of communication posed by such diversity, including within U.S. culture. Topics include cultural patterns, worldview and perception, cultural identity, verbal and nonverbal communication, listening, family and relationships, and business.

## COM 253 SPORTS MEDIA AND PROMOTION 3 CR

Examines the various publicity, promotion and public relations responsibilities, duties and challenges aspiring professionals seeking careers in college and professional sports promotion and information will face. The course also includes development of aspects involved in the staging of a major sports-oriented community event. Prerequisite: COM 153 or sophomore standing

## COM 263 THEORIES AND PRACTICES IN COMMUNICATION 3 CR

An introduction to the disciplines and professions of communication. Considers quantitative, qualitative, and humanistic research and theories for understanding language, nonverbal communication, listening, persuasion/rhetoric, and communication context. Indicates how communication knowledge, research techniques, and skills are employed in various professions and considers professional preparation strategies such as communication portfolio development.

## COM 283 SPORTS WRITING 3 CR

Techniques, instruction and practice in news gathering, evaluation, reporting, writing and editing local, regional and national sports news. Topics will include research, style, interviewing skills, how newsroom decisions are made for sports stories and features. Each student will be required to submit articles to the Triangle and other local media for possible publication. Prerequisite: ENG 113

## COM 301 MEDIA PRACTICUM 1 CR

Practical media experience through work at WEAX, the Triangle, or the Modulus. Requires a minimum 30 hours of work for the semester and written mid-semester and final reports. May be repeated, but for no more than a total of three credit hours. Any alternate supervised media experience requires department chair approval. Prerequisite: Communication major or minor

## COM 323 THE BUSINESS OF ELECTRONIC MEDIA 3 CR

This course examines how electronic media organizations throughout the U.S. are dealing with today's competitive pressures, new technologies, and financial strains. Discuss how radio and television programming...practices that once galvanized families during respective golden ages of radio/TV...to the explosion of electronic media choices that are currently available to audiences and advertisers.

## COM 353 PUBLIC RELATIONS WRITING AND PRODUCTION 3 CR

Application of persuasive writing and communication principles and of document and visual design principles to public relations writing and production formats, such as backgrounders, news releases, media advisories, newsletters, brochures, direct mail, op-ed pieces, media kits, web pages, persuasive speeches, PSAs, and audio (ANR) and video (VNR) news releases. Assignments include developing potential client content for WEAX, the Triangle, and/or the Modulus, as well as use of the digital video editing lab to produce electronic PR media. Prerequisites: COM 213 OR ENG 133

## COM 363 PERSUASION AND ARGUMENTATION 3 CR

Knowledge of concepts and principles of persuasion, rhetoric, and argumentation is applied through debate and other exercises designed to improve skill in reasoning, argumentation, persuasion, planning, and rational decision-making. Students develop skill in analyzing and planning worthy and effective oral, written, and mediated persuasive communication. Prerequisite: SP 203

## COM 373 TOPICS IN COMMUNICATION 3 CR

Detailed survey of one of the major areas within the discipline of communication. The course changes each time it is offered, with the specific topic announced in the class schedule.

## COM 400X ELECTIVE INTERNSHIP VARIES (1-3 HRS.)

Elective internship with variable credit of from one to three hours, with a minimum of 40 hours of work per credit hour. May be repeated for credit, but the total credit hours of elective and/or capstone internship may not exceed six
hours total. Prerequisites: COM major or minor, 2.5 G.P.A

## COM 4013 SENIOR CAPSTONE INTERNSHIP IN COMMUNICATION (3 HRS.)

An internship including capstone requirements, such as submission of a proposal and of written and oral final reports, and requiring a minimum of 90 hours of work. Prerequisites: Must not have taken more than three credits of COM 400X, senior Communication major, 2.5 G.P.A.

## COM 410X INDEPENDENT STUDIES IN COMMUNICATION VARIED ( 1-4 HRS.)

An individualized reading and research project in the communication discipline. Prerequisite: Permission of the Dean for the School of Professional Studies

## COM 413 CORPORATE AND ORGANIZATIONAL COMMUNICATION 3 CR

Principles and skills for effective communication within task-oriented teams, nonprofit organizations, and corporations. Considers communication techniques to improve meetings, problem-solving, decision-making, and communication climate, while fostering cohesiveness and productivity. Also considers the role of communication consultants and trainers and of internal media such as newsletters, brochures, and electronic communication. Team projects apply techniques and refine communication skills essential for internal contexts. Teams conduct a client-based communication audit or ethnography of an organization or corporate office. Participation in development of content for the Triangle, the Modulus, and/or WEAX is also required. Prerequisite: COM 213 or ENG 133

Experience in assuming substantial student management responsibilities at WEAX, The Triangle, or The Modulus.
Prerequisite: Communication major or minor, and permission of both the Dean and the appropriate campus media Operations Manager or Advisor

## COM 4281 SENIOR COMMUNICATION PROJECT PROPOSAL 1 CR

Application of communication principles and skills by planning and developing a formal proposal for a capstone communication campaign or project. Prerequisite: Senior Communication major

## COM 4292 SENIOR COMMUNICATION PROJECT 2 CR

Application of communication principles and skills by implementing and evaluating a capstone communication campaign or project. Prerequisites: Must have taken COM 4281

## COM 453 PUBLIC RELATIONS PLANNING AND CAMPAIGNS 3 CR

Knowledge and skills needed in the public relations planning, decision-making, and problem-solving process of research, objectives, programming, and evaluation. Case studies and problems apply planning and execution of PR campaigns and relations with a variety of publics: media, employees, members, communities, government and the public, investors, consumers, international, and special groups. Includes crisis and emergency PR and PR aspects of integrated marketing communications. Individuals develop oral and written client-based campaign proposals to solve problems or to utilize opportunities, while teams develop and execute a short term PR campaign for a campus or community client. Prerequisites: COM 213 or ENG 133

## COMPUTER SCIENCE

## CS 1113 OBJECT-ORIENTED JAVA PROGRAMMING 3 CR

An introduction to programming. We begin with a history of computing, and then keep an eye on software-engineering issues including design/test, tools, and risks as we introduce: objects and classes; variables, types and assignment; message passing; inheritance; control structures; the concept of, and properties of, algorithms, including recursion; arrays and strings; collections and iteration; APIs; and object-oriented design. Co requisite: MA 103 or higher

## CS 1123 C++ AND OBJECT-ORIENTED DESIGN 3 CR

This course introduces the programming language C++ with emphasis placed on object-oriented design. Students should be able to: Use pointers and arrays; use header files; overload operators; use functions of the standard library; determine a plan for testing a piece of software; organize a program to determine classes and objects; design a graphical user interface. Pre-requisite: CS 1113

## CS 1303 INTRODUCTION TO THE WORLD WIDE WEB 3 CR

Introduction to computer science through the World Wide Web, focusing on the techniques of web-page creation.

## CS 2103 ALGORITHM DESIGN AND ANALYSIS 3 CR

The theory of programming, reinforced with practical activities, such as animations and demonstrations of the time requirements of different algorithms. We investigate proof techniques, time-space analysis of algorithms, classic strategies like greedy search and branch-and-bound, trees and graphs, automata, and applications. Before enrolling in this course, Java programming is required, but further experience in programming is prudent. Prerequisites: CS 1113

## CS 2213 ARCHITECTURE AND OPERATING SYSTEMS 3 CR

The course reviews digital logic, and investigates the machine representations of data, assembly-level machine organization, memory architecture, and functional control including pipelines. Other topics include the functions of operating systems, and examines processes, interrupts, and kernel modes; concurrency, and scheduling; and memory management. Prerequisite: CS 1123

## CS 2503 SOFTWARE ENGINEERING \& USER INTERFACES 3 CR

This course introduces software engineering from requirements definitions and documents, through system modeling, specification, and design, to verification and validation. It examines project management, software cost estimation, software maintenance,
configuration management, documentation, and software quality assurance. This course also examines human-centered development and evaluation and human performance models. It involves students in graphical user interface design and implementation. The course introduces groupware, on-line communities and intelligent agents. Prerequisite: CS 1123

## CS 2613 ARTIFICIAL INTELLIGENCE AND INFORMATION 3 CR

This course introduces the basic terms and issues of artificial intelligence. It describes knowledge representation and search methods, and learning systems like genetic algorithms and neural networks. The course describes information models and systems, database systems, data modeling, and both relational databases and query languages. Prerequisite: CS 1123

## CS 3223 NETWORK ARCHITECTURE 3 CR

Topics include distributed algorithms Interfacing and communication; multiprocessing architectures; LAN, WAN, and ISO/OSI; concurrency; scheduling; real-time issues; fault-tolerance; system performance measurement; scripting. Prerequisite: CS 2213

## CS 3303 NET-CENTRIC COMPUTING 3 CR

Communication and networking: the ISO 7-layer model; client/servers on the web; building web applications; network management: security, firewalls, quality-of-service; compression and decompression; multimedia technologies and capacity issues; wireless and mobile computing protocols, LANs, and performance, and extending client/server ideas to mobile computing. Prerequisite: CS 3223

## CS 4013 COMPUTER GRAPHICS 3 CR

This course includes both two and three dimensional computer graphics. Topics include windows and view-ports; geometric transformations, hidden surfaces, and file formats. It introduces standard libraries such as VCL. Prerequisite: ECE 263

## CS 4023 COMPILER CONSTRUCTION 3 CR

This course introduces compiler design for procedural languages. Topics include formal grammar, lexical, syntax, and semantic analysis, parsing, code generation and optimization, and compiler writing tools. Prerequisite CS 2213

## CS 4033 SPECIAL TOPICS 3 CR

Addresses advanced topics that vary by year. Prerequisite: consent of instructor

## CS 4903 CAPSTONE PROJECT 3 CR

A team project that requires interaction with users and formal reporting. A student who intends to pursue graduate study and who can demonstrate team work from other experience may be assigned a solo research project. Prerequisite: CS 2503

## EARTH SCIENCE

## EAS 203 OCEANOGRAPHY 3 CR

A description of the oceans and their relation to humans. The principles of physical, chemical, geological, and biological oceanography are used to explain the ocean environment. Society's effect on the oceans and problems and potentials of utilizing the natural resources of the sea included. Prerequisites: A lab science and MA 113 (Same as BIO 203 and GEO 203)

## EAS 213 PHYSICAL GEOGRAPHY 3 CR

An analysis of the spatial and functional relationships among landforms, climates, soils, water, and the living world. This course also addresses the connections between environmental processes and human activity, such as human impact on the environment. (Same as GEO 213)

## EAS 253 WEATHER \& CLIMATE 3 CR

Elementary description of the atmosphere: its motion systems, thermal characteristics, clouds and precipitation, weather map interpretation and analysis; climates of the United States. The course conveys meteorological concepts in a visual, practical, and non-mathematical manner.

## EAS 273 GEOLOGY 3 CR

An introduction to the field of geology. Study of minerals and rocks and their formation, within the context of the earth's geologic history. Emphasis on soils, running water, and groundwater. Plate tectonics, glaciers, volcanoes, erosion, and weathering are also covered. Non-lab science only. (Same as GLY 273)

## ELECTRICAL AND COMPUTER ENGINEERING ECE 261 DIGITAL SYSTEMS LABORATORY 1 CR

The lab provides a comprehensive hands-on opportunity to implement digital design concepts. Logic gates, logic tools, Hardware Description Language(HDL) and Field Programmable Gate Array (FPGA) design boards are extensively introduced to provide different variations of digital design. Students will be able to: Work in a team environment; solve technical problems; Understand switchbounce problems and design a de-bounced switch; Design adders, comparators, multiplexers, tri-state buffers and decoders using AND/OR/NOT/NAND/ NOR logic gates; Design memory cells, BCD 7-segment decoders, flip-flops and counters using logic gates and HDL; Implement the design in an FPGA board. Co requisite: ECE 263

## ECE 263 DIGITAL SYSTEMS 3 CR

This course covers and explores the introductory concepts of digital systems using combinational and sequential logic circuits. Digital design automation tools and Hardware Description Language (HDL) are also introduced. Students will be able to demonstrate that they: Understand number systems and Boolean algebra; Understand and can design combinational logic circuits including multiplexers, comparators, decoders, and adders; Understand and can design sequential logic circuits including latches, flip-flops and counters; Can design combinational and sequential circuits using HDL and can perform timing analysis; Understand the memory hierarchy, ROMs, RAMs and FLASH memories; Understand Programmable Logic Devices (PLDs), CPLDs and FPGAs. Co requisite: ECE 261

## ECE 271 MICROCONTROLLERS LAB 1 CR

This course teaches students to implement and test inexpensive hardware software systems that offer a user interface, a digital signal generator, a sampled feedback controller, and subsystem interfacing. You will: test a feedback system using experiments you design, and determine if your project goals are met; design and implement a working feedback controller for a real physical system; team -up on most labs and on one formal report; solve the problem you pose yourself in the feedback project; report findings in formal written documents; use lab bench tools to develop and debug code.

## Prerequisite: ECE 261; Co requisite: ECE 273

## ECE 273 MICROCONTROLLERS 3 CR

This course teaches students to design inexpensive hardware-software systems that offer a user interface, a digital signal generator, a sampled feedback controller, and subsystem interfacing. You will analyze a microcontroller system for timing; solve problems written in prose by showing a hardware/software system that addresses the problem; empathize with stakeholders of a medical device; teach yourself to use an unfamiliar on-chip peripheral from the manufacturer's data sheet; address power consumption/battery life; use a compiler/assembler/ simulator to develop correctly working code; use the UML to aid design work; respect the IEEE code of ethics. Prerequisite: ECE 263 and CS 1113 or equivalent; Co requisite: ECE 271

## ECE 371 EMBEDDED SYSTEMS LABORATORY 1 CR

In support of 413 , this lab puts students in pairs of triples to explore isolated subsystems from the course project in the usual lab format, and then provides structured time to achieve and demonstrate progress in the project. Students will work in small teams; will show that they can use the tools and techniques of modern embedded systems to implement their designs; will assume responsibility for designing the test or experiments needed to verify their work; and will demonstrate communication skills in formal reports and demonstrations. Co requisite: ECE 373

## ECE 373 EMBEDDED SYSTEMS 3 CR

Building on 273 (Microcontrollers), this focuses focuses on real-time multitasking and RTOS and includes a design project to explore these ideas, and the course also looks at enabling techniques such as mixed C and assembly, control of linking, external
memory, self-programming, and fail-safety. Students will be able to explain and apply real-time multitasking concepts; design and implement an embedded system; design recovery from exceptional conditions; incorporate into their work complex peripherals like PWM-capable timers. Prerequisite: ECE 273; Co requisite: ECE 371

## ECE 393 SOFTWARE ANALYSIS AND DESIGN 3 CR

Teaches the code development process to students who can use an object-oriented computer language. Students will: identify activities of software project engineering; write a formal requirements document; perform object-oriented analysis of client requirements; use UML class and sequence diagrams to support object-oriented design; apply some software design patterns; implement your designed software in a team supported by a version-control tool; use a professional-caliber GUI library to advantage; and follow coding standards. Prerequisite: CS 1123

## ECONOMICS

## ECO 213 MICROECONOMICS 3 CR

Introduction to the theory of demand and supply and price determination in market economies. The study of individual consumers and producers, different market structures and the distribution of income.

## ECO 223 MACROECONOMICS 3 CR

Introduction to the theory of national income determination for the United States and other global economic systems. The study of fiscal and monetary policy tools and the government's role in promoting stability and growth, and the causes of unemployment, inflation, and trade deficits.

## ECO 243 ECONOMICS OF SOCIAL ISSUES 3 CR

An economic analysis of social issues, such as the problems of pollution, poverty, crime, and the use of drugs. A study of the economic consequences of various social and economic policies, population pressures and related energy and pollution problems. Prerequisite: ECO 213 (Same as SOC 243)

## ECO 303 QUANTITATIVE ANALYSIS IN BUSINESS 3 CR

This course builds on designing operations and applies quantitative techniques to common business problems, preparing the student to make data-driven decisions. Topics include decision theory, Bayesian analysis, forecasting, linear programming, dynamic programming, game theory, transportation models, assignment and scheduling modeling, simulations, and queuing theory. Prerequisites: MA 253, MGT 353 (Same as BA 303)

## ECO 323 MONEY AND BANKING 3 CR

This course is a study of the principles of monetary economics. An analysis of the structure and operation of financial institutions and the Federal Reserve System is included. The function of monetary policy within the framework of macroeconomic theory is examined. Prerequisite: ECO 223 (Same as FIN 323)

## ECO 333 PUBLIC FINANCE 3 CR

This course involves an investigation of the role of the public sector in economic development. Fiscal policy and the practice of public finance are examined. Topics cover cost functions for public goods, externalities, and fiscal federalism. Prerequisite: ECO 223 (Same as FIN 333)

## ECO 343 ECONOMIC GEOGRAPHY 3 CR

A spiritual approach to economics, the course considers historical, present and future economic activities, developments, and trends, in a global context, with the goal of answering the two basic questions of geography: "where?" and "why there?". Prerequisite: ECO 223 (Same as GEO 343)

## ECO 363 COMPARATIVE ECONOMIC SYSTEMS 3 CR

A comparison of the capitalist, socialist, communist and mixed economies, theory, history, and application of the system in selected countries. Prerequisite: ECO 223

## ECO 383 INTERNATIONAL ECONOMICS 3 CR

Introduction to the fundamental theories of international specialization and exchange, and international payments; the analysis of processes and organizations for maintaining equilibrium of international economic relationships. Prerequisite: ECO 223

## ECO 393 ECONOMIC HISTORY OF THE UNITED STATES 3 CR

A survey of major economic developments in American history. Stresses the changed conditions and values in moving from an agricultural to an industrial society. Prerequisites: HIS 103, HIS 113 (Same as HIS 393)

## ECO 453 BUSINESS AND PUBLIC POLICY 3 CR

This course includes an analysis of the legal, political and economic framework that has shaped public policy toward business in the United States. It will include the methods as to how public policy is created and its implications for management decision making. The issues that this course will be concerned with are: how public policy is related to societal, community, employee, consumer, and environmental concerns and their implication for business. (same as BA 403) Prerequisites: MGT 363, ECO 223, LAW 203, MK 303, or permission of the instructor

## ECO 400X INDEPENDENT STUDIES IN ECONOMICS VARIES (1-4 HRS.)

Credit earned through directed reading, independent study, research or supervised field work. Maximum 4 hours credit. Prerequisite: Permission of Department Chair

## ENGINEERING GRAPHICS

## EGR 143 ENGINEERING GRAPHICS 3 CR

Graphical communication for engineers using sketching and computer -aided drafting. The fundamentals of orthographic projection, isometric projection and descriptive geometry are taught. An introduction to three dimensional models using solid modeling computer software is also covered. Emphasis is placed on developing the skills needed for mechanical engineering design.

## EGR 153 ENGINEERING GRAPHICS FOR CE 3 CR

Graphical communication by means of sketching and computer-aided drafting. Fundamentals of orthographic projection and descriptive geometry. This course stresses applications of graphic communications, both manually and through the use of CAD systems.

## EGR 453 ADVANCED PARAMETRIC DESIGN 3 CR

An introduction to the high end Unigraphics NX design software used by many major industry segments including a review of the advanced capabilities of the software. Prerequisite: ETD 263

## EMERGENCY MANAGEMENT

## EM 103 INTRODUCTION TO EMERGENCY MANAGEMENT 3 CR

This course examines the role of emergency management in today's society. This course will examine the theories, principles and concepts of managing emergencies that impact our communities. The course will address mitigation, preparedness, response and recovery, as well as roles of federal, state and local (public and private) agencies. Analysis and discussion will cover past and present hazards and approaches, and legal issues within the discipline

## EM 113 INTRODUCTION TO HAZARD MITIGATION AND PLANNING 3 CR

This course will examine hazards and hazard mitigation planning. The course will examine causes of and resulting behaviors of hazards and the potential for federal, state and local agencies to mitigate the potential threats presented by hazards. The course will also look at coordination of planning responsibilities of emergency managers as they relate to emergency preparedness and the specialty areas that need to be coordinated.

## EM 223 RISK ASSESSMENT \& VULNERABILITY 3 CR

An adequate hazard, risk and vulnerability (HRV) analysis is the cornerstone of successful disaster management: communities need to be able to identify potential hazards, to determine those hazards most likely to occur, to evaluate vulnerabilities, and to develop mitigative programs in order to reduce the likelihood and consequences of disasters. Developing an effective implementation of the disaster management plan across disciplinary boundaries will be discussed.

## EM 253 DISASTER RELIEF \& RECOVERY 3 CR

The purpose of this course is to address relief and recovery from disasters that occur. The majority of effort will focus on natural disasters, but planned (e.g., terrorism) and unplanned (e.g., oil tanker spills) will be covered as well. Policies, programs and procedures for managing the relief effort and methods of providing the best return to normalcy will be discussed and assessed. Also covered will be the concept of minimizing the occurrences and damages of recurring future events.

## EM 303 NATURAL AND MAN-MADE DISASTERS 3 CR

This course will look at natural and man-made disasters across history. An emphasis will be placed on the capabilities and capacities necessary to respond to these disasters. During the course students will explore the evolution of government (federal, state, local \& tribal) response through history, with focus on current response trends. Students will explore the roles and responsibilities of public and private entities in response efforts as well as the costs of the roles and responsibilities.

## EM 313 HAZARDOUS MATERIALS OPERATIONS 3 CR

This course will cover the dangers posed by hazardous materials to the operations personnel; to the responders; and to the community. Best practices for storage, transportation and use of hazardous materials are covered. Categories and identification of hazardous materials, as well as state and federal laws regulating hazardous materials will be learned.

## EM 323 HAZARDOUS MATERIALS AND WEAPONS OF MASS DESTRUCTION 3 CR

The course will explore the use of chemical, biological, radiological, nuclear and explosive (CBRNE) materials as weapons of mass destruction. Students will take a more in depth look at hazardous materials, particularly those that might be used as a weapon. The historical use of CBRNE materials against humanity will be explored. The coordination between law enforcement, fire, health departments, and hazardous materials teams will be addressed during this course. Capabilities and capacities that might be necessary to respond to an incident involving a hazardous material or CBRNE as a weapon of mass destruction will be discussed. Prerequisite: EM 313

## EM 333 WORLD TERRORISM 3 CR

This course will examine terrorism around the world and the groups often associated with terrorism. The "lone wolf" as a terrorist will also be explored. Policies and procedures used by countries around the world to prevent and respond to terrorism will be examined. The relative success of these policies and procedures will be evaluated and their potential for implementation in the United States. The course will take up the focus on terrorism in the United States and the consequences this has had on emergency management and the all-hazard approach.

## EM 343 INCIDENT MANAGEMENT 3 CR

This course examines the National Incident Management System (NIMS). It explores the five major components of NIMS, preparedness, communications and information management, resource management, command and management and finally ongoing management and maintenance. In particular the course will address command and management and the Incident Command System (ICS). This course will explore both scene management and the interface with multi-agency coordinating groups. The course also addresses management of the multi-agency coordinating groups. The course will explore the difference between disaster management and daily incident management.

## EM 353 HAZARDOUS WEATHER/COMMUNITY RISK 3 CR

This course is meant to provide an overview of how weather, climate and natural climatic and geophysical events can create natural disasters for our communities. Threats to human life and property are discussed as well as plans for minimizing the effect of such threats to society. Efforts to control such threats and how to best communicate the danger of the threat will be covered.

## EM 363 PUBLIC INFORMATION AND MEDIA 3 CR

This course explores the role of public information in emergency management. The course will address communication with the general public, chief elected officials and senior management, responders, other stakeholders and the media. The course will look at the roles and responsibilities of the various stakeholders in communicating with the various audiences. The role of media in communicating vital information during a disaster will be addressed as well as their impact on response and recovery efforts and public opinion. The role of social media will also be addressed.

## EM 383 PREPAREDNESS AND RESPONSE OPERATIONS 3 CR

The purpose of this course is to promote effective disaster response and management. The course will examine the nature of disasters and the roles of various agencies and actors in response to them. The course will also explore various preparedness strategies that enable more effective disaster response. Past responses will be examined as well as problem solving to propose solutions and improvements that could positively impact future responses. Each student will be expected to gain a solid comprehension of common post-disaster problems as well as effective means of overcoming those challenges and problems.

## EM 403 MANAGING CONSEQUENCES OF TERRORISM 3 CR

The history of violence and terrorism, domestic, internationally, and trans-nationally will be reviewed in this course. Hazard analysis, risk assessment and mitigation strategies will be covered. The structure and legal context of anti-terrorism programs, responding to terrorist disasters, and preparedness are all major parts of the course.

## EM 423 SOCIAL DIMENSIONS OF DISASTER 3 CR

This course will be an overview of empirical versus theoretical approaches; human behavior in disaster; myths and reality; group disaster behavior; community social systems and disaster; cultures, demographics, and disaster behavior distinctions; and modelbuilding in sociological disaster research.

## EM 453 EMERGENCY MANAGEMENT CAPSTONE 3 CR

This course is an overview of the emergency management core courses and will pull the theories, concepts and practices of EM together. Students in this course will work collaboratively to solve simulated disasters in a way that produces the most desirable outcomes to all citizens affected by the simulated disasters. Recovery operations will be stressed. Prerequisite: All required course work in the emergency management core.

## ENGLISH

## ENG 103 ENGLISH COMPOSITION I 3 CR

Intensive training in methods of exposition leading to the ability to write coherent, clear, and persuasive essays.

## ENG 113 ENGLISH COMPOSITION II 3 CR

Continuation of ENG 103. Concentration on research paper and library methods. Prerequisite: ENG 103 or ENG 104

## ENG 133 TECHNICAL COMMUNICATION 3 CR

Emphasizes clear writing and oral communication in professional situations for technical fields. Concentration on project-oriented instruction, which includes creating technical documents (email, reports, proposals, instructions, et.al.) and adapting them to specific audiences and tasks. Prerequisite: ENG 103 or ENG 104

## ENG 153 INTRODUCTION TO LITERATURE 3 CR

Introduces the student to literature of some complexity and sophistication, developing a critical vocabulary and skills in reading on an advanced level. Analysis of genre: short fiction, poetry, and drama.

ENG 204 BRITISH LITERATURE 4 CR
A survey of British literature to the present. Prerequisite: ENG 153

## ENG 214 AMERICAN LITERATURE 4 CR

A survey of American literature to the present. Prerequisite: ENG 153
ENG 233 MYTHOLOGY 3 CR
An introduction to world mythology, with emphasis on Greek and Roman legends. Prerequisite: ENG 153

## ENG 253 READINGS IN WORLD LITERATURE 3 CR

Readings in selected major works which have influenced thought and culture. Selections may be drawn from (but not limited to) such writers as Dante, Juvenal, Confucius, Montaigne, Rabelais, Cervantes, Moliere, Goethe, and Dostoyevsky. Prerequisite: ENG 153

## ENG 263 CONTEMPORARY THEMES IN LITERATURE 3 CR

A critical study of works of literature selected for their relevancy to current social, ethnic, minority, and ethical problems. Special emphasis placed upon minority writers. Prerequisite: ENG 153

## ENG 323 RESTORATION AND EIGHTEENTH CENTURY LITERATURE 3 CR

A study of literature from 1660-1798. Authors studied include Moliere and Restoration playwrights, Swift, Pope, Voltaire, Dr. Johnson, and others. Prerequisite: ENG 153

## ENG 333 STUDIES IN LITERATURE 3 CR

Study of selected authors and topics. May be repeated for credit so long as course content is not substantially duplicated. Prerequisite: ENG 153

ENG 363 THE ENGLISH LANGUAGE 3 CR
A systematic study of the development of the English language from its medieval beginnings; some consideration of contemporary dialectic and semantic differences; work with etymology. Prerequisite: ENG 113

## ENG 403 BRITISH AND AMERICAN NOVELS I 3 CR

A chronological study of the major thematic and structural developments in the novel from its beginnings to the 21 st century. Social commentary and satire on classes, monarchy, empire, war, education, religion, marriage, middle class morality. Prerequisite: ENG 153

## ENG 423 DRAMA 3 CR

Studies of selected playwrights, movements, trends, and developments in world drama from the beginnings to the present day. Prerequisite: ENG 153

ENG 433 SHAKESPEARE AND HIS TIMES 3 CR
The close reading of at least eight plays by Shakespeare. Discussion of his life and times, the sonnets, his themes, and the differences between texts and productions. Prerequisite: ENG 153

ENG 443 POETRY 3 CR
An investigation of the poetic process through the careful examination of selected poems and statements about poetry. Prerequisite: ENG 153

ENG 463 CREATIVE WRITING 3 CR
Directed experiments in the original composition of literary essays, plays, short stories, longer narratives, or poems. Prerequisites: ENG 113, ENG 153

ENG 400X DIRECTED STUDIES IN ENGLISH VARIES (1-3 HRS.)

For senior students of superior ability able to assume a larger share of the responsibility for designing and pursuing a reading research project which is academically respectable. Prerequisite: Permission of Department Chair

## ENG 401X CAPSTONE STUDY IN ENGLISH ( 1-4 HRS)

A capstone course for students who plan to enter law or graduate school and who are capable of writing a polished, academically significant research paper in the field of English. Prerequisite: Permission of Department Chair

## ENTREPRENEURSHIP

## ENT 303 ENTREPRENEURIAL LEADERSHIP 3 CR

This course examines leadership, influence, and power as it relates to entrepreneurship with a strong emphasis on entrepreneurial character traits and business ethics. Historical, literary, and contemporary examples of successful entrepreneurs provide a framework for examining the theories of leadership and power.

## ENT 313 BUSINESS CONCEPTS (FOR NON-BUSINESS MAJORS) 3 CR

A survey course designed to introduce non-business majors to business issues and practices. All major functions of business are included (management, marketing, law, finance, economics, operations, accounting, information technology) as well as issues facing the business person (ethics, globalization, motivation, etc.). Not open to students enrolled in the business programs.

## ENT 323 ENGINEERING CONCEPTS (FOR NON-ENGINEERING MAJORS) 3 CR

Fundamental engineering concepts are introduced, with an emphasis on developing foundations for lifelong learning of technological issues. Broad-based technologies and the importance of technical communication are emphasized. Current and future technologies are discussed by visiting practitioners. Not open to students enrolled in the engineering and technology programs.

## ENT 333 ENTREPRENEURSHIP SEMINAR SERIES 3 CR

Through case studies, simulations, guest lectures, and reading, students become aware of legal business structures, legal issues related to emerging ventures (patents, copyrights, trademarks, licensing, franchising, employment law, etc.), venture financing, and venture marketing. Prerequisite: ENT 313 or 323

## ENT 413 CREATIVITY-PRODUCT/SERVICE DEVELOPMENT 3 CR

This course explores the nature of creativity from four interacting viewpoints: person, process, product, and environment. Its goal is to develop students' awareness of their creative potential. Activities include group work, discussion, and the development of an idea or invention. Prerequisite: BA 123 or ENT 313

## ENT 423 ENTREPRENEURSHIP \& VENTURE PLANNING 3 CR

This course focuses on entrepreneurship and small business management. Through case studies, simulations, guest lectures, reading and business plan development, students become aware of the unique challenges facing small business owners and entrepreneurs. Students become familiar with the resources available to small business owners by developing and presenting a business start-up plan. Prerequisite: ENT 413

## ENT 463 INTERNSHIP (3 CR)

Students will be assigned to a real world new venture, small business, or corporate new product development department to gain experience in the art and science of entrepreneurial/intrapreneurial thinking, problem solving, and decision making. The term of the internship will vary depending on the nature of the position and responsibilities. Ideally, students will be assigned the internship during the summer between their junior and senior year. Prerequisite: Junior Standing

## ENGINEERING SCIENCE

ES 213 STATICS 3 CR

The first course in engineering mechanics. Subjects cover includes; force and moment vectors, equivalent systems, trusses, frames, and machines, equilibrium of particles and rigid bodies, static friction, centroids and moments of inertia.
Corequisite: PH 224, MA 164

## ES 223 DYNAMICS 3 CR

Kinematics of absolute and relative motion of particles and rigid bodies. Subjects include; kinetics of particles and particle systems. Principles of work and energy, impulse and momentum, and impact. Kinetics of rigid bodies in plane motion.
Prerequisite: Grade of C or better in ES 213, MA 164 and PH 224

## ES 233 ENGINEERING MATERIALS 3 CR

A study of the structure and properties of materials. Materials covered include metals, ceramics, polymers, and composites. Mechanical properties are emphasized, electrical properties, thermal properties, and environmental interactions are addressed. Structural features at the atomistic level, the crystal structure level, and the microstructure level of single and polyphase materials are studied in terms of their effects on material properties. Prerequisite: CH 104; Corequisite: PH 224

## ES 243 SOLID MECHANICS 3 CR

Concepts of stress and strain in engineering materials. Subjects include; Hooke's law and Poisson's relationship, analysis of axial, shear, flexural, and torsional stresses, combined stress, shear and moment distribution in beams, and deformation of structural members. Prerequisite: Grade of C or better in ES 213

## ES 253 ELECTRICAL SCIENCE 3 CR

Basic voltage-current-energy relationships in circuit elements. Fundamental circuit laws. Resistive networks and network theorems. Sinusoidal steadystate response and phasors. Power and energy in AC circuits. Prerequisites: MA 134, PH 224

## ES 313 THERMODYNAMICS 3 CR

Introduction to properties of substances and ideal gases by use of tables. Introduction to thermodynamic concepts of systems, control volumes, heat, work and internal energy. Formulation of the First and Second Laws of Thermodynamics with engineering applications, Vapor Water Systems Ranking cycle, First and Second Law analysis of power plant cycles.
Prerequisites: Grade of "C" or better in MA 164, PH 224, and ES 213

## ES 323 FLUID MECHANICS 3 CR

Fundamental properties of fluids. Fluid statics. Kinematics of fluid motion. Conservation of mass, energy and momentum as applied to compressible and incompressible fluids. Similitude. Introduction to laminar and turbulent boundary layers.
Prerequisite: ES 213; Co-requisite: MA 213

## ES 382 ENGINEERING ECONOMICS 2 CR

An introduction to the economics component of design and problem solving. Application of economic concepts from present and future value of money, depreciation, and taxes to problems involving replacement studies and selection between alternative uses of capital. Methods include equivalent worth, rate of return, and incremental techniques.

## ENGINEERING TECHNOLOGY

## ETD 103 BASIC TECHNICAL DRAWING 3 CR

A course in the fundamentals of drafting. Use of instruments and materials, lettering and techniques of penciling. Primary emphasis is on shape and size description of three-dimensional objects. Preparation of drawings for various reproduction processes. Application of drawing geometry and study of sections and conventional practices.

## ETD 113 GEOMETRIC DIMENSIONING AND TOLERANCING 3 CR

Introduction to geometric dimensioning and tolerancing including advanced applications of dimensioning principles, tolerances and precision dimensioning. Introduction to part measurement techniques as it relates to geometric dimensioning and tolerancing.
Prerequisite: ETD 103

## ETD 123 MANUFACTURING MATERIALS AND PROCESSES 3 CR

Physical properties of ferrous and nonferrous materials, such as wood products, plastics, and rubber. Heat treating and testing of metals. Industrial practice in the working of metals and plastics. Fundamentals of metallurgy, machining, casting, welding and forming.

## ETD 143 DESCRIPTIVE GEOMETRY 3 CR

Introduction to the principles of multi-view drawings and the solutions of space problems. Methods for solution of point, line and plane problems, and the angle between planes, parallelism and perpendicularity, revolution, intersection and development problems. Prerequisite: ETD 103

## ETD 163 ENVIRONMENTAL HEALTH AND SAFETY 3 CR

This introductory level course investigates safety philosophy and the principles of safety. The student will study occupational safety and industrial hazard control with a focus on the basic principles of accident prevention. The analysis of safety performance, cost and identification of accident potential is also studies. Emphasis is placed on concepts and techniques proven useful in reducing accidents and injuries. (Equivalent to HR 323)

## ETD 173 COMPUTER AIDED 3-D MODELING 3 CR

An introductory course which studies the concept of parametric modeling and its application in industry. In this course students will learn the fundamentals of 3D parametric modeling, detail drawing creation, and assembly modeling using industry standard parametric modeling software. Prerequisite: ETD 103 or EGR 143

## ETD 203 BASIC MECHANISMS 3 CR

Introduction to simple mechanisms and their kinematics. Study of linkages, cams, gearing, and belts.
Prerequisites: PH 154, MA 123

## ETD 233 ENGINEERING \& MANUFACUTURING SYSTEMS 3 CR

A study of engineering and manufacturing systems such as engineering documentation systems, design control and lean manufacturing technologies. Prerequisites: ETD 173

## ETD 243 STATICS AND STRENGTH OF MATERIALS 3 CR

Principles of statics, analysis of structures, graphic methods, and friction as applied to the inclined plane and wedge. Simple direct and combined stresses, determination of structural sizes as function of unit stress, and physical properties of the materials. Prerequisites: MA 123

## ETD 253 DIMENSIONAL METROLOGY 3 CR

Emphasis on methods and principles of measuring basic physical qualities for inspection and quality control. Laboratory work in measuring physical variables such as size, flatness, circularity, and total run-out. An introduction and project work in related areas, such as reverse engineering, functional gauge design, and statistical process control.
Prerequisites: ETD 113, ETD 123, ETD 173

## ETD 263 DESIGN, ANALYSIS, AND PROTOTYPING 3 CR

The use of the CAD system as an engineering tool for the presentation of engineering problem solving. The set-up and maintenance of CAD systems. A study of the advanced techniques that are available on typical CAD systems and their applications in industrial systems. Prerequisite: ETD 233

## ETD 273 ELECTRICAL FUNDAMENTALS 3 CR

Electrical circuit principles. Basic circuit laws, motors, generators, controls, distribution systems, and electrical codes are presented. Theory of electricity and magnetism, electrical phenomena, and measurements. Circuits, power, AC phenomena, capacitance, and conduction are studied. Prerequisites: PH 154

## ETD 293 INTRODUCTION TO COMPUTER NUMERICAL CONTROL PRINCIPLES 3 CR

History of numerical control and comparison with conventional machining systems. Standard coding system and control terminology. Prerequisites: ETD 123, ETD 173

## ETD 323 PRODUCT DESIGN AND DEVELOPMENT 3 CR

Introduction to product analysis, development and design. Conceptual design, design for manufacture, reverse engineering, concurrent engineering, designing for special needs, prototyping, and product safety. Integration of previous work into complete product design project. Prerequisite: ETD 233

## ETD 363 ELEMENTS OF MACHINES 3 CR

Design principles and calculations of machine elements. Consideration of economy, loads, stresses, deformations, and environment. Prerequisite: ETD 243, PH 154

## ETD 423 SENIOR DESIGN PROJECT 3 CR

Study of advanced design methods as used in engineering design. A study of the design process as practiced in the industrial setting. The procedures used from the start of a design until its final production including presentations and design reports. Prerequisites: ETD 263, ETD 323

## ETD 433 COMPUTER NUMERICAL CONTROL PRINCIPLES 3 CR

History of numerical control and comparison with conventional machining systems. Standard coding system and control terminology. Prerequisites: ETD 123, ETD 263

## FINANCE

## FIN 303 MANAGERIAL FINANCE 3 CR

This course is a study of the principles of managerial finance including time value of money, capital budgeting, methods of financing, working capital management, financial statement analysis, and other financial topics. Prerequisites: AC 213, ECO 213, ECO 223, MA 253, or permission of the instructor

## FIN 313 CORPORATE FINANCE 3 CR

An analytical approach to financial management of a corporation. Areas covered include: long term financing, financial structure, cost of capital, dividend policy, mergers, reorganization, and international financial management. Prerequisite: FIN 303

FIN 323 MONEY AND BANKING 3 CR
This course is a study of the principles of monetary economics. An analysis of the structure and operation of financial institutions and the Federal Reserve System is included. The function of monetary policy within the framework of macroeconomic theory is examined. Prerequisite: ECO 223 (Same as ECO 323)

## FIN 333 PUBLIC FINANCE 3 CR

This course involves an investigation of the role of the public sector in economic development. Fiscal policy and the practice of public finance are examined. Topics cover cost functions for public goods, externalities, and fiscal federalism. Prerequisite: ECO 223 (Same as ECO 333)

FIN 343 INTERNATIONAL FINANCE 3 CR

This course involves a study of the topics essential to the understanding of international finance. Topics include foreign exchange markets and currency risk, international financial markets, international banking, trade financing, country risk analysis, accounting and taxation issues, capital budgeting, and international lending, and borrowing techniques. Prerequisite: FIN 303

## FIN 353 PERSONAL FINANCE 3 CR

An overview of financing decisions made by individual investors for personal financial needs. The course will cover pension investing, tax considerations, retirement planning, and various investment products available to investors. Prerequisite: MA 103

## FIN 363 VENTURE FINANCING 3 CR

This course examines the venture financing options available for new business startups; emphasizes creating and analyzing financial documents, approaching financial sources, assessing the financing alternatives, selling stock for growing companies, the capital structure decision and managing the financial condition of a new venture. Prerequisite: FIN 303

## FIN 403 INVESTMENTS 3 CR

An overview of the security markets, sources of investment information, and the classic process of analyzing and valuing securities is presented. Investment opportunities in a wide variety of financial and real assets are explored. The concept of portfolio theory in terms of risk and return is examined. Prerequisite: FIN 303

## FIN 493 TOPICS IN FINANCE 3 CR

Offered to examine specific or current business or special financial issues. Possible examples could include asset management, corporate financing, securities analysis and management of financial institutions. Prerequisite: FIN 303

## FIN 503 FINANCIAL ANALYSIS FOR DECISION MAKING 3 CR

This course reviews the economic and organizational context in which resource allocation decisions are made. Primary tools to be used include spreadsheet analysis, financial simulation, and case studies. Topics to be included are: the capital expenditure decision process, reviewing capital investment projects, capital expenditures, EVA, lease-versus-buy decisions and cash flow analysis. Prerequisite: Graduate standing or approval of instructor

## FILM

## FLM 203 FILM APPRECIATION 3 CR

Acquaints the student with the art of film criticism. Presents basic cinema vocabulary, information about film production, theory and history of film, and practice in analysis of individual films.

## GENERAL ENGINEERING

## GE 101 INTRODUCTION TO ENGINEERING 1 CR

This course is required for all freshman engineering students. Its purpose is to improve student success, to make the college experience more relevant to career goals, and to help students obtain as much assistance from the University as possible while working towards their engineering degrees. The course will cover community building, academic goals, effective learning methods, University orientation, and personal and professional development.

## GE 401 PROFESSIONAL PRACTICE 1 CR

This course covers the two broad areas of professional practice. The first consists of topics pertinent to career aspects of the profession: job search activities, graduate school information, lifelong learning, professional registration, and the role of professional societies. The second area concerns the social responsibilities of the practicing professional engineer: professional ethics, the role of engineering in public policy, the need for knowledge of current affairs, and consideration of the impact of technology upon society. Prerequisite: Senior standing in engineering

## GEOGRAPHY

## GEO 203 OCEANOGRAPHY 3 CR

A description of the oceans and their relation to humans. The principles of physical, chemical, geological, and biological oceanography are used to explain the ocean environment. Society's effect on the oceans and problems and potentials of utilizing the natural resources of the sea. Prerequisites: A laboratory science and MA 113 (Same as EAS 203 and BIO 203)

## GEO 213 PHYSICAL GEOGRAPHY 3 CR

An analysis of the spatial and functional relationships among landforms, climates, soils, water, and the living world. This course also addresses the connections between environmental processes and human activity, such as human impact on the environment. (Same as EAS 213)

## GEO 303 HUMAN GEOGRAPHY 3 CR

Topical studies to show how human beings have altered and adapted to their physical environments over time through technology, migration, and demographic changes. Focus is on cultural identity and landscape, cultural interaction, and conflict. Prerequisite: Junior standing or permission of instructor

## GEO 313 GEOGRAPHY OF NORTH AMERICA 3 CR

A regional approach to the United States and Canada. An in-depth look at economic, political, historical, and cultural developments in the content of the physical environment. Focus on the present and the future of each region, as well as how those futures are intertwined. Global context is also considered. Prerequisite: Junior standing or permission of instructor

## GEO 323 WORLD GEOGRAPHY 3 CR

A study of the major cultural regions of the world, with emphasis on human social development (economic, cultural, historical, political), in the context of a given physical environment. Focus is on the present and future of each region, as well as how those futures are intertwined. Prerequisite: GEO 303

## GEO 343 ECONOMIC GEOGRAPHY 3 CR

A spatial approach to economics, the course considers historical, present and future economic activities, developments, and trends, in a global context, with the goal of answering the two basic questions of geography: "where?" and "why there?" Prerequisite: ECO 223 (Same as ECO 343)

## GEO 353 POLITICAL GEOGRAPHY 3 CR

The politics of place. A review of the basic concepts and principles of geopolitics, designed to help students understand the connections between place and political decision-making. The course explores the applications of these concepts using past and present world events, as well as projecting possible futures. Prerequisite: GOV 113 (Same as GOV 353)

## GEO 400X INDEPENDENT STUDIES IN GEOGRAPHY VARIES(1-4 HRS.)

Credit earned through directed reading, independent study, research or supervised field work. Maximum four hours credit.
Prerequisite: Permission of Department Chair

## GEOLOGY

## GLY 271 GEOLOGY LABORATORY 1 CR

An introductory laboratory study of basic physical geology. The laboratory emphasizes skills needed for the identification of minerals and rocks, for the interpretation of land surface features based on topographic maps and for the understanding of folding, faulting, and rock relationships through the interpretation of geologic maps. Co requisite or Prerequisite: GLY 273
GLY 273 GEOLOGY 3 CR

An introduction to the field of geology. Study of minerals and rocks and their formation within the context of the earth's geologic history. Emphasis on soils, running water, and groundwater. Plate tectonics, glaciers, volcanoes, erosion, and weathering are also covered. (Same as EAS 273)

## GOVERNMENT

## GOV 113 INTRODUCTION TO GOVERNMENT 3 CR

An examination of the origins and operations of the national political machinery; the development, functions and philosophy of political parties; the problems and tasks of leading governmental agencies.

## GOV 313 COMPARATIVE GOVERNMENTS 3 CR

A comparison of the systems, philosophies and functions of the governments of England, France, the United States, Germany and the countries of the former Soviet Union. Prerequisite: GOV 113

## GOV 323 THE CONTEMPORARY WORLD 3 CR

An analysis of current global issues from a historical perspective with an emphasis on developing an awareness of cultural diversity and an understanding of the role of international governmental and nongovernmental organizations. Prerequisites: GOV 113 or HIS 113 (Same as HIS 323)

## GOV 333 STATE AND LOCAL GOVERNMENT 3 CR

The general relationship between the states and the federal government; organization, functions, and divisions of authority between the executive, legislative and judicial. The functions, powers, and forms of county and municipal governments. Prerequisite: GOV 113

## GOV 343 AMERICAN POLITICAL THOUGHT 3 CR

A survey and analysis of significant political ideas from colonial times to present. Some of the ideas discussed in the survey include the philosophies of liberalism, conservatism, and pragmatism, as well as the political thinking of such men as Alexander Hamilton, Thomas Jefferson, John C. Calhoun, Henry Thoreau, Herbert Spencer and Lester Ward. Prerequisite: GOV 113 (Same as HIS 343)

## GOV 353 POLITICAL GEOGRAPHY 3 CR

The politics of place. A review of the basic concepts and principles of geopolitics, designed to help students understand the connections between place and political decision-making. The course explores the applications of these concepts using past and present world events, as well as projecting possible futures. Prerequisite: GOV 113 (Same as GEO 353)

## GOV 363 UNITED STATES FOREIGN POLICY 3 CR

A history of United States involvement in world affairs from the War for Independence to the present; the close relationship between the foreign policy and domestic concerns is emphasized; an analysis of the policy-making bureaucracy. Prerequisites: HIS 103, HIS 113, or GOV 113 (Same as HIS 363)

## GOV 373 POLITICAL PSYCHOLOGY 3 CR

An examination of the role of group dynamics and personality variables in contemporary political issues, including leadership and power, political attitudes, current social movements, conflict resolution, coalition formation, cross-cultural comparison of political attitudes and other issues. Prerequisites: PSY 113 or GOV 113 (Same as PSY 373)

## GOV 403 AMERICAN CONSTITUTIONAL DEVELOPMENT 3 CR

A study of the historical and judicial developments of the Constitution of the United States by analyzing court decisions and the philosophies of the justices of the Supreme Court. Emphasis on the court's role in the development of national economic policy, with a focus on the court's position on civil rights and liberties, political freedom and social equality. Prerequisites: HIS 103, HIS 113, GOV 113 (Same as HIS 403)

## GOV 400X INDEPENDENT STUDIES IN GOVERNMENT VARIES (1-4 HRS.)

Credit earned through directed reading, independent study, research or supervised field work. Maximum 4 hours credit. Prerequisite: Permission of Department Chair

## GENERAL STUDIES

## GS 4003 SENIOR CAPSTONE PROJECT 3 CR

The capstone project will give students the opportunity to demonstrate the integration of the two to three academic programs they have chosen for the self-directed concentration. The project will include an oral and written presentation encapsulating the rationale for the programs selected and the nature of the relationship between them.

## HEALTHCARE MANAGEMENT

## HC 303 HISTORY OF AMERICAN HEALTHCARE 3 CR

This course is an introductory course in healthcare management. The course will present the history of healthcare systems in America from the late 1800's through the present day. Emphasis will be placed on an understanding of key historical forces which have shaped new millennium models of the American healthcare delivery system.

## HC 333 MANAGEMENT TECHNIQUES \& PRINCIPLES 3 CR

This course will offer a variety of industrial management techniques applicable to department-level projects within a healthcare facility. The course will incorporate projects and statistical analysis of current operations. Hospital ancillary support departments as well as direct patient care departments will be reviewed. Recommendations for improvement will be derived from the analysis of workflow data and other internal information sources. The course addresses the overall management of a healthcare facility and explores issues such as how to determine what is broken in the organization, prioritization of changes or improvements, long-term impact of current problems, and response strategies to internal and external forces. Prerequisite: MA 253

## HC 403 PROGRAM AND FACILITIES MANAGEMENT 3 CR

In this course, the student will study and analyze future program options related to healthcare facilities. Management of healthcare facilities will be studied. Analysis of current programs and facilities and the potential need for programs and/or facilities expansion will be covered. Strategic long-range and tactical short-range planning will be an integral part of this course and will cover both program and facilities planning topics. Prerequisite: MA 253

## HC 413 HEALTH CARE ACCOUNTING 3 CR

This course introduces the student to accounting specifically related to the health care industry. Audit procedures, insurance (including Medicare and Medicaid) reimbursement, fund accounting, government and grant accounting are also covered. This course uses computer applications. Prerequisite: AC 213

## HC 423 HEALTH CARE FINANCE 3 CR

An analytical approach to financial management of a corporation. Areas covered include: Operating and capital budgets, capital purchases, cost benefit analysis and break-even analysis, financial statement analysis and the financing of facilities. The course is considered the second course and continuation of Managerial Finance with a specialization in health care issues. Prerequisite: FIN 303, HC 413

## HC 443 HEALTHCARE DELIVERY SYSTEMS 3 CR

This course will evaluate and describe various financing mechanisms available within the healthcare industry. Issues related to insurance and managed care will be explored. The ongoing problem of healthcare availability and accessibility in the United States will be reviewed. The impact of economics, national health status statistics and public policy legislation affecting the U.S. healthcare system will be discussed. A research paper related to the current status of the healthcare delivery system of a foreign country will be required.

## HC 483 PROGRAM AND FACILITIES MANAGEMENT 3 CR

This course is the culmination of the Health Care Management core and serves as the capstone course. In this course, the student will study and analyze future program options related to healthcare facilities. Management of health care facilities will be studied. Analysis of current programs and facilities and the potential need for programs and/or facilities expansion will be covered. Strategic long-range and tactical short-range planning will be an integral part of this course and will cover both program and facilities planning topics. A comprehensive research project dealing with a health care related case study will be undertaken and presented by the student. The project will include written and oral presentations of the research findings. Prerequisites: All other courses in the Health Care Management core should be taken prior to this course.

## HISTORY

## HIS 103 AMERICAN HISTORY I 3 CR

Traces the major trends in the history of the United States from colonial times to the end of Reconstruction. Concentrates upon the diplomatic, political, economic, intellectual, and cultural achievements of the American nation, set within the larger framework of the European world.

## HIS 113 AMERICAN HISTORY II 3 CR

Increasing emphasis on the post Civil War industrial development of the United States and its subsequent role as a great world power to present.

## HIS 203 WORLD CIVILIZATION I 3 CR

A historical review of human civilization from prehistoric times through the Renaissance. The class focuses upon the political, economic, and cultural achievements of various civilizations of the world.

## HIS 213 WORLD CIVILIZATION II 3 CR

A survey of major civilizations of the world in the post-Renaissance period, including Asian, African, and Western European civilizations in the areas of politics, economics, and scientific, and cultural developments. Emphasis is placed on the increasing interdependence of world civilizations and people.

## HIS 251 ANCIENT GREECE FROM THE PERSIAN THROUGH PELOPONNESIAN WARS 1 CR

An examination of the culture of Athens and Sparta during the 5th century B.C., concentrating on the Persian and Peloponnesian wars and their lasting effects on Western Civilization. (Same as PHL 251)

## HIS 253 THE JAPANESE PEOPLE 3 CR

A humanistic approach to the study of the Japanese people. An emphasis on using a historical context to reveal domestic political, social, and economic associations, as well as important achievements in literature, religion, philosophy and art.

## HIS 323 THE CONTEMPORARY WORLD 3 CR

An analysis of current global issues from a historical perspective with an emphasis on developing an awareness of cultural diversity and an understanding of the role of international governmental and nongovernmental organizations. Prerequisite: GOV 113 or HIS 113 (Same as GOV 323)

## HIS 343 AMERICAN POLITICAL THOUGHT 3 CR

A survey and analysis of significant political ideas from colonial times to the present. Some of the ideas discussed in the survey include the philosophies of liberalism, conservatism, and pragmatism, as well as the political thinking of such men as Alexander Hamilton, Thomas Jefferson, John C. Calhoun, Henry Thoreau, Herbert Spencer, and Lester Ward. Prerequisite: GOV 113 (Same as GOV 343)

## HIS 363 UNITED STATES FOREIGN POLICY 3 CR

A history of the United States involvement in world affairs from the War of Independence to the present, the close relationship between the foreign policy and domestic concerns is emphasized; an analysis of the policymaking
bureaucracy. Prerequisites: HIS 103, HIS 113, or GOV 113 (Same as GOV 363)

## HIS 393 ECONOMIC HISTORY OF THE UNITED STATES 3 CR

A survey of major economic developments in American history. Stresses the changed conditions and values in moving from an agricultural to an industrial society. Prerequisites: HIS 103, HIS 113 (Same as ECO 393)

## HIS 403 AMERICAN CONSTITUTIONAL DEVELOPMENT 3 CR

A study of the historical and judicial developments of the Constitution of the United States by analyzing court decisions and the philosophies of the justices of the Supreme Court. Emphasis on the court's role in the development of national economic policy, with a focus on the court's position on civil rights and liberties, political freedom, and social equality. Prerequisites: HIS 103, HIS 113, GOV 113 (Same as GOV 403)

## HIS 423 THE UNITED STATES AS A WORLD POWER 3 CR

A study of social, economic, intellectual, and political developments within the United States from approximately 1939 to the present. Emphasis is placed on relating America's developments to its role in international affairs. Prerequisite: HIS 113

## HIS 433 THE AMERICAN REVOLUTION 3 CR

A history of the War of Independence and the formation of national government to 1787. Prerequisite: HIS 103

## HIS 443 READINGS IN AMERICAN HISTORY 3 CR

An independent study and research on selected topics in American History. Prerequisite: Junior standing or permission of instructor

## HIS 453 READINGS IN WORLD HISTORY 3 CR

An independent study and research on selected topics in World History. Prerequisite: Junior standing or permission of instructor

## HIS 400X INDEPENDENT STUDIES IN HISTORY VARIES (1-4 HRS.)

Credit earned through directed reading, independent study, research, or supervised field work. Maximum 4 hours credit. Prerequisite: Permission of Department Chair

## HOSPITALITY and TOURISM MANAGEMENT

## HOS 103 CURRENT TRENDS IN TOURISM 3 CR

The objective of this class is to look at the research, stats, and current trends as they relate to the Tourism Industry. Upon examination of the research, the class will discuss how the industry continues to adapt to meet the ever changing demands of the public.

## HOS 203 LODGING MANAGEMENT 3 CR

The objectives of this class are to examine the policies, techniques and trends in hotel administration from a front office perspective. Topics such as organization, ethics, procedures, and communication amongst the hotel staff and with the hotel guest will be examined.

## HOS 213 SOPHOMORE INTERNSHIP IN HOSPITALITY MANAGEMENT 3 HRS

This sophomore experience is the first of two internships required for a Hospitality Management major. This field related experience is under the direction of a field supervisor and University supervisor. The Internship must have the approval of the Department Chair.

## HOS 303 HOSPITALITY AND TOURISM MARKETING 3 CR

The objective of this class is to provide the student with an understanding of the techniques used to market the many facets of the hospitality and tourism industry. Packaging pricing, promoting, advertising and merchandising will all be explored as they relate to restaurant sales, hotel occupancy, and the travel and tourism industry. Prerequisite: Junior standing or permission of instructor

## HOS 313 CATERING 3 CR

The objective of this class is look at catering from a business perspective including pricing, production, promoting, packaging, and customer service. Prerequisite: Junior standing or permission of instructor

## HOS 322 MEETING AND EVENT PLANNING 2 CR

This class looks at meeting and event planning from an organizational and administration perspective. Customer service as it relates to meeting the needs of the client will be examined. The culminating projects of this class are the creation of a event planning resource notebook and the class project of putting on a "campus event". Prerequisite: Junior standing or permission of instructor

## HOS 402 BEVERAGE MANAGEMENT 2 CR

The objective of this class is to give the student an education in the purchasing, storing, serving, and production of alcoholic and non-alcoholic beverages. Prerequisites: a hospitality management major and 21 years of age

## HOS 404 QUALITY FOOD PREPARATION 4 CR

The class will examine food preparation methods and service techniques important to the success of a food service operation. Menu planning, food preparation and production along with proper food service methods will be studied. A basic knowledge of food service operations will be taught in a lab setting through the production of a "A Night out on the Town". Student will exhibit their skills by performing a variety of tasks in a cooperative environment as they produce a dining experience to the general public. Prerequisite: Junior standing or permission of instructor

## HOS 413 CASINO, SPA, AND RESORT MANAGEMENT 3 CR

This class examines the day to day operations of casinos, spas, and resorts from a front office perspective including the law, procedures, and organizational structure. This class incorporates both classroom and field experiences to give the student the necessary perspective of how these facilities become successful. Prerequisite: Junior standing or permission of instructor

## HOS 423 SANITATION AND HEALTH IN THE FOOD SERVICE, LODGING, AND TOURISM INDUSTRY 3 CR

This class will discuss food safety and other health related issues common to the Hospitality Industry, and other institutional programs like hospitals, schools, restaurants, cruise ships, airlines, and other form of travel. Students must pass a National Sanitation Certification examination upon completion of the course. Prerequisite: Junior standing or permission of instructor

## HOS 473 SENIOR INTERNSHIP IN HOSPITALITY MANAGEMENT 3 CR

This internship experience is of great importance to the Hospitality Management major because it comes at a time where the student has through their classroom experiences at Trine University, gained a knowledge of the hospitality and tourism industry, and now goes out into the field to compliment their knowledge of the subject. Prerequisite: Junior standing or permission of instructor

## HEALTH AND PHYSICAL EDUCATION

## HPE 253 RISK MANAGEMENT 3 CR

Consideration of the legal aspects involved with physical education and sport activities. Emphasis on negligence case law, liability issues and facility safety.

## HPE 273 NUTRITION 3 CR

A review of the nature of nutritional needs. Focus will include the function of nutrients in the body, weight control and the importance of balanced diets.

## HUMAN RESOURCE MANAGEMENT

## HR 303 COMPENSATION AND BENEFITS 3 CR

This course examines the role of compensation and benefits in today's workplace. It emphasizes the role, importance, and impact of a defined compensation and benefits strategy. Emphasis will be on assessment of compensation and benefit plans. Topics include traditional and non-traditional bases of pay, strategies for developing benefits plans, administering compensation, and benefit plans. Prerequisite: FIN 303

## HR 313 TRAINING AND DEVELOPMENT 3 CR

Provides a review of the field of training and development, including topics such as adult learning theory, training needs assessment, the design, delivery and evaluation of training and development programs, career development, and e-learning. Prerequisite: MGT 313

## HR 323 SAFETY AND HEALTH MANAGEMENT 3 CR

This course examines the role of occupational safety and health in the workplace today. It emphasizes the need for and the impact of having a strong safety and health program. Topics include identification and assessment of major types of occupational hazards including falls, mechanical, environmental, electrical, fire, weather, and stress. OSHA regulations, fines and authority, safety standards, accident prevention and investigation, safety and analysis, and safety and health management concepts are also covered. Prerequisite:

## MGT 313 (Equivalent to ETD 163)

## HR 403 PROJECT MANAGEMENT 3 CR

A study of effective project planning and management. Topics covered include project goals, objectives, and feasibility. Estimation of completion times and costs, evaluation and review, incentives, and quantitative analysis are also topics. Case studies and project management software used extensively. Prerequisite HR 323

## INFORMATICS

## INF 103 INFORMATION TECHNOLOGY APPLICATIONS 3 CR

Terminology, concepts, principles, and use of computer in solutions of business, scientific and educational decision-making problems. Introduction to system structures, storage media, peripheral equipment, communications and Web development. Emphasis on topics in human-computer interaction and human factors, collaborative technologies, ethics, privacy, and ownership of information and information sources, information representation and the information life cycle, the transformation of data to information. Hands on assignments: Word Processing, Spreadsheet Analysis, Database, Presentation Graphics, and collaboration software. Prerequisite: Computer Literacy

## INF 233 ADVANCED SPREADSHEET FOR BUSINESS 3 CR

Concepts including raw data management, business analysis and reporting. Other concepts include: collaboration and workbook security, using tables to analyze and report data, integrating and manipulating data from external sources, creating and auditing complex formulas, automation features, advanced data analysis, using charts to analyze and communicate business information Prerequisite: INF 103 or INF 113

## INF 263 DATABASE CONCEPTS AND APPLICATIONS 3 CR

Concepts including entity-relationship diagrams, normalization to fifth normal form, database optimization. Other concepts include: file organization, database representation, descriptions, software reliability, security, integrity, relational data bases, query languages. Prerequisite: INF 103

## INF 273 VIDEO I 3 CR

A study of time-based media production, design and issues including in-class demonstrations of equipment, camera/lighting techniques, file formats, codes, emphasizing attributes of digital video editing software. Exercises illustrate principles of visual dynamic images over a time frame. Students produce experimental commercial works of 10 to 15 seconds duration to interviews, documentaries, narratives up to 5 minutes length. Issues regarding streamed video discussed. Prerequisite: INF 223

## LAW

## LAW 203 BUSINESS LAW I 3 CR

This course is an introduction to the American legal system. It includes a survey of courts, legal procedures, torts, and criminal law. It involves an intensive study of the common law of contracts, including contract formation, performance, breach and remedies, as well as a study of the law of sales under the Uniform Commercial Code.

## LAW 303 BUSINESS LAW II 3 CR

This course is a study of the law of agency, partnerships, corporations, and other business organizations. It includes a study of negotiable instruments, secured transactions, surety ship, bankruptcy, securities regulation, and related legal issues. Prerequisite: LAW 203

## LAW 313 AUCTION LAW 3 CR

An overview of laws impacting the auctioneering environment. Ethical standards and legal ramifications of actions within the auctioneering profession will be explored and discussed. Prerequisite: LAW 203

## LAW 323 BANKRUPTCY 3 CR

An in-depth study of federal bankruptcy regulations as well as state and local regulations. The impact of bankruptcy on the auctioneering industry will be examined. Prerequisite: LAW 203

## LAW 403 EMPLOYMENT LAW 3 CR

This course is a survey of the law relating to the employment relationship, with a major emphasis on federal law. The course covers unions and collective bargaining under the National Labor Relations Act. Discrimination in employment will address the Civil Rights Act of 1964 as amended, the Equal Pay Act, the Age Discrimination in Employment Act, the Americans with Disabilities Act, and related statutes. State and federal law with regard to employment-at-will, privacy, whistleblower protection, and related issues will also be discussed. Prerequisites: LAW 203, MGT 363

## LAW 413 INTERNATIONAL LAW 3 CR

The legal considerations governing international business transactions. Introduction to the international legal environment including the status of international law, international dispute settlement, conflicts of law. A more detailed study of the international contracting process, international payment mechanisms, carriage contracts, insurance issues, and related subjects. Government regulation of international business will also be addressed. Prerequisites: LAW 203, BA 343

## LAW 503 PUBLIC POLICY AND THE LEGAL ENVIRONMENT 3 CR

This course includes an analysis of the legal, political and economic framework that has shaped public policy toward business in the United States. It will include the methods as to how public policy is created and its implications for management decisionmaking. The issues that this course will be concerned with are: how public policy is related to societal, community, employee, consumer, and environmental concerns and their implication for business. Prerequisite: Graduate standing or approval of instructor

## LAW ENFORCEMENT

## LE 103 INTRODUCTION TO CRIMINAL JUSTICE 3 CR

This course is an introduction to the criminal justice system that covers the processes, institutions and administration of justice in the United States. The course will concentrate on the purposes and history of the three primary parts of the criminal justice system: law enforcement, courts, and corrections.

## LE 153 JUVENILE JUSTICE 3 CR

A comprehensive review of the nature and etiology of juvenile delinquency. The legal and philosophical basis of the juvenile justice process, procedures, and programs of prevention and rehabilitation.

## LE 213 DIGITAL FORENSIC SCIENCE 3 CR

This course introduces the student to investigative techniques involving computers and other electronic devices. Topics include investigative procedures, computer hardware, data recovery methods and laws concerning digital devices. This course also covers how computers are used in investigations. Prerequisite: INF 103 (Same as INF 213 and FS 213)

## LE 253 PROBATION, PAROLE \& COMMUNITY CORRECTIONS 3 CR

An introduction to community-based corrections within the criminal justice system. A comprehensive review of the philosophies, and practices, traditional and nontraditional approaches, and exemplary programs of the juvenile, and adult systems.

## LE 263 INTRODUCTION TO CRIMINAL LAW AND JUSTICE 3 CR

A survey of the American criminal justice system, its legal bases, and the interrelationships between local, state and national agencies. Specific attention will be focused on criminal law, criminal liabilities and punishments.

## LE 273 CRIMINAL PROCEDURES AND EVIDENCE 3 CR

An examination of the various aspects of criminal procedures and their bases in the Constitution and in law. Topics include arrest, search and seizure, interrogation, and the exclusionary rule.

## LE 313 POLICE ADMINISTRATION 3 CR

Historical and legal perspectives of policing in the United States. Issues include: organizational theory, police responsibilities, and leadership roles in contemporary law enforcement organizations. Prerequisite: LE 103

## LE 343 CRIMINALISTICS AND CRIME SCENE INVESTIGATIONS I 3 CR

Introduction to criminalistics and crime scene investigation. Methods of processing a crime scene: documentation, location, and collection of evidence, proper collection and handling procedures, selection, and presentation for analytical examination, and presentation of the process and findings in court. (Same as FS 343)

## LE 351 CRIMINALISTICS AND CRIME SCENE LABORATORY 1 CR

The study of types of chemical and physical analyses associated with crime scene investigations. Prerequisite: LE 343 (Same as FS 351)

## LE 353 CRIMINALISTICS AND CRIME SCENE INVESTIGATIONS II 3 CR

Advanced criminalistics and crime scene investigation. A detailed review of current methodology of collection, processing, and court presentation of evidence. Analysis of the roles of law enforcement and forensic scientists. Prerequisite: LE 343 (Same as FS 353)

## LE 363 INSTITUTIONAL CORRECTIONS AND CORRECTIONAL LAW 3 CR

A detailed review of penology and institutional corrections. A historical and contemporary perspective on jails and prisons. Rehabilitation and incarceration in both the adult and juvenile systems. A critical analysis of legislation and appellate decisions in correctional law for pretrial detainees and convicted and sentenced prisoners. Prerequisite: Junior standing or permission of instructor

## LE 423 CRIMINAL JUSTICE AGENCY ADMINISTRATION 3 CR

A detailed examination of the unique blend of criminal justice and business/ public administration required in the administration of law enforcement, judicial and corrections agencies. A pragmatic analysis of public funding and utilization of local, state, and federal grants. Prerequisite: Junior standing or permission of instructor

## LE 433 CRIMINAL JUSTICE CAPSTONE DEMONSTRATION 3 CR

This capstone course will provide students the opportunity to integrate and synthesize previous course work in Criminal Justice. In addition, to the Capstone Demonstration Project, students will be required to take the Major Field Test for Criminal Justice Majors. Prerequisite: All required coursework following the Psychology or Law Enforcement Concentration.
LE 453 TOPICS IN CRIMINAL JUSTICE 3 CR

Selected topics in the area of criminal justice. Prerequisite: Junior standing or permission of instructor

## MATHEMATICS

## MA 103 BUSINESS ALGEBRA 3 CR

This course emphasizes the business applications of the following: rational algebraic expressions, quadratic equations, linear systems, synthetic division, determinants, exponents, radicals, and logarithms.

## MA 113 COLLEGE ALGEBRA 3 CR

Rational algebraic expressions, quadratic equations, non-linear systems, partial fractions, binomial expansion, synthetic division, determinants, exponents, radicals, logarithms.

## MA 123 TRIGONOMETRY 3 CR

Trigonometric functions, identities, inverses, unit circle, solutions of triangles, trigonometric equations, complex numbers, radian measure, angular velocity.

## MA 134 CALCULUS I 4 CR

Limits, continuity, differentiation, applications, definition of the integral, and fundamental theorem of integral calculus. Uses symbolic algebra software.

## MA 153 FINITE MATHEMATICS 3 CR

Set operations, introduction to logic, mathematics of finance, introduction to probability and statistics. Not open to engineering/science majors.

## MA 164 CALCULUS II 4 CR

Applications of integration, differentiation, and integration of transcendental functions and methods of integration, L'Hopital's rule, conic sections, parametric equations, polar coordinates, infinite series. Uses symbolic algebra software. Prerequisite: "C" or better for MA 134 or equivalent

## MA 173 APPLIED MATHEMATICS 3 CR

Mathematics of finance, graphical solution of linear programming problems, introduction to differential and integral calculus with applications. Prerequisite: MA $\mathbf{1 0 3}$ or MA 113

## MA 213 CALCULUS III 3 CR

Calculus of several variables, algebra and calculus of vectors, partial differentiation, directional derivative, multiple integrals, applications. Uses symbolic algebra software. Prerequisite: "C" or better in MA 164 or equivalent

## MA 233 DIFFERENTIAL EQUATIONS 3 CR

Topics include: methods of solution for first and higher order differential equations, systems of ordinary differential equations, Laplace transforms, series solutions. Prerequisite: MA 213

## MA 253 STATISTICS 3 CR

Laws of probability, frequency distributions, sampling, expectation and variance, normal and sampling distributions, hypothesis testing, least squares, point, and interval estimates of parameters. Not open to engineering/ science majors. Prerequisite: MA 103 or MA 113

## MA 323 OPERATIONS RESEARCH 3 CR

Computer solution of mathematical models for decision making. Linear, dynamic and integer programming, critical path scheduling, queuing theory, game theory, resource allocation. Prerequisites: INF 132 or CS 1113; MA 253 or MA 393

## MA 393 PROBABILITY AND STATISTICS 3 CR

Finite probability, distributions, data analysis, sampling and sampling distributions, hypothesis tests, regression and correlation analysis, analysis of variance, design of experiments. Prerequisite: MA 213

## MA 473 GRAPH THEORY AND COMBINATORICS 3 CR

An introduction to discrete and combinatorial mathematics. Construction and analysis of mathematical models using combinatorics, graph theory and other discrete methods with application in a wide variety of areas. Prerequisite: MA 213

## MECHANICAL \& AEROSPACE ENGINEERING

## MAE 303 MECHANICS OF MACHINERY 3 CR

Topics include: study of the kinematics and dynamics of mechanisms. Fundamentals of displacement, velocity, and acceleration analysis of rigid bodies as a basis for the study of mechanisms. Motion analysis of linkages, cams, and gearing. Static and inertia force in machines. Balancing of rotating and reciprocating masses. Prerequisite: ES 223

## MAE 343 MANUFACTURING PROCESSES AND EQUIPMENT 3 CR

An examination of commonly used engineering materials and the manufacturing processes and machines used in processing these materials. Demonstrations of: sand molding, metal casting, metal removal processes (turning, milling, drilling, grinding), and deformation processes. Introduction to CNC machining. Prerequisites: ES 233, ES243

## MAE 353 MACHINE COMPONENT DESIGN 3 CR

Topics include: stress analysis of machine parts, combined stresses, working stress, stress concentration, theory of failure for both static and fatigue loadings, design of machine elements. Prerequisites: ES 233, ES 243; Corequisite: MA 313

## MAE 463 MEASUREMENT LABORATORY 3 CR

Principles of dimensional measurement and the measurement of deflection, stress, strain, and vibration. Transducer theory and signal conditioning. Use of computer data acquisition and signal analysis. Analysis of experimental error and construction of test plans. Laboratory work leading to an experimental project. Prerequisites: ES 253, MA 393, MAE 353

## MANAGEMENT

## MGT 313 HUMAN RESOURCES MANAGEMENT 3 CR

This course includes a discussion of policies, objectives, principles and organizational structure as they pertain to personnel work. The major activities of a personnel department such as recruiting, selecting, training, and employee relations are examined along with the impact of government laws and regulations on these activities. Prerequisite: Junior standing or permission of instructor

## MGT 323 LEADERSHIP 3 CR

This course examines leadership, influence, and power across a variety of disciplines, with a strong emphasis on ethics. Historical, literary, and contemporary examples of successful leadership provide a framework for examining the theories and practice of leadership and power. Prerequisite: Junior standing or permission of instructor

## MGT 333 SUPERVISION 3 CR

This course is intended for people who are, or plan to be, first line supervisors. Its purpose is to present basic principles that will assist in developing the talent needed to direct other people. Skill building cases and incidents are part of the course content. Prerequisite: MGT 363
MGT 343 HUMAN RESOURCE DEVELOPMENT 3 CR

This course is a study of processes, methods, theories, and current practices in training and staff development in business and organizational settings. The course focuses on practices that facilitate learning and change to achieve organizational objectives. Prerequisite: Junior standing or permission of instructor

## MGT 353 DESIGNING OPERATIONS 3 CR

This course examines the central concepts of designing operations in both manufacturing and service enterprises. Topics include process strategy, location and layout strategy, job design, quality management, planning, productivity, and the design of goods and services. Prerequisites: MA $\mathbf{1 7 3}$ or permission of instructor

## MGT 363 ORGANIZATIONAL BEHAVIOR 3 CR

This course examines the manager's role in dealing with behavior at all organizational levels. It emphasizes the need for interpersonal and group skills. Applications of behavioral science concepts and findings to organizational situations are included. Topics include motivation, communications, leadership, conflict, and change. Prerequisites: COM 213, PSY 113, or permission of instructor

## MGT 413 MANAGEMENT OF QUALITY 3 CR

This course examines principles of quality management and continuous improvement in manufacturing and services enterprises. The focus is on using key quality tools, including statistical process control, pareto charts, flow charts, cause-effect diagrams, etc. Prerequisite: MGT 353, MA 253, or permission of instructor

## MGT 443 MANAGING OPERATIONS 3 CR

This course examines contemporary operations management principles and practices. Topics include project management, inventory management, aggregate planning, supply chain management, materials requirement planning, lean manufacturing, and just-in-time principles. Prerequisite: MGT 353 and MA 253 or permission of instructor

## MGT 453 STRATEGIC MANAGEMENT 3 CR

This course requires a knowledge of all functional areas of business. It integrates these areas through analysis of case histories and related readings. Class discussion, presentations and written reports are used extensively.
Prerequisite: Completion of all business core courses or permission of the Dean of the School of Professional Studies

## MGT 463 SMALL BUSINESS MANAGEMENT 3 CR

This course examines the preparatory steps necessary to launch a small business enterprise, as well as manage the everyday complexities of cash flow, marketing, staffing, pricing, purchasing, and advertising. Its purpose is to present the many competencies needed to operate a small business successfully in the competitive environment of the 21 st century. Case analysis and personal interviews are the primary integral components of the course content. Prerequisites: AC 213, MK 303, FIN 303, MGT 353, MGT 363

## MGT 473 CAPSIM BUSINESS SIMULATION 3 CR

This course through competitive simulations, will teach the importance of team work, strategic planning and the impact of decisionmaking within a business entity. Small teams will manage a business entity throughout the course. Teams will make and submit decisions regarding functional areas of the entity, including research and development, production, marketing, finance, and human resources. The decisions will then be analyzed and feedback given on how the decisions would have impacted their entity. Teams will be competing with other teams across the globe, and they will see immediately how their decisions position their given entity in that global business arena. Prerequisites: Completion of all business core courses or permission of the dean of the School of Professional Studies

## MGT 483 CAPSTONE 3 CR

This capstone course will provide students the opportunity to integrate and synthesize previous course work in business to complete a primary research project. Students will identify a problem, research potential solutions and survey impacted groups. By analyzing the data collected, the student will complete a report and make recommendations. The final report will be presented. This course is
the capstone business course and should be taken the last semester before graduation. Prerequisites: Completion of all business core courses or permission of the dean of the School of Professional Studies

## MGT 493 SELECTED TOPICS 3 CR

Offered to treat specific or current business or management issues in depth Prerequisite: MGT 353, MGT 363 or permission of the instructor

## MGT 523 COMMUNICATIONS, LEADERSHIP AND ETHICS 3 CR

This course examines leadership, influence, and power across a variety of disciplines with a strong emphasis on ethics. Historical, literary, and contemporary examples of successful leadership provide a framework for examining the theories and practice of leadership and power. This course requires substantial advanced critical thinking and writing. Prerequisite: Graduate standing

## MGT 543 OPERATIONS STRATEGY AND MANAGEMENT 3 CR

This course examines the central role of operations in both manufacturing and service enterprises. Topics include quality management, design of goods and services, layout, scheduling, project management, inventory management, supply chain management, and purchasing activities within the firm. Prerequisite: Graduate standing

## MARKETING

## MK 303 MARKETING 3 CR

The marketing activities necessary to provide goods and services to target customers are examined, as well as the role marketing plays in the social and economic system. The marketing variables of product, promotion, placement, and price are considered in the context of strategic planning, implementation, and control. Prerequisite: Junior standing or permission of instructor

## MK 313 RETAIL MANAGEMENT 3 CR

This is the study of the role of retailing in the domestic and international marketing process. A functional approach is taken in the study of retailing topics of placement, promotion, pricing, inventory control. Also examined are the consumer purchasing behavior and lifestyle profiles to understand growth of nontraditional channels. Prerequisite: Junior standing or permission of instructor

## MK 323 INTEGRATED MARKETING COMMUNICATIONS 3 CR

The integrated approach to marketing communications is emphasized. Advertising, sales promotion, database/direct marketing, public relations, sponsorship/event marketing, support media, trade promotions, internet marketing, personal selling, and their coordination through a common brand and theme are investigated. Prerequisite: Junior standing or permission of instructor

## MK 333 BUYER BEHAVIOR 3 CR

Studies in this course include consumer and organizational buying behavior, as well as determinants of this behavior. Consumer characteristics, including attitudes and behaviors, processing of information, as well as consumer cultural, psychological and communication theories are also studied. Course also examines industrial perspectives; the unique aspects of organizational markets and how they differ from individual consumer behavior. Prerequisite: Junior standing or permission of instructor

## MK 343 INTERNATIONAL MARKETING 3 CR

This course provides a detailed examination into the principles and practices of international marketing as it applies to today's global economy. In-depth studies and analysis will be made of trade and commercial policies and practices, as well as international product adaptation, promotion, distribution, and pricing strategies. The student will examine the international marketing manager's role in the development of an export marketing program. Prerequisites: BA 343, MK 303 or permission of the instructor

MK 423 PERSONAL SELLING 3 CR

This course examines the impact of personal selling in today's competitive marketplace. Topics examined are motivation, account selection, compensation, seller's role in the economy, and personality variables. Prerequisite: Junior standing or permission of instructor

## MK 433 MARKETING MANAGEMENT 3 CR

This is the study of the planning, implementation, and outcomes of a firm's marketing program. Content will focus on identification, analysis, and reviews of internal/external factors associated with marketing policies and programs. Prerequisites: MK 303

## MK 463 MARKETING RESEARCH 3 CR

This is the study of techniques and approaches associated with researching marketing topics. It includes consumer research, market analysis, product research, advertising research, and sales analysis. Prerequisites: MK 303 or concurrently, or permission of the instructor

## MK 473 E-MARKETING 3 CR

Electronic technologies are applied to the functions of marketing which are product, price, placement, and promotion. E-marketing transforms traditional business using new models that add customer value and increase profitability. The outcome of the course will be the creation of an E-marketing plan. Prerequisite: Junior standing or permission of instructor

## MK 483 SENIOR SEMINAR IN MARKETING 3 CR

This is an integrative capstone course which brings together all the functional areas of marketing. The focus is on decision-making and problems in marketing strategy. Students will study marketing considerations and responses to changes in the customer, legal, trade, technological and regulatory environments. This course includes the preparation and organization of a comprehensive marketing plan. Prerequisite: Senior Marketing Major or Minor in Marketing having completed most of the required marketing courses

## MK 493 SPECIAL TOPICS IN MARKETING 3 CR

Offered to treat specific or current marketing issues in depth. Prerequisite: Junior standing or permission of instructor

## MK 503 STRATEGIC MARKETING MANAGEMENT 3 CR

This course examines the collective marketing activities (pricing, promotion, placement, product) as they relate to the target market. The strategic planning process and how it relates to the overall profitability of the marketing department and a corporate structure will be studied. Prerequisite: Graduate standing

## MUSIC

## MUS 273 MUSIC \& CULTURE 3 CR

An introduction to the music of the Western world, including musical styles of the past and styles and forms of contemporary music literature. Previous music training not a prerequisite. This course explores how people define, create, value, and use music in cultures around the world. The basic musical elements of rhythm, melody, timbre, texture, harmony, and form are explored through this multicultural approach to music appreciation.

## PHYSICS

## PH 104 PHYSICAL SCIENCE 4 CR

A development of basic concepts and theories in the physical sciences and physics. Conceptual view of mechanics, thermodynamics, sound waves, electricity, magnetism, and optics.

## PH 154 COLLEGE PHYSICS I 4 CR

An algebra-based introduction to the concept and application of Newton's Law, linear and rotational motion, work, energy, and momentum, solids and fluids, heat, vibrations, waves and sounds. Experimental investigation of selected topics. Prerequisites: MA 113, MA 123

## PH 164 COLLEGE PHYSICS II 4 CR

An algebra-based introduction to the concept and application of Coulomb's Law, capacitance, DC electric circuits, magnetism, electromagnetic induction, optics and optical instruments, and relativity and quantum physics. Experimental investigation of selected topics. Prerequisites: PH 154

## PH 224 UNIVERSITY PHYSICS I 3-2-4

Underlying principles of measurement, vectors, translatory, rotary, uniform, circular, and harmonic motion, work, power, energy, and physical properties of liquids, solids, gases, and statics. Also the fundamentals of heat: thermometry, expansion of liquids, solids and gases, calorimetry, heat transfer, elementary thermodynamics, and fluids. Experimental investigation of selected topics. Prerequisite: MA 134

## PH 234 UNIVERSITY PHYSICS II 3-2-4

Study of vibrations and wave motion: different types of simple harmonic motion, sound. Also the fundamentals of electric fields, Gauss's Law, electric potential, capacitance, magnetism, direct, and alternating currents and circuits. Electromagnetic wave propagation and optics. Experimental investigation of selected topics. Prerequisites: MA 164, PH 224

## PHILOSOPHY

## PHL 203 INTRODUCTION TO PHILOSOPHY 3 CR

A study of the perennial problems of philosophy, such as the nature of knowledge, the role of the self, the existence of God, and the function of science. The contributions of the great thinkers of history to these problems are presented so that the student may find aid in forming his or her own philosophy.

## PHL 251 ANCIENT GREECE FROM THE PERSIAN THROUGH PELOPONNESIAN WARS 1 CR

An examination of the culture of Athens and Sparta during the 5th century B.C., concentrating on the Persian and Peloponnesian wars and their lasting effects on Western Civilization. (Same as HIS 251)

## PHL 313 ETHICS 3 CR

A study of ethical language, methods of justifying ethical decisions, and types of ethical value systems, with emphasis on practical applications in terms of personal and social morality. Prerequisite: Junior standing or permission of instructor

## PHL 323 PHILOSOPHY OF RELIGION 3 CR

An inquiry into the nature of religious experience, activity and belief. An examination of the concepts of God, freedom, and immortality as well as the relationship of religious knowledge to artistic and scientific knowledge. Prerequisite: Junior standing or permission of instructor

## PHL 333 ART, TECHNOLOGY AND SOCIETY 3 CR

An interdisciplinary effort to place modern technology within a social, cultural, and historical context. Prerequisite: ENG 113 or ENG 133 (Same as SOC 333)

## PHL 343 LOGIC 3 CR

An examination of the function of language and the nature of meanings. Valid and invalid reasoning, deductive and inductive methods. Particular emphasis will be given to the application of formal techniques to the evaluation of arguments in everyday settings. The course is argument and language oriented. Prerequisite: Junior standing or permission of instructor

## PRE-LEGAL STUDIES

## PL 4003 LEGAL CAPSTONE EXPERIENCE 3 CR

The legal capstone experience will provide the opportunity to utilize the skills and knowledge the student has attained in their previous coursework in a concerted effort to prepare for and gain law school admission. Prerequisite: Junior standing or permission of instructor

## PSYCHOLOGY

## PSY 113 PRINCIPLES OF PSYCHOLOGY 3 CR

Introduction to the scientific study of human and animal behavior. Course covers all of the major areas within psychology, including development, learning, intelligence, personality, attitudes, altered states of consciousness, abnormal behavior, and psychotherapy.

## PSY 303 RESEARCH METHODS IN PSYCHOLOGY 3 CR

An introduction to research methods employed in psychology, with special emphasis on experimental design. Topics include between and within-subjects designs, quasi-experimental designs, as well as research ethics and procedures for controlling extraneous variables. Prerequisite: PSY 113

## PSY 313 TOPICS IN PSYCHOLOGY 3 CR

Survey, in detail, of one of the major areas of study within psychology. The course changes each semester with the specific topic of study announced in the class schedule. Prerequisite: PSY 113

## PSY 323 ABNORMAL PSYCHOLOGY 3 CR

Survey of abnormal psychology, including such topics as clinical assessment, anxiety disorders, schizophrenia, personality disorders, age-related problems, depression, sexual dysfunctions, psychotherapy, and related legal and ethical questions arising within clinical psychology. Prerequisite: PSY 113

## PSY 333 PSYCHOLOGY OF PERSONALITY 3 CR

An introductory survey of problems, methods, and theories; personality development and motivation, with emphasis on the normal contemporary theories of adjustment and idiodynamics. Prerequisite: PSY 113

## PSY 343 SOCIAL PSYCHOLOGY 3 CR

An introduction to the measurement and principles of human interaction and group behavior including attitude change, prejudice, attraction, love, altruism, aggression, conformity, group dynamics, crowding, and other current social issues. Prerequisite: PSY 113 (Same as SOC 343)

## PSY 353 CHILD AND ADOLESCENT PSYCHOLOGY 3 CR

An investigation into the development stages within the life of a human being, from birth through adolescence, with emphasis on the origin of personality and factors related to intellectual growth. Prerequisite: PSY 113

## PSY 363 COUNSELING 3 CR

Examines the theory and practice of counseling with a corporate or social service setting. Exposure to a variety of therapeutic techniques. Experiences first-hand the complexities of the human mind through a case-study approach. Direct versus indirect forms of interventions are explored. Prerequisite: PSY 333 (same as SOC 363)

PSY 373 POLITICAL PSYCHOLOGY 3 CR
An examination of the role of group dynamics and personality variables in contemporary political issues, including leadership and power, political attitudes, current social movements, conflict resolution, coalition formation, cross-cultural comparisons of political attitudes, and other issues. Prerequisites: GOV 113 or PSY 113 (Same as GOV 373)

## PSY 383 FORENSIC PSYCHOLOGY 3 CR

A pragmatic review of the psychological and sociological theories and practices which seek to evaluate and analyze deviant human behavior and environments which precipitate criminal conduct. An introduction into the profiling and prediction of criminals and criminal behavior. Prerequisite: PSY 113

## PSY 403 HUMAN SEXUALITY 3 CR

A survey of the historical, cultural, and psychological origins of sex differences as they relate to sex role identity, stereotyping, and related behavior. Prerequisite: PSY 113

## PSY 413 THE PSYCHOLOGY OF ADDICTION 3 CR

A study of the psychological and sociological factors relating to the problems of addiction. Special attention will be given to the effects which alcohol and other drugs have upon fetuses, children, adults, families, and communities. Prerequisite: PSY 113

## PSY 423 COUNSELING THEORIES AND PRACTICES 3 CR

A thorough review of contemporary approaches to counseling. This course examines the major current theories and practices in psychotherapy in detail. Prerequisite: PSY 323

## PSY 443 ADVANCED FORENSIC PSYCHOLOGY 3 CR

An in-depth study of the etiology of criminal behavior. A critical analysis of mentally disordered, psychopathic, and sexually disordered offenders. Students acquire profiling and prediction skills. Prerequisites: PSY 38, junior or senior standing

## PSY 473 PSYCHOLOGY CAPSTONE DEMONSTRATION 3 CR

This capstone will provide students the opportunities to integrate and synthesize previous course work in psychology. In addition to the Capstone demonstration Project, students will be required to take the Major Field Test for Psychology Majors. Prerequisite: All required coursework in the Psychology Core.

PSY 400X INDEPENDENT STUDIES IN PSYCHOLOGY VARIES (1-4 HRS.)
Credit earned through directed reading, independent study, research, or supervised field work. Maximum four hours credit. Prerequisite: Permission of Dean of the School of Professional Studies

## SOCIOLOGY

## SOC 103 PRINCIPLES OF SOCIOLOGY 3 CR

A presentation of the basic concepts and principles of sociology, designed to develop a system of thought about the nature of society and major special problems, such as ethnic patterns, social stratification, youth, educational, and religious institutions.

## SOC 243 ECONOMICS OF SOCIAL ISSUES 3 CR

An economic analysis of social issues, such as the problems of pollution, poverty, crime, and the use of drugs. A study of the economic consequences of various social and economic policies, population pressures and related energy and pollution problems. Prerequisite: ECO 213 (Same as ECO 243)

## SOC 313 TOPICS IN SOCIOLOGY 3 CR

Selected topics in sociological content such as criminology, minority groups, urbanization, and the like. Topics will vary from semester to semester. Prerequisite: SOC 103

## SOC 323 THE FAMILY 3 CR

An analysis of problems and relationships in the family setting: divorce, mobility, generation differences, changing role of women and youth, delinquency, cross cultural patterns. Prerequisite: PSY 113 or SOC 103

SOC 333 ART, SOCIETY AND TECHNOLOGY 3 CR

An interdisciplinary effort to place modern technology within a social, cultural and historical context. Prerequisite: ENG 113 or ENG 133 (same as PHL 333)

## SOC 343 SOCIAL PSYCHOLOGY 3 CR

An introduction to the measurement and principles of human interaction and group behavior, including attitude change, prejudice, attraction, love, altruism, aggression, conformity, group dynamics, crowding, and other current social issues. Prerequisite: PSY 113 (Same as PSY 343)

## SOC 363 COUNSELING 3 CR

Examines the theory and practice of counseling with a corporate or social service setting. Exposure to a variety of therapeutic techniques. Experiences first-hand the complexities of the human mind through a case-study approach. Direct versus indirect forms of interventions are explored. Prerequisite: PSY 333 (same as PSY 363)

## SPEECH

## SP 103 INTRODUCTION TO THEATER 3 CR

Understanding the roles of playwrights, actors, directors, designers, and audiences within the "living art" of theater. Demonstrates the relationship between art and culture through the study of, participation in, and viewing of theater.

## SP 203 EFFECTIVE SPEAKING 3 CR

Application of communication principles to improve extemporaneous public speaking and listening skills. Considers principles of audience analysis and rhetorical invention, worthy and effective evidence and inductive reasoning, speaker and source credibility, organization and outlining, effective speaker audience interaction, listening for comprehension, and critical listening. Prerequisite:

## ENG 113 or ENG 133

## SPANISH

## SPN 103 SPANISH CONVERSATION I 3 CR

An introduction to the Spanish language with an emphasis on functional conversation skills. Vocabulary development and pronunciation within communicative contexts are stressed. No previous study of Spanish is required.

## SPN 113 SPANISH READING AND WRITING I 3 CR

An introduction to the Spanish language with an emphasis on reading and writing in Spanish. Vocabulary development and the basics of Spanish structure are also covered. No previous study of Spanish is required.

SPN 123 SPANISH II 3 CR
A continuation of Spanish 113, integrating listening, speaking, reading, and writing skills. Basic grammar and Latin American and Spanish cultures are covered. Prerequisite: SPN 113

## UNIVERSITY EXPERIENCE

## UE 111 ADULT LEARNING ORIENTATION 1 CR

This course offers resources for success in learning for students new to Trine University. This course will assist new students in becoming acclimated to the university, and understanding the expectations of an adult learner while allowing them to become familiar with the course management system (Moodle). This course will also present information about Trine University offices and services to familiarize students with resources and procedures. This is a four week course.

## GRADUATE STUDIES

## TRINE UNIVERSITY GRADUATE POLICIES

Changes approved by Graduate Council March 15, 2011

## CULTURE OF GRADUATE LEARNING

Graduate learning, teaching and scholarship differ from the undergraduate educational experience through the intensity of learning and the role of applicable research. All graduate experiences should reflect an in-depth study of a particular curricular field and should lead students to independent thinking, learning and knowledge acquisition.

## AFFIRMATIVE ACTION STATEMENT

Trine University is committed to the equitable treatment of students, faculty and staff; therefore, all who work, live, study and teach in the Trine Community will be valued on the basis of scholastic achievement and academic potential without regard to race, religion, color, gender, sexual orientation, or age.

## ADMISSION REQUIREMENTS

Students seeking to enroll in graduate studies must have:

1. A bachelor's degree from a regionally-accredited institution in an appropriate academic field, or
2. a bachelor's degree from a regionally accredited institution in a related field and significant major-specific professional experience, or
3. a bachelor's degree from a non-regionally accredited institution in an appropriate or related field and GRE test scores of 152 verbal and 148 quantitative or higher. (A GMAT score of 570 or higher may substitute for the GRE at the discretion of the department chair, program director, or dean.)

Applicants whose native language is not English must provide evidence of a minimum score of 550 on the paper-based or 213 on the computer-based Test of English as a Foreign Language (TOEFL).

Admittance to any graduate program is valid for one year from the time of admission to enrollment.

## STUDENT CLASSIFICATIONS

## 1. Dual Undergraduate/Graduate

Dual undergraduate/graduate enrollment status is granted to those who concurrently seek a bachelor's and master's degree from the Allen School of Engineering and Technology. These students will be changed to graduate status after earning 132 credit hours, at which time they must have a cumulative grade point average of at least 3.0. Students who do not meet this standard
will not be given graduate status and will be awarded the BS degree when the BS requirements are met. Students will be awarded each degree upon completion of its respective degree requirements.

## 2. Graduate

Prospective graduate students are required to submit a completed Graduate Application, official academic transcripts from every previous undergraduate and graduate institution attended (except Trine University), and supplemental admission materials as required by the department or program in order to be considered for admission into graduate programs.

Transcripts of prospective students will be evaluated by the program chair/director in consultation with the school dean to determine if additional undergraduate coursework is required to adequately prepare for the rigors of graduate coursework.

One of the following conditions must be met to enroll in graduate coursework:

1. An undergraduate grade point average of 3.0 or greater $\boldsymbol{o r}$
2. Permission for admission as a conditional graduate student as be approved by the program chair/director and dean as follows:

## Conditional Admission

In order to be considered as a candidate for conditional graduate admission, students who have not earned a cumulative GPA of 3.0 in an undergraduate degree program must submit the following materials to the program chair/director in addition to required application materials:

- A 1-page narrative describing challenges or extenuating circumstances that led to the student earning less than 3.0 GPA in undergraduate work. Students must include a description of specific strategies they will use to ensure academic progress within the graduate degree program.
- An additional letter of recommendation from a professional colleague who can address the applicant's situation and potential for success.
- The applicant's resume or vita indicating positions held that demonstrate task commitment, knowledge and skill relevant to the applicable course of study.

Upon receipt of the all materials, the application will be reviewed by the department chair/program director and a recommendation will be made to the dean for conditional admission. Students admitted conditionally will become graduates in good standing upon completion of four graduate level courses maintaining a B or better grade in each course. Conditional graduate students not garnering a grade of B or better in each of their first four courses will be dismissed.

## 3. Special Graduate Student

Special Graduate Student status is granted to those students who wish to (1) audit a course, (2) seek certification in specialized areas, or (3) enroll in certain courses but do not plan to pursue a graduate degree program.

For degree-seeking students who audit courses, a fee of $1 / 2$ the nominal rate is charged per credit hour. For special graduate students who are non-degree seeking, full tuition will be charged.

All graduate admission decisions must be reported once each semester to the assistant vice president for graduate studies.

## ACADEMIC RESIDENCY/TRANSFER CREDIT

A maximum of 6 semester hours of graduate course credit completed at other graduate schools may be counted toward completion of the Master's degree at Trine University with a grade of B or above and with the approval of the program chair/director and dean. All other courses must be taken at Trine University. Transfer credit will not include a grade and, therefore, will not impact the student's GPA. Courses used to satisfy the requirements of a bachelor's degree cannot be applied to the master's degree.

The final 15 credits of a master's degree must be taken at Trine University unless a waiver is granted by the academic dean upon recommendation of the program chair/director.

For the five-year engineering programs, students holding senior class standing may take up to 6 credit hours in the graduate program with the approval of the program coordinator, and if: (1) these credits were not applied to the undergraduate degree, (2) the credits were earned in designated graduate courses, and (3) a grade of B or better was earned in the course.

## GRADUATION REQUIREMENTS

Students must have a 3.0 cumulative GPA, complete all necessary program requirements, and carry a grade of C or better in all courses to qualify for graduation.

## GRADUATE STUDENT COMMENCEMENT PARTICIPATION

Graduate students are eligible to attend the spring commencement ceremony following their degree completion. No graduation honors or honor cords are used for graduate degrees.

## CREDIT BY EXAMINATION

There is no credit by examination in the Trine graduate programs.

## GRADING SYSTEM

The grading system is as follows:
A Excellent 4.0

B+ Very Good 3.5
B Good 3.0
C+ Above Average $\quad 2.5$
C Average (lowest passing grade) 2.0
F Failure 0.0
I Incomplete not figured into GPA
IP In progress (grade deferred) not figured into GPA
W Withdrawal before completion of $80 \%$ of the semester
WP Withdrawal after completion of $80 \%$ of the semester with (passing work at the time of withdrawal) issued only under special circumstances and with the approval of the department chair/program director.

## INCOMPLETE GRADE POLICY

Incomplete (I) is a temporary grade used by the instructor in cases where a student is unable to complete course requirements because of circumstances beyond the student's control such as illness, family emergency or other similar circumstances. Incomplete grades are rarely assigned and only if the student has satisfactorily completed the vast majority of the course requirements and has convinced the instructor of his or her ability to complete the remaining work without registering for the course again. An instructor who assigns a grade of "I" submits to the program chair/director a formal statement of requirements that must be satisfied for removal of the incomplete grade. A copy of the statement of requirements, including deadlines for their completion, shall be made available to the student.

It is the student's responsibility to contact the instructor to make arrangements for completing the remaining work. The required work should be completed and a grade reported by the end of the student's next semester in residence, but in no case later than one calendar year following the receipt of the "I" grade. An "I" grade not removed within one year from the end of the semester in which the "I" grade was issued will be converted to an "FI" grade by the registrar. An "I" grade may not be removed by registering again for the course.

If the instructor giving the " $I$ " grade is no longer a member of the faculty, the student should contact the program chair/director who will act on behalf of the former instructor. In the case of a graduating senior, if an "I" or "IP" grade is not removed until after the start of the next semester, the graduation date will reflect the new semester.

## IN PROGRESS GRADE POLICY

The "IP" (In Progress) grade is to be given only in courses so designated by the respective schools. The "IP" grade is designed for courses which require more than one semester for completion. An "IP" grade not removed within one year from the end of the semester in which the "IP" grade was issued will be converted to an "F" by the registrar. An "IP" grade may not be removed by registering again for the course.

## COURSE REPEAT

A student may retake a course at Trine University; however, no more than two courses may be retaken during the student's course of study. The number of repeated courses may be further limited by individual departments, and scheduling constraints may impact the length of the program.

Whenever a course is repeated on a credit basis, the higher grade and credits earned completely replace the previous grade in the satisfaction of requirements and computation of grade-point averages. All entries remain a part of the student's permanent academic record.

## WITHDRAWAL FROM CLASS

A student may withdraw from class through 80 percent of the semester, provided the student obtains the proper form from the registrar and obtains academic advisor approval. International students must also have the approval of the registrar if they will be dropping below 9 credit hours.

All students dropping below full-time status must have the approval of the director of financial aid. The completed form shall be submitted to the registrar before 80 percent of the semester is completed.

No classes shall be dropped after the completion of 80 percent of the semester except for circumstances beyond the control of the student, such as illness, family emergency, or other similar circumstances. Permission to withdraw after the completion of 80 percent of the semester must be obtained from the program chair/director of the student's department. If permission is granted, a grade of "WP" will be issued if the student was passing at the time of withdrawal.

A grade of " $F$ " will be issued if the student was failing and will count toward the student's cumulative and semester grade point averages.

Any deviation from the policy will be considered an unofficial withdrawal, and a grade of " $F$ " will be issued.

## ACADEMIC STANDING

Students whose cumulative GPA drops below a 3.0 will be dismissed from Trine University. A student who is dismissed may apply for readmission immediately by contacting the Registrar and completing the re-admit form, providing a 3-4 paragraph written statement explaining why he/she was not meeting academic standards and outlining a plan for his/her future success. The re-admit form requires students to submit a plan for raising their cumulative GPA back to 3.00.

The Graduate Council will determine the outcome of the re-admit request.

## GRADE APPEALS

The awarding of grades is the prerogative of the classroom instructor in accordance with policies posted in the Trine University Catalog. Faculty members are responsible for informing students of their grading policy. Grades become official when they are reported to the Registrar. If a faculty member discovers incorrectly reported grades due to miscalculation or clerical error, the error should be reported to the Registrar immediately on the prescribed form. The appropriate program chair/director must approve any adjustment of grades.

A student who disagrees with an assigned grade will take the following steps:

- Approach the professor and explain the problem.
- If the professor and student do not come to an agreement, the student should write a letter to the program director/chair.
- If the program director/chair's mediation does not resolve the issue, the student should file a written appeal to the Dean.

If these steps do not resolve the problem, or if impractical, the student may petition the Grade Review Board in writing for a hearing of the issue. Information regarding this may be obtained from the Vice President for Academic Affairs. The petition shall set forth in detail the basis for the review. This should be done by the midterm of the first regular term following the assignment of the grade. The Board may grant an extension of this time limit. If the Board agrees to hear the case, it will so inform the student by the end of that term. In grade review cases, the student is responsible for presenting evidence to support his/her position.

At the Grade Review Hearing, the student shall present his/her argument followed by the professor's response. The Board shall promptly prepare a written recommendation and forward copies to all parties involved, including the Chairperson and Vice President for Academic Affairs. The report shall include dissenting opinions on the Board, if any. Recommendations of the Board are advisory. In cases involving death, incapacity, or prolonged inaccessibility of the professor, or in similar unusual circumstances, the professor's immediate supervisor is responsible for assigning the grade. Records of each case heard by the Board shall be maintained in the office of the Vice President for Academic Affairs. If the student or professor involved wishes to appeal the decision on procedural grounds, he/she should file an appeal within two working days for the decision with the Vice President for Academic Affairs. If any procedural irregularities are discovered, he/she will notify the student and the Board within ten working days after the appeal.

The Vice President for Academic Affairs shall appoint the faculty members who will serve on the Board. He shall choose one regular member and one alternate (who will be from a different department, if possible) from each school. In addition, the Student Senate shall elect two student members and their alternates. Student members must have junior of senior standing. The faculty
members shall serve three-year, staggered terms, and faculty members serving their third year will chair the committee. Student members shall serve one-year terms.


#### Abstract

ASSESSMENT The academic assessment process at Trine University is designed to measure the abilities and knowledge of students graduating from all degree programs. It also measures student satisfaction with the program. Sometimes students will be asked to reply to surveys or questionnaires that rate the quality of instruction, the level of satisfaction with career preparation, and the overall satisfaction of the Trine experience. Occasionally, anonymous samples of student course work will be used in an assessment process.

Trine University is committed to providing quality educational experiences for our students. The information gathered through the assessment process provides information for continual improvement of our programs.


## PAYMENT OF EDUCATIONAL COSTS

Payment of tuition and fees is due at the Business Office on the date indicated on the student's bill. Any student with outstanding financial obligations to the University will not be permitted to register for any subsequent semester or receive a transcript or diploma until the obligation is fulfilled. Students maintaining a balance owed to the University will be assessed late fees and will be responsible for collection and/or attorney costs if such efforts should become necessary.

## ACADEMIC INTEGRITY

The University prohibits all forms of academic misconduct. Academic misconduct refers to dishonesty in examinations (cheating), presenting the ideas or the writing of someone else as one's own (plagiarism) or knowingly furnishing false information to the University by forgery, alteration, or misuse of University documents, records, or identification. Academic dishonesty includes, but is not limited to, the following examples: permitting another student to plagiarize or cheat from one's own work, submitting an academic exercise (written work, printing, design, computer program) that has been prepared totally or in part by another, acquiring improper knowledge of the contents of an exam, using unauthorized material during an exam, submitting the same paper in two different courses without knowledge and consent of professors, or submitting a forged grade change slip or computer tampering. The faculty member has the authority to grant a failing grade in cases of academic misconduct as well as referring the case to Student Life.

## PLAGIARISM

A student is expected to submit his/her own work and to identify any portion of work that has been borrowed from others in any form. An ignorant act of plagiarism on final versions and minor projects, such as attributing or citing inadequately, will be considered a failure to master an essential course skill and will result in an $F$ for that assignment. A deliberate act of plagiarism, such as having someone else do your work or submitting someone else's work as your own (e.g., from the Internet, fraternity file, etc., including homework and in-class exercises), will at least result in an F for that assignment and could result in an F for the course.

## DEGREES

An "Intent to Graduate" form obtained through the Registrar's office should be filed at the beginning of the master's program. This form will include an expected graduation date and other information pertinent to graduation. All degree requirements must be completed within 5 years.

## TRANSCRIPTS

A hold may be applied to the release of a transcript or other information requested from an academic record for a student who has an overdue indebtedness to the University.

A current student may obtain a maximum of five unofficial (personal) copies of his or her Trine University transcript at no charge while attending the University. All official transcripts which bear the registrar's signature and school seal are available at an additional cost. Additional unofficial transcripts are also available at additional cost.

## RELEASE OF STUDENT INFORMATION

To ensure compliance with the federal government's Family Education Rights and Privacy Act (FERPA), the following general principles and procedures govern the release of information from student academic records.

A written request signed by the student whose name appears on the transcript and that contains information such as date of birth and/or the Trine University student identification number, is required before a University transcript or other information from the student's academic record may be released. Trine University will not release copies of transcripts from another institution. Exceptions to the above statements are outlined in the following paragraph:

- The Office of the Registrar may release transcripts or information from academic records including reports of academic standing to administrative and faculty members of Trine University whose responsibilities require this information.
- Public directory information from student records may be released at any time unless restricted by the student. This includes the student's name, local and permanent addresses and telephone numbers, e-mail address date and place of birth, major field of study, class year, participation in officially recognized activities and sports, weight and height of athletic team members, dates of attendance, degrees, awards received, and photographs.
- Information pertaining to graduation and honors achieved may be released for publication unless otherwise restricted by the student.

Upon proper identification, a student will be shown the following:

- His or her Trine University permanent academic record, including the student's file and transcript.
- His or her transcripts from another institution.


## SEMESTER HOUR LOAD

The semester course load of a full-time graduate student is 9 hours. The maximum load for a full-time student is 12 credits in any fall or spring semester or combined summer terms. Any course load greater than 12 credit hours must be approved by the assistant vice president for graduate studies upon the petition of the school dean.
End of Policy (Approved March 15, 2011)

## TUITION AND FEES

## PAYMENT OF EDUCATION COSTS

Payment of tuition and fees is due at the Business Office on the date indicated on the student's bill. Any financial aid awarded will be deducted from the student's charges each semester. Each student is responsible for purchasing books using funds from personal and/or financial aid sources. Any student with outstanding financial obligations to the University will not be permitted to register for any subsequent semester or receive a transcript or diploma until the obligation is fulfilled. Students maintaining a balance owed to the University will be assessed late fees and will be responsible for collection and/or costs if such efforts should become necessary.

## APPLICATION FEE

There is no application fee for online applications.

## TUITION RATE

A per credit hour fee is charged for each course and is subject to change. Please visit trine.edu to learn about the current rate or contact the appropriate Program Director for current fee and tuition information.

Beginning Fall 2012 Graduate tuition rates are as follows:

| Graduate Face to Face | $\$ 450.00$ |
| :---: | :---: |
| Graduate Online (TVC) | $\$ 550.00$ |
| Graduate Engineering Online | $\$ 650.00$ |

Please visit trine.edu to learn about the current rate.

## AUDITING FEE

A fee is charged per credit hour for auditing courses. To learn the amount of this fee, call the Business Office at 260.665.4108.

## TRANSCRIPT FEE

A per copy fee is assessed for issuance of official Trine University transcripts. A transcript will not be issued to a student with an outstanding financial obligation to the University.

## OTHER COSTS

## BOOKS AND SUPPLIES

Book and supply expenses vary depending on the number of courses taken and the major, and are the personal obligation of each student. Students can order books from the Trine University bookstore through the online order process or in person. Books ordered online will be mailed directly to the student.

## REFUNDS

Refunds of credit balances due to excess financial aid or overpayment will be refunded after the drop/add period. A student withdrawing from a course may be eligible for a full or partial refund of tuition, depending on when the official withdrawal takes place. All refund requests must be made by the student. Please visit trine.edu/admission/adult_students/financial_aid to access the refund request form.
A student is not officially withdrawn until the necessary withdrawal forms, complete with the required signatures, have been filed with the Office of the Registrar. Anything other than an official withdrawal does not permit refunds. Refunds follow the schedule below.

## TUITION:

- Week one- $100 \%$

A $\$ 50$ administration fee will be assessed for "exception" drops (per occurrence).
Please note: If a student receiving financial aid withdraws during the semester, that aid is subject to the federal refund calculation.
Refunds are processed through the Business Office approximately one month after a student officially withdraws and all charges/credits are posted.
The official withdrawal form is required for a refund to be processed.
Any student who is dismissed or suspended for misconduct shall not be entitled to any refund. No refund is provided at any time on fees, books and supplies, or personal expenses.

## WITHDRAWAL

If a student decides to drop or withdraw after registering for classes:

- The student is responsible for completing the proper paperwork with the program director. By failing to do so, the student accepts financial responsibility for all charges incurred on their account.
- The student may be eligible for a refund depending on when the official withdrawal takes place.
- It may result in a change in the total amount due for the semester.
- It may result in a loss of financial aid from a federal or state source.
- Failure to attend classes does not constitute a drop/withdrawal.


## OFFICE OF FINANCIAL AID

## PURPOSE

The Office of Financial Aid provides assistance to students to make a college career at Trine University affordable. To provide such assistance allows students to attend who might otherwise not have the opportunity. Loans are awarded based upon financial need as determined by the federal government after completion of the Free Application for Federal Student Aid (FAFSA).

## GRADUATE PROGRAM

All information listed must be followed for the graduate program. The graduate student is not eligible for grant money from the state or federal government. Graduate students may however receive Stafford loans. Subsidized Stafford loans are awarded on the basis of financial need. Unsubsidized Stafford loans are not awarded on the basis of need.

## FINANCIAL AID APPLICATION PROCEDURES

All students applying for financial aid must complete the Trine University application for admission to be accepted into a degreeseeking program and complete a FAFSA.

The FAFSA is the primary application for assistance. This can be filed on the Web at www.fafsa.gov it is used to determine eligibility for Direct Loan Programs.

Aid is awarded throughout the school year. Current students need only complete the FAFSA once each school year. Trine University's school code for the FAFSA is 001839.

## DIRECT LOAN PROGRAM

A subsidized loan is awarded on the basis of financial need. The student is not charged interest until repayment begins because the federal government "subsidizes" the interest. These loans have a 10 -year payoff and a six-month grace period beginning after the student leaves college, either by graduation or withdrawal from the University, or by dropping below half-time status.

An unsubsidized loan is not awarded on the basis of need. A student must be enrolled half-time to be eligible. There are maximum amounts a student can borrow, which is based upon grade level. A student is charged interest from the time the loan is disbursed until it is paid in full. A student can choose to pay the interest while enrolled in school or defer those payments until repayment. These loans also have a 10-year payoff and a six-month grace period.

## GRAD PLUS INFORMATION

## Direct Grad PLUS Loan

If you need to borrow funds beyond the federal direct subsidized and unsubsidized loan limits, you may be able to participate in the Federal Direct Grad PLUS Loan program. The Grad PLUS Loan will have a fixed 7.9 percent interest rate, $2.5 \%$ ( $4 \%$ with an upfront interest rebate of $* 1.5 \%$ ) *To keep an upfront interest rebate, student must make all of first 12 required monthly pay ments on time or will lose the rebate. If student loses the rebate, the rebated amount will be added back to the principal balance on the loan(s), which will increase the amount of repayment.

## Eligibility

- Must complete a Free Application for Federal Student Aid (FAFSA)
- Must be admitted to a graduate or professional program
- Must be a U.S. citizen or eligible non-citizen
- Must be enrolled at least half-time
- Must not have adverse credit history as determined by federal regulations
- Must not be in default on any student loan

Must have exhausted all Direct Stafford Subsidized and Unsubsidized Loan Limits prior to utilizing this Grad PLUS loan.

## Credit checks

While credit checks are required to be eligible, credit criteria are less restrictive than those for most private student loans. If you do not meet the credit requirements, you may still qualify for the loan if you have someone who does meet the credit requirements endorse the loan. An endorser, unlike a co-signer, is not liable for your Graduate PLUS loan debt if you become permanently disabled or die.

## How does the process begin?

To apply, complete the Free Application for Federal Student Aid (FAFSA). You must first be offered subsidized and/or unsubsidized direct loans. You must accept, reduce, or decline these loans prior to requesting the Direct Grad PLUS Loan.

## Master promissory note

Before the loan can be disbursed, you must complete a separate MPN. Read carefully all of the terms and conditions of the Grad PLUS Loan explained in the MPN. By signing the MPN, you promise to repay the loan. You can sign the required MPN electronically with your U. S. Department of Education-issued PIN. If you don't already have their PIN, you can request one on the official PIN site.

The Grad PLUS MPN can be used for one or more loans in one or more academic years. This means that, in most cases, you may receive additional Direct PLUS loans for up to 10 years without completing a new PLUS MPN.

## Entrance counseling

First-time borrowers under this loan program are required to complete entrance counseling. Your loan(s) will not disburse until you have successfully completed the entire entrance counseling process.

Complete the term online at the U.S. Department of Education's site www.studentloans.gov.
Once at the site, $\log$ in and select Entrance Counseling. Make the selection corresponding to your loans:

- If you are new only to the Graduate PLUS loan program, select the middle option.
- If you are a first time borrower to both the Graduate PLUS loan program and the Ford Federal Direct Subsidized/Unsubsidized Loan program, select the third box and you will fulfill the entrance counseling requirement for both loan types.

Make sure to print a copy of the Borrower's Rights and Responsibilities for your records.

## Renewal

Awards cannot be automatically renewed. Students must apply annually and continue to meet the eligibility requirements listed above.

## Repayment

A Graduate PLUS borrower will receive a deferment while he or she is enrolled at least half-time at an eligible school. Upon dropping to less than half-time enrollment status, the borrower is not entitled to a grace period on his or her PLUS loans and repayment will begin within 45 days. The length of repayment and monthly payment amounts depend on the outstanding loan balance, the interest rate, and repayment policies. Interest on the Federal Direct Graduate PLUS Loan begins to accumulate at the time the first disbursement is made.

## Maximum Loan Amounts

The maximum Graduate PLUS Loan you may borrow per academic year is equal to your cost of attendance minus other financial aid (including Federal Direct Subsidized and/or Federal Direct Unsubsidized Loans for which you are eligible). There is no aggregate maximum loan limit for the Graduate PLUS Loan.

Your eligibility for a Graduate PLUS will be reduced accordingly if you borrow a private loan through an outside banking institution.

| William D. Ford Grad PLUS Loan Program |  |
| :---: | :---: |
| Eligibility Requirements | - US citizen or permanent resident <br> - Enrolled at least half-time in degree program <br> - Not in default on prior education loan <br> - Credit review required |
| Annual Loan Limits | Borrow up to the cost of attendance less other aid (including maximum Direct) |


| Aggregate Loan <br> Limits | No aggregate limit |
| :--- | :--- |
| Interest Rates | $7.9 \%$ fixed rate. Interest will begin to accrue once the loan is disbursed. |
| Fees | $4.0 \%$ less $1.5 \%$ interest rebate for a total of $2.5 \%$. |
| Rebate | Once in repayment, you must make 12 required monthly payments on time or the <br> rebate amount will be added back to the principal balance on your loan. |
| Source | U.S. Department of Education, which can be contacted at 800-848-0979 or <br> www.ed.gov/directloan. |
| Disbursement | Twice a year, at the beginning of each term. |
| Repayment | Begins 60 days after last disbursement of loan; however, students with enrollment <br> status of at least half-time will be eligible for a continuing education deferment of <br> repayment. |
| Special Repayment <br> Provisions | Income Based Repayment <br> Public Service Cancellation |
| Length of <br> Repayment | Standard 10-year repayment for loan borrowing under $\$ 30,000$. Extends to 25 years <br> over $\$ 30,000$. |

## ELIGIBILITY

Additional awards may be available to a student with extreme economic need, after his or her FAFSA has been received by the March 10 priority deadline. Eligibility requirements and responsibilities for need-based assistance are as follows:

1. Student must be a U.S. citizen or an eligible non-citizen.
2. Student must be admitted and enrolled at least half-time to Trine University.
3. Student must submit documentation to complete his or her financial aid file.
4. Student must be enrolled in the minimum number of credit hours needed to fulfill specific program requirements.
5. Student must complete the FAFSA.
6. Student must be accepted as a regular student in an eligible program that leads to a degree.
7. Student must not be in default on any Title IV loan (Perkins, NDSL, Federal Stafford, GSL, FSL) or owe a repayment on any Title IV grant (Federal Pell Grant, FSEOG, ACT, SMART, or TEACH grant) received for attendance at any institution.
8. Student must be registered with the U.S. Selective Service System if required by law.

## DISBURSEMENT

Aid will be disbursed as follows and based on eligibility at the time of disbursement: one half of Stafford Loans approximately four weeks into the first term with all other state aid, other half of Stafford Loans to disburse approximately four weeks into the second term. Aid is subject to change based on a student's enrolled hours at the time of disbursement. This aid is credited to the student's account in the Business Office.

## ENROLLMENT STATUS

Each type of aid requires students to enroll for a certain number of credit hours per two-term semester. Most federal aid requires at least half-time status (six credit hours); state and private aid requires full-time enrollment (a minimum of 12 credit hours). The maximum load for full-time graduate students is 12 credit hours per semester.

## MAINTAINING ELIGIBILITY

Currently enrolled students are required to maintain the appropriate grade point average for their financial aid and may reapply for aid in the spring for the next academic year.

## STUDENT RIGHTS AND RESPONSIBILITIES

Trine University is committed to working with each student to provide the best financial aid package possible. At the same time, each student has the responsibility to apply for the aid and to meet and maintain eligibility requirements. Following is a list of basic rights and responsibilities of the students in regard to financial aid:

- Students must apply for financial aid by completing a FAFSA a minimum of eight-ten (8-10) weeks prior to the start of the term.
- Financial aid information and counseling will be available.
- Students will be notified in writing of their eligibility for financial aid.
- Students will be informed of the specific type of financial aid, the amount of each type of aid and the conditions to renew each type.
- Students will have the opportunity to review with the SPS Financial Aid Adviser the planning process by which awarded aid was determined.
- Students may request an additional review of their aid package with the director of financial aid.
- All students who receive financial aid are required to abide by the policies and regulations of Trine University.
- Students receiving financial aid must inform the Office of Financial Aid about additional awards.
- Students must maintain satisfactory academic progress toward academic goals.
- Students must maintain good social standing.
- Students must reapply for financial aid annually.
- Students must report to the Office of Financial Aid when transferring to another school.
- If applicable, students must participate in the Federal Stafford Graduate Loan entrance and exit interviews.
- Students must report to the Office of Financial Aid when adding or dropping classes after the term begins.


## APPEALS

Appeals to financial aid decisions can be filed with the director of financial aid, who will present them to the financial planning review committee. Appeals must be filed in a timely manner. Not all students will be eligible for an appeal.

## REFUNDS AND REPAYMENTS

If a student withdraws from classes during the semester, a calculation is required to determine how much money may be refunded to the student's account and how much must be refunded back to the federal programs.

## COUNSELING SERVICES

Counseling Services provides assistance and support to students on an individual or group basis. All counseling is provided free of charge and is strictly confidential. The Trine University counselor is a state licensed clinician who is experienced in providing services for a wide array of personal and/or mental health needs. Other areas in which students may seek services include stress management, decisionmaking, relationship issues, conflict resolution, family concerns, academic performance, career/major selection, separation and loss issues, alcohol or substance use, as well as other matters which may be detrimental to a successful college experience.

Counseling Services also provides outreach and consultation to regional education center organizations, groups or classes. Outreach programs are available to provide prevention education for a variety of topics, such as balancing responsibilities, developing healthy relationships, enhancing personal safety, confronting alcohol and/or drug use, and any other issues of primary concern to students.

Counseling Services is located in the Office of Student Life Office 260.665.4172 in the University Center. The counselor is available by appointment weekdays from 8 a.m. to 5 p.m. Evening appointments are available upon request.

## DISCIPLINE STRUCTURE

See SPS Student Handbook

## CAREER SERVICES

Our goal is to equip you with the tools you need to get major-related work experience prior to graduation and to help you secure a full-time job upon graduation. We offer one-on-one counseling, workshops with guest speakers, and host alumni and employers who visit campus for recruiting. We provide assistance with the following:

- Resume/Cover Letter Writing
- Interviewing Techniques
- Job Search Strategies
- Employer Information terms
- On-campus Interviews
- Career \& Internship Fairs
- Internships and co-ops
- Networking
- Career Planning/Graduate School

Join our Facebook group, "Trine University Career Services" to get instant updates on what's happening. Get to know us prior to your part-time, internship, co-op, and/or full-time job search. Register with our office at www.trinecareers.org and stop in to introduce yourself. Career Services is located on the first floor of Shambaugh Hall on the main campus. For more information, contact Linda Bateman, Director of Career Services, at 260.665.4124 or batemanl@trine.edu.

## SCHOOL OF PROFESSIONAL STUDIES GRADUATE PROGRAMS

The School of Professional Studies offers the following graduate degree programs through Trine University at all SPS locations.

- Master of Science with a Major In Criminal Justice
- Emergency Management concentration
- Forensic Psychology concentration
- Public Administration concentration
- 
- Master of Science in Leadership
- Athletic Administration
- Biomedical Regulatory Affairs concentration
- Healthcare Systems Studies concentration
- Instructional Leadership Higher Education concentration
- Instructional Leadership K-12 Concentration
- International Studies concentration
- Non-Profit Organization Studies concentration
- Political Leadership \& Civic Engagement concentration
- Strategic Foresight and Entrepreneurship concentration
- Sustainable Business Administration concentration


## GRADUATE ADMISSION CRITERIA MASTER OF SCIENCE WITH A MAJOR IN CRIMINAL JUSTICE

The Master of Science with a major in criminal justice degree program is open to persons holding bachelor's degrees in a social science field from regionally accredited colleges and universities and whose undergraduate work has been of sufficient quality and scope to enable them to successfully pursue graduate study. An undergraduate degree in criminal justice is preferred; however, if the undergraduate degree is other than criminal justice, a core of criminal justice prerequisite courses will be required. At the discretion of the SPS Director of Criminal Justice, these course prerequisites may be waived for applicants who have a significant amount of documented professional experience with a criminal justice agency.

A candidate for the master's program must have the following:

- A Bachelor of Science degree (or equivalent) with a general education component from a regionally accredited institution.
- A minimum composite undergraduate grade point average (GPA) of 3.0 on a 4.0 scale.
- An official transcript showing a bachelor's degree awarded by an accredited college or university with an acceptable grade point average.
Conditional admission may be determined by the SPS Director of Criminal Justice as described in "Admission Classification" section of University Graduate Policy.
A maximum of six hours of credit from another accredited graduate program may be transferrable, upon approval of the SPS dean. Graduate courses taken and applied to the Bachelor of Science degree in criminal justice will not apply to the graduate program.

Students must have a 3.0 GPA to graduate. Students who drop below a 3.0 GPA at any time in the program will be dismissed.

## DESCRIPTION: MASTER OF SCIENCE WITH MAJOR IN CRIMINAL JUSTICE

The Master of Science with a major in criminal justice is an accelerated degree program that provides education for both preand mid-career individuals serving their communities as law enforcement, corrections, court practitioners or with private agencies that deliver services in the justice arena. The curriculum is designed to prepare these professionals to assume key leadership roles within the justice system or the private sector by enhancing their ability to:

- Analyze information, identify emerging trends, and implement solutions to crime problems
- Evaluate agency performances and plan for increased effectiveness
- Successfully manage human and financial resources in the public arena

We define the justice system as a continuum of interrelated processes, personnel, and agencies from prevention of crime through the reintegration of offenders into society.

The Master of Science degree with a major in Criminal Justice (MSCJ) is a professional graduate degree program structured around knowledge and career-oriented skills essential for administrative or managerial positions within governmental, quasi-governmental and private sector organizations. The program provides concepts and skills that can be used by professionals in a multitude of roles within an ever-changing dynamic criminal justice field. The course work for the program consists of 21 credit hours of core coursework and 15 credit hours in a selected concentration. 36 credit hours of coursework are required for completion of the degree.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

## Master of Science with a Major in Criminal Justice - Program Goal:

The goal is to prepare criminal justice professionals with advanced competencies in their respective specialties and areas of interest and to emphasize excellence in practice, problem-solving, critical thinking, inquiry, and leadership.

## Master of Science with a Major in Criminal Justice - Program Objectives:

Objective \#1: The students will be able to apply knowledge of an increased understanding of the professional skills in the field of criminal justice.
Objective \#2: The student will be able to apply knowledge in a concentration area as it interfaces with criminal justice.

## MASTER OF SCIENCE WITH MAJOR IN CRIMINAL JUSTICE COURSE REQUIREMENTS



## Emergency Management Concentration <br> (15 Hrs.)

EM 503 Advanced Principles of Emergency

Management
EM 513 Seminar in Hazard Mitigation
EM 623 Comprehensive Risk Assessment \& Vulnerability
EM
653 Managing Disaster Relief

Forensic Psychology Concentration
FPY 603 Theory \& Practice of Forensic

FPY 613 Psychopathology


## GRADUATE ADMISSION CRITERIA MASTER OF SCIENCE IN LEADERSHIP

The Master of Science in Leadership degree program is open to persons holding a bachelor's degree in a business, engineering, arts or sciences field from a regionally accredited college or university and whose undergraduate work has been of sufficient quality and scope to enable them to successfully pursue graduate study. Admission requirements include:
. A completed application form.

- An official transcript showing a bachelor's degree with a general education component awarded from a regionally accredited institution.
- A minimum composite undergraduate grade point average (GPA) of 3.0 on a 4.0 scale.
- Applicants whose native language is not English must have a minimum score of 550 on the paper-based or 213 on the computer-based test of English as a foreign language (TOEFL).
Conditional admission may be determined by the SPS Leadership Program Director as described in "Admission Classification" section of University Graduate Policy.
Up to six credits earned at an approved institution with grades of "C" or better may be transferred to Trine University. Credits a student wishes to transfer toward a Trine University degree shall be evaluated and approved by the regional education center where the student is enrolled. Official transcripts must be received in order for college credit to be awarded. Credits earned toward an undergraduate degree will not be considered for transfer toward the master's degree.
Students must have a 3.0 GPA to graduate. Students who drop below a 3.0 GPA at any time in the program will be dismissed.


## DESCRIPTION: MASTER OF SCIENCE IN LEADERSHIP

The Master of Science in Leadership (MSL) program is designed to provide advanced training in people- and problem-oriented competencies with skills that determine success. This organizational leadership program is aimed at students who have achieved undergraduate degrees in a variety of professional content areas, thus meeting the needs of a wide range of the adult market. The program will provide advanced theory and training in organizational management, decision-making, problem solving and leadership skills so that individual s may progress in their career journeys and are currently employed in professional occupations in which visionary leadership is a necessary and valuable asset. The degree program promotes and encourages lifelong learning for those involved in a variety of fields in which visionary, strategic leadership is requisite to success.

## School of Professional Studies Mission

Our mission is to provide quality, continuous higher learning opportunities for adults who want to begin or advance in careers, enhance lifelong learning, and keep pace with the growing complexities of today's world.

Master of Science in Leadership program goal is to equip professionals with the theoretical and applied leadership knowledge, capabilities, and characteristics needed to positively impact organizations across multiple sectors.

## Master of Science in Leadership program objectives are:

Objective \#1: Graduates will exhibit ethical, vision-oriented leader behaviors capable of creating a dynamic environment.
Objective \#2: Graduates will exhibit comprehensive understanding of the cultural landscape of organizations and implications for leading and building effective communities at all levels.
Objective \#3: Graduates will apply sustainable business practices and strategies that will maintain success in a global economy.
Objective \#4: Graduates will employ organizational behavior strategies that provide leadership for effective change management within the context of organizational goals.
Objective \#5: Graduates will utilize strategic information to design and monitor organizational communication, capabilities, and performance.

The Master of Science in Leadership degree requires the completion of 36 semester credit hours, 24 of which are core for all students, and 12 of which are clustered into one of six concentration areas: biomedical regulatory affairs, healthcare systems studies, international studies, non-profit organization studies; strategic foresight and entrepreneurship, or sustainable business administration. Cohort groups will progress through a series of twelve 8 -week, three-credit hour classes over the span of 12 months to complete the Master's degree.

## MASTER OF SCIENCE IN LEADERSHIP COURSE REQUIREMENTS

| Master of Science in Leadership | 36 Hrs. <br> Program Requirements |
| :--- | ---: | ---: | ---: |
| Leadership Core | (21 Hrs.) |
| Required Hours |  |

Biomedical Regulatory Affairs Concentration (15 Hrs.)
LDR 6103 Introduction to Biomedical Regulatory
Affairs
(3)

| LDR | 6123 | Product Development and <br> Manufacturing Systems |
| :--- | :--- | :--- |
|  | (3) |  |
| LDR | 6143 | Product Testing, Evaluation, |
|  |  | (3) |

(3)

LDR 6166 Biomedical Regulatory Affairs Capstone

## Healthcare Systems Studies Concentration (15 Hrs.)

LDR 6803 Leadership and Management of Healthcare Systems
LDR 6823 Legal and Ethical Issues in Healthcare Leadership
LDR 6843 Organization and Economics of Healthcare Delivery Systems
LDR 6866 Healthcare Leadership Capstone

## Instructional Leadership - Higher Education

Concentration

| Hrs.) |  |  |
| :---: | :---: | :---: |
| LDR | 6513 | Students and Stake holders in the |
|  |  | Higher Education Environment |
| LDR | 6533 | Teaching and Learning in Higher |
|  |  | Education |
| LDR | 6553 | Principles and Practices of Academic |
|  |  | Advising |
| LDR | 6576 | Instructional Leadership Capstone |
|  |  | Course - Higher Education |
| Instructional Leadership - K-12 Concentration |  |  |
| Hrs.) |  |  |
| LDR | 6503 | Foundations of Instructional Leadership |
| LDR | 6523 | Designing, Managing, and Monitoring |
|  |  | Standards-driven Curriculum |
| LDR | 6543 | Systematic Improvement of Instructional |
|  |  | Practices |
| LDR | 6566 | Instructional Leadership Capstone K-12 |

International Studies Concentration
(15 Hrs.)

| LDR | 6003 | Fundamentals of Global Business |
| :---: | ---: | :--- |
|  |  | Leadership |
| LDR | 6023 | International Marketing and Economics |
|  |  | for Leaders |
| LDR | 6043 | Global Logistics and Supply Chain |
|  |  | Management for Leaders |
| LDR | 6066 | International Studies Capstone |

## Nonprofit Organizational Studies Concentration

Hrs.)
LDR 6203 Nonprofit Sector Foundations
LDR 6223 Economic Sustainability of Nonprofit Organizations
LDR
6243 Quantitative Methods for Nonprofit Organization Planning and Evaluation
LDR
6266 Nonprofit Organization Studies Capstone

## Political Leadership \& Civic Engagement

 Concentration| LDR | 6303 | Political Marketing and Management |
| :--- | :--- | :--- |
| LDR | 6323 | Leading Community Engagement |


| LDR | 6343 | Public Governance and Servant <br> Leadership |
| :--- | ---: | :--- | ---: |
| LDR | 6366 | Political Leadership \& Civic Engagement <br> Capstone |
| Strategic Foresight \& Entrepreneurship |  |  |
| Concentration |  |  |
| LDR | 6403 | Fundamentals of Foresight and |
|  |  | (15 Hrs.) |
| LDR | 6423 | Feasibility Analysis for New Ventures |
| LDR | 6443 | Business and Marketing Plans for |
|  |  | New Ventures |
| LDR | 6466 | Global Entrepreneurship Capstone |

Sustainable Business Administration Concentration
(15 Hrs.)
LDR 6603 Leading the Sustainable Business (3)
LDR 6623 Business Management and Environmental Leadership
LDR 6643 Sustainability and Business Opportunity (3)
LDR 6666 Sustainable Business Administration
Capstone

## GRADUATE COURSE DESCRIPTIONS

## KEY TO COURSE PREFIXES

CRJ Criminal Justice
EM Emergency Management
LDR Leadership

## COURSE NUMBERING SYSTEM

Course numbers are found at the beginning of the course description immediately following the course prefix.
Courses numbered 500/5000: Graduate-level courses
Courses numbered 600/6000: Graduate-level courses

## EXAMPLE OF COURSE PREFIX AND NUMBER

AC 303: This course prefix and number means that this is an Accounting junior level course.

## COURSE TITLE

The course title follows the course prefix and number.

## COURSE DESCRIPTIONS

## CRIMINAL JUSTICE GRADUATE COURSES

## CRJ 503 SEMINAR IN LAW AND SOCIAL CONTROL 3 CR

An introduction to legal theory and the moral, practical and legal implications of law as a means of maintaining social order. The course will also examine the impact of economic and political forces on social control.

## CRJ 513 CRIMINOLOGY 3 CR

The study of the nature, extent, cause and control of criminal behavior. Students will examine the ways in which crime is measured, identify various crime typologies, and explore a wide range of crime causation theories.

## CRJ 523 THE AMERICAN SYSTEM OF JUSTICE 3 CR

An examination of the core components of the criminal justice system: courts, law enforcement, and correctional agencies. Particular emphasis will be placed on the interrelationship between the various components as they attempt to meet their individual mandates.

## CRJ 533 CRIMINAL JUSTICE POLICY FORMATION AND ANALYSIS 3 CR

A study of the methodology behind law, statute and policy creation in the public criminal justice arena. Includes a discussion of the American political system and an evaluation of key public policies that impact the justice system.

## CRJ 553 APPLIED STATISTICS FOR CRIMINAL JUSTICE 3 CR

The study of data analysis as it relates to the social sciences. Topics will include inductive and descriptive analysis, sampling, and methods of evaluation. The emphasis will be on practical application of statistics to criminal justice situations.

## CRJ 563 PLANNING, \& PROGRAM EVALUATION 3 CR

An overview of program planning and intervention principles for the public administrator. Students will review methodologies for identifying public issues, planning for them, and assessing outcomes. Attention will also be given governmental policies as they impact program planning.

## CRJ 593 DEMONSTRATION PROJECT CAPSTONE 3 CR

An in-depth application of the concepts contained in the core courses. Under the direction of a criminal justice faculty member, the student will design, research, and complete a project that will then be formally presented to a committee of at least two full-time or adjunct professors.

## CRJ 603 THEORY AND PRACTICE OF PUBLIC ADMINISTRATION 3 CR

An examination of factors that impact public administration, including organizational design, political relationships, and the environment, with an emphasis on ethical behavior in the public arena.

## CRJ 613 PUBLIC ORGANIZATIONAL BEHAVIORAL AND HUMAN RESOURCE MANAGEMENT 3 CR

A study of the importance of organizational planning, quality decision-making, and budget management. The course will also examine the methods and procedures necessary for managing in the public arena.

## CRJ 623 GOVERNMENTAL ACCOUNTING, FINANCE AND BUDGETING 3 CR

An in-depth look at accounting, finance and budgeting practices in public administration, including fundamental concepts of accounting principles.

## CRJ 643 LAW AND PUBLIC POLICY 3 CR

This course provides an overview of several key legal issues faced by administrators within criminal justice public agencies. It focuses on statutory and Constitutional public employment rights and the Constitutional limitations on these administrators' interactions with prisoners, probationers and parolees. It also addresses core issues faced by public managers in the field of administrative law.

## CRJ 693 PUBLIC ADMINISTRATION DEMONSTRATION PROJECT 3 CR

An in-depth analysis of the concepts contained within the concentration courses. Conducted under the direction of a criminal justice faculty member, the student will design and implement a capstone project, and then present the results to a committee of at least two full-time or adjunct professors with public administration experience.

## EM 503 ADVANCED PRINCIPLES OF EMERGENCY MANAGEMENT 3 CR

This course prepares the emergency manager to assess, mitigate and manage emergencies that impact our communities in accordance with national standards. Emphasis is place on the roles of government agencies-local, state, and federal - and the facilitation of strategic plans that address unique community situations. A global perspective for emergency management activities is stressed.

## EM 513 SEMINAR IN HAZARD MITIGATION 3 CR

The focus of this course will be to equip emergency managers to address principles of community resilience for both natural and manmade disasters, to implement formal risk assessments, and to involve private sector entities in mitigation strategies. Particular emphasis will be placed on the development and facilitation of a formalized planning process in the successful mitigation of potential hazards.

## EM 623 COMPREHENSIVE RISK ASSESSMENT AND VULNERABILITY 3 CR

This is a project-based course that integrates hazard, risk, and vulnerability analyses within a comprehensive disaster management strategy. A focus will be on assisting local communities to assess their unique vulnerabilities and develop policies and processes that mitigate those hazards. Special attention will be placed on maintaining business contingency plans and continuity of operations.

## EM 653 MANAGING DISASTER RELIEF AND RECOVERY OPERATIONS 3 CR

This course is designed to develop competency in damage assessment, disaster declaration, and debris management for both natural and man-made disasters. The focus will be on supervising programs and personnel in accordance with national standards, policies, and procedures, as well as on providing leadership for recovery solutions and future disaster mitigation.

## EM 693 EMERGENCY MANAGEMENT DEMONSTRATION PROJECT 3 CR

An in-depth analysis of the concepts contained within the concentration courses. Conducted under the direction of a criminal justice faculty member and a professional emergency management specialist, the student will design and implement a capstone project, and then present the results to a committee of at least two full-time or adjunct professors, one of which has professional emergency management or first responder experience.

## FPY 603 THEORY \& PRACTICE OF FORENSIC PSYCHOLOGY 3 CR

A study of the fundamental elements encompassing the practical and research application of forensic psychology. Students will examine the variables associated to: (a) ethical issues, (b) psychological assessment, (c) police and correctional psychology, (d) child custody evaluations, (e) trial consultation procedures, (f) criminal investigative techniques, (g) eyewitness memory, and (h) insanity pleas and competency evaluations. Prerequisites: Completion of all MSCJ core courses

## FPY 613 PSYCHOPATHOLOGY 3 CR

An in-depth analysis of mental illness and its association with criminal behavior, to include identification of patterns of psychopathy and sociopathy and the comparison of disparities and similarities between the two,. Various disorders will be examined and applied the causation of crime. This course will also examine the DSM-IV in relation to criminal behavior. Prerequisite: FPY 603

## FPY 623 EVALUATION \& TREATMENT OF SPECIALIZED POPULATIONS 3 CR

This course provides an overview of the methods and modalities utilized to assess and treat sex offenders, substance abuse offenders, juveniles, and domestic violence perpetrators. Students will concentrate on each classification and interrelationships associated to application, treatment, assessment, and evaluation of the variables accompanying each classification. Prerequisite: FPY 603

## FPY 643 VICTIMOLOGY 3CR

This course involves the study of victims and witnesses of crime. An emphasis will be placed on the psychological and emotional detriments associated with being victimized an the classification of the types of victims. Criminological theory will be applied to address the reasons that certain victims are more attractive to offenders than others, and to examine a victim's reaction to crime.
Prerequisite: FPY 603

## FPY 693 FORENSIC PSYCHOLOGY DEMONSTRATION PROJECT 3CR

An in-depth analysis an synthesis of the concepts contained within the concentration courses. Conducted under the direction of a criminal justice faculty member the student will design and implement a capstone project, and the present the results to a committee of two full time or adjunct professors who specialize in criminal justice and/or forensic psychology. Prerequisites: FPR 603, FPY 613, FPY 623, and FPY 643

## LEADERSHIP GRADUATE COURSES

## LDR 5003 LEADERSHIP PHILOSOPHY 3 CR

An exploration of the nature of business leadership models and theories, examining these models through a broad variety of insights and viewpoints. Provides a description and analysis of these approaches to leadership, giving special attention to how the models can improve leadership in the real-world organization.

## LDR 5023 STRATEGIC LEADERSHIP 3 CR

A study of the formulation of strategy and policy in the organization, emphasizing the integration of strategic decisions across the functional areas and across multiple business units. Significant emphasis is placed on the critical role that leaders play in driving organizational success while concurrently ensuring ethical soundness.

## LDR 5043 ORGANIZATIONAL SYSTEMS AND CULTURES 3 CR

This course will equip students to fully understand the complexities of organizational systems and cultures, the ways in which these forces manifest themselves, and the means by which leaders intentionally impact the shape that these forces take in their organizations. Students will explore the application of various organizational systems and cultures theories to case studies, as well as to their current professional settings. Additionally, students will research and critically analyze the comparative cultures of two organizations from the same industry. The findings related to this research will be presented in the form of an Executive Presentation and related written analysis report. Prerequisites: LDR 5003, LDR 5023

## LDR 5063 ORGANIZATIONAL DEVELOPMENT AND CHANGE 3 CR

An exploration of the behavioral forces and relationships that influence organizational effectiveness and change. Topics include the study of intervention strategy and application skills. Prerequisites: LDR 5003, LDR 5023

## LDR 5083 CONFLICT RESOLUTION FOR LEADERS 3 CR

Conflict is a fact of everyday professional and personal life. If conflict is mishandled, it can be a source of considerable stress and lead to lost productivity. Much of the success and satisfaction we find in life is determined by how we respond to conflict. Leaders especially must respond well in conflict situations and should willingly accept the consequences of their conflict responses. This course explores theories, methods, skills, and practices associated with successfully engaging in the dynamics of conflict interactions. Prerequisites: LDR 5043, LDR 5063

## LDR 5203 LEADERSHIP ETHICS, CULTURE, AND POLITICS 3 CR

This course compares and contrasts the disciplines of leadership with an emphasis on fostering organizational culture and personal ethics. Topics will include historical and contemporary leadership theories applied across a wide variety of organizational contexts. Prerequisites: LDR 5043, LDR 5063

## LDR 5223 ORGANIZATIONAL COMMUNCATIONS FOR LEADERS 3 CR

This course is designed to examine the theoretical and applied literature in the field of organizational communication relevant to organizational leadership. The different perspectives on organizational theory - the classical, systems approach, cultural, etc. - will be studied and compared. In addition, such applied topics as organizational socialization, conflict, and the impact of technology on organizational communications will be investigated. Prerequisites: LDR 5083, LDR 5203

## LDR 6003 FUNDAMENTALS OF GLOBAL BUSINESS LEADERSHIP 3 CR

This course provides students with a practical but intellectually challenging roadmap to their development as international business leaders. Different challenges and insights provided by leaders from industry and government enable students to explore leadership as a concept and as a vocation. Students will understand the dynamics of the worldwide marketplace, evaluate the different dimensions of international business, and examine leadership traits and skills managers must possess to effectively lead in rapidly expanding and volatile global economy. They will study management practices of global leaders while identifying the drivers of international business. Students will learn how to recognize and how to work through many of the barriers, challenges, and differences of international business to become global leaders. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6023 INTERNATIONAL MARKETING AND ECONOMICS FOR LEADERS 3 CR

Post W.W.II, the trend toward freer trade and accelerating technological change, has been altering the world's economic landscape via the process of globalization. The recent drift toward regionalism (e.g., unifying European and North American
markets), the collapse and subsequent restructuring of many of the world's national economies such as in the Soviet and Eastern European economies, have served as massive economic experiments. Global recession and recovery have been studies to glean what has worked and what has failed in each of these examples yielding critical information for future marketing strategies. This course is designed to introduce some of the key issues of these international events that can be incorporated into multinational marketing. This class will focus on issues involved in marketing products and services across national boundaries. Culture, economic arrangements, technical standards, currency movements, language, religion, ideology, politics, distance and conflicting interpretations of national and global interests combine to complicate the administration of marketing's familiar 4-Ps crossnationally. This course uses a combination of lectures, global marketing cases, discussion, and mini projects to examine specific issues currently involved in multinational marketing strategies. In addition, students will study the concepts of international finance (international monetary relations) and financial policies, international loans, balance of payments accounting, exchange rates, reserve and payments currencies, and international liquidity. Of particular interest is the impact of the U.S. economy of international financial developments. Balance of payments adjustment under fixed and flexible exchange rates and under the gold standard will be considered in detail. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6043 GLOBAL LOGISTICS AND SUPPLY CHAIN MANAGEMENT FOR LEADERS 3 CR

This course demands from students to develop cutting-edge logistics strategies to gain competitive advantage and a comprehensive understanding of managing logistics in a global setting. It covers principles of logistics activities in international business with special emphasis on transportation, global sourcing, customs issues, import-export opportunities, customs documentation, and the role of government in international transactions, customer service, information technology, and global supply chain management. Special emphasis is placed on current events and their effect on the marketing and logistics activities of global organizations. Students will evaluate the advantages and disadvantages of the location of different facilities in a global context, and the tangible and intangible resources required for effective supply chain decision making. They will coordinate logistics activities across supply chains and choose between different options for effectively delivering logistics services.

## Prerequisites: All LDR core courses or admission to the concentration

## LDR 6066 INTERNATIONAL STUDIES CAPSTONE 6 CR

This course is designed to provide a capstone or conclusion to the International Studies Concentration. Its objective is to provide an opportunity to conduct independent research on an International Studies theme, analyzing a contemporary policy issue. The topic will be selected by the students, so that they can integrate the linkages between the themes, areas, and disciplinary foci of study, and apply the analytical frameworks, professional writing, research, and leadership skills acquired during the program.
Prerequisites: All LDR core courses LDR 6003

## LDR 6103 INTRODUCTION TO BIOMEDICAL REGULATORY AFFAIRS 3 CR

This course surveys government oversight of devices and biotechnology derived products; laws and regulations that apply to development, testing and production. It also addresses the responsibilities of a regulatory affairs specialist the regulatory setting. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6123 PRODUCT DEVELOPMENT AND MANUFACTURING SYSTEMS 3 CR

This course covers product development and manufacturing concerns (such as quality control, scale-up, good manufacturing practices (GMPs) and quality systems), the U.S. Food and Drug Administration inspection process, and FDA regulatory actions. Focus on the QSIT (Quality System Inspection Technique). Prerequisites: All LDR core courses, LDR 6103 or admission to the concentration

## LDR 6143 PRODUCT TESTING, EVALUATION, CLINICAL TRIALS, AND POSTMARKET ISSUES 3 CR

This course focuses on post-marketing requirements, reporting and enforcement actions. Emphasis is on inspection (internal and by regulators) preparation, conduct and follow-up actions. It also introduces the major concepts under which clinical trials are
designed and run, including the phases of clinical trials, study design and statistical concepts, the role of the U.S. Food and Drug Administration, Institutional Review Boards, the Code of Federal Regulations and ethical principles. Post-marketing surveillance and studies, and reimbursement and economics of biomedical interventions are discussed. Prerequisites: All LDR core courses, LDR 6103 or admission to the concentration

## LDR 6166 BIOMEDICAL REGULATORY AFFAIRS CAPSTONE 6 CR

This course provides a practical experience to ensure that participants can conceptualize the shepherding of new biomedical products through regulatory, clinical and quality assurance aspects. Students work on projects of their choice under the guidance of an adviser. The final report will consist of a comprehensive regulatory strategy work plan for a product, using knowledge gained in the concentration-area courses. Prerequisites: All LDR core courses LDR 6103

## LDR 6203 NONPROFIT SECTOR FOUNDATIONS 3 CR

An examination of the social and legal history of nonprofit organizations in the United States, to develop an historical perspective and a sense of magnitude, scope, and functions of the nonprofit sector and its relationships with business and government. This course will first explore the theoretical bases upon which social scientists have sought to understand the role of the nonprofit sector in our economy and in our political and social systems, and will explore the issues that will shape the future of the sector. Learners will also receive a basic grounding in the laws and regulations governing nonprofit organizations. Content will include the procedures for incorporating, reporting, and maintaining tax-exempt status as a nonprofit organization, a familiarity with legal principles and research methods, and an overview of the legal, regulatory, and policy issues facing contemporary nonprofit organizations. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6223 ECONOMIC SUSTAINABILITY OF NONPROFIT ORGANIZATIONS 3 CR

This course will provide the student with an understanding of basic principles of micro-economic analysis, put the nonprofit sector into perspective within the framework of the overall economy, and present strategies for organizational sustainability that incorporate fund development programs, private, corporate and government funding streams. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6243 QUANTITATIVE METHODS FOR NONPROFIT ORGANIZATION PLANNING AND EVALUATION 3 CR

This course will give students working knowledge of data analysis, statistical concepts, use of computers, research designs for program planning and evaluation, and quantitative techniques for problem solving. The intent is to ensure that executives and leaders are able to effectively utilize and interpret statistical data, technical reports, research findings, and evaluation studies, and employ basic quantitative methods in their own analysis of programs, problems and policies. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6266 NONPROFIT ORGANIZATION STUDIES CAPSTONE 6 CR

This course is the capstone course for all students in the Nonprofit Concentration. The capstone is a special project conducted in a nonprofit organization. It may be arranged within the organization in which the student is employed or in another organization which agrees to work with the student on a project of mutual interest. It is anticipated that most projects will be arranged within agencies in which students currently work. The capstone experience affords each student an opportunity to go through a process that will generate a solution(s) to a critical problem or issue for the organization. Prerequisites: All LDR core courses, LDR 6203

## LDR 6303 POLITICAL MARKETING AND MANAGEMENT 3 CR

This course empowers students to create an interdisciplinary strategy to analyze constituent priorities and community resources, effectively engage media and society in framing public debate, and facilitate effective political leadership that can implement chosen policies. The principles of power and leadership are explored, featuring effective state and national political leaders who discuss their principles of leadership and engagement. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6323 LEADING COMMUNITY ENGAGEMENT 3 CR

This course provides the student with a deeper understanding of the major components and principles of civic leadership. Classroom activities examine the leadership process in the context of community and society. This approach encourages ordinary citizens to take responsibility, organize, and build coalitions for the purpose of productive public discussion. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6343 PUBLIC GOVERNANCE AND SERVANT LEADERSHIP 3 CR

This course explores the essential elements of effective governance within the framework of servant leadership, which is essential for the survival of a democratic Republic. The legal, moral, and ethical implications of these elements will be in both historical and contemporary contexts. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6366 POLITICAL LEADERSHIP \& CIVIC ENGAGEMENT CAPSTONE COURSE 6

$\mathbf{C R}$ This course is the capstone course for all students in the Political Leadership \& Civic Engagement Concentration. The capstone is a special project conducted within a local, state, or national community setting. It may be arranged within the organization in which the student is employed or in another organization which agrees to work with the student on a project of mutual interest. The capstone experience affords each student an opportunity to apply the skills, knowledge, and abilities gained through the leadership core and concentration-area content courses in a process that will generate a solution(s) to, or facilitate substantive public debate of a critical problem or issue. Prerequisites: All LDR Core Courses, All Political Leadership \& Civic Engagement Concentration applied skills courses

## LDR 6403 FUNDAMENTALS OF FORESIGHT AND ENTREPRENEURSHIP 3 CR

This course will cover the fundamentals of broad topics in entrepreneurship, including human dimension of entrepreneurship, nature and role of entrepreneurship, economics of entrepreneurship, and corporate entrepreneurship. Students will gain a basic understanding of the entrepreneurial process of venture creation and innovation or the art and skill of finding viable new-business opportunities and the resources needed to develop and profit from them. In addition, students will examine the marketing, management, operations and financial functions needed to successfully start-up a new business whether a sole-proprietorship, partnership or division of a corporation. An emphasis will be placed on foresight, where students will utilize current analytical reports to foresee future events and outcomes, and then acting in accordance so as to arrive at the future in a desired state. They will accomplish this by applying creative and innovative thinking and work as a team to develop new ideas and scenarios around selected contemporary issues. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6423 FEASIBILITY ANALYSIS FOR NEW VENTURES 3 CR

The course focuses on business start-ups, providing an intensive introduction to business planning from the defining of a "primary vision" through market size assessment and strategic operations planning, to the financing, staffing and implementation of the new venture. Course includes readings on entrepreneurship, case studies of both small and large examples of successful new ventures and student fieldwork. Software available to help business planning will be introduced for hands-on use. Students will each prepare a formal business plan for new ventures. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6443 BUSINESS AND MARKETING PLANS FOR NEW VENTURES 3 CR

The core of this course provides the theoretical and practical skills required to produce a comprehensive business plan integrating marketing, organizational behavior and financial planning via a flexible corporate strategy and it focuses on marketing planning and emphasizes the analysis of customer needs as well as company and competitor capabilities. This analysis forms the basis of a sound marketing strategy that provides value to customers in a way superior to competitors. Among other topics, students will discuss strategic and managerial analysis and securing start-up financing for new ventures. They will learn how to deliver the marketing strategy through the development of an integrated marketing program covering product offerings, pricing, promotion, and distribution and how to perform presentation of a professional business plan. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6466 GLOBAL ENTREPRENEURSIP CAPSTONE 6 CR

This course is designed to provide a capstone or conclusion to the Strategic Foresight and Entrepreneurship Concentration. The emphasis in this course is for students to develop the ability to create and grow a global venture. Students will apply the knowledge and skills acquired in their courses to the work environment using the business plan model. Along with the aspects and characteristics of global entrepreneurs and the global entrepreneurship process, concepts of creativity, innovation and opportunity analysis are discussed both in individual and corporate setting as are global ethics, corporate governance, social enterprise and entrepreneurship. Student will develop a specific business idea, then examine the discussed concepts and include political risk, market opportunity, and operating conditions of their international market destination. Business plan is developed using market research options, entry modes, resource allocation, financial projections, and overall strategy for new ventures. Prerequisites: All LDR core courses, LDR 6403

## LDR 6503 FOUNDATIONS OF INSTRUCTIONAL LEADERSHIP 3 CR

This course will orient instructional leadership within the multiple contexts of child development, diverse learning environments, and an ever-changing political landscape. Students will explore current educational issues and use them to frame approaches to the continual improvement of academic instruction. Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6513 STUDENTS AND STAKEHOLDERS IN THE HIGHER EDUCATION ENVIRONMENT 3CR

This course introduces students to the major human development theories involving college students in American higher education. Special attention will be given to contemporary student development theory and research. Focus will also be directed toward understanding how this body of theory and research can be used to guide the design of policies and practices in higher education. Prerequisites: All LDR Core or admission to Concentration

## LDR 6523 DESIGNING, MANAGING, AND MONITORING STANDARDS-DRIVEN CURRICULUM 3 CR

This course will guide students in utilizing state standards frameworks to make sound decisions about what is important for students to learn; create, assess. select, and adapt a rich and varied collection of materials and strategies to support learning; and base their instruction on ongoing assessment. Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6533 TEACHING AND LEARNING IN HIGHER EDUCATION 3 CR

This course provides an overview of the issues, principles, and practices associated with effective college teaching. The course assumes, identifies, and uses a body of scholarly knowledge and research appropriate for study and application to the profession of college/university teaching. Topics examined include learning and diversity, teaching models and strategies, teacher and student behaviors and learning outcomes, and instructional improvement strategies. The interaction of theory and practice is an important theme (and challenge) of the course. Prerequisites: All LDR Core Courses - or admission to Concentration

## LDR 6543 SYSTEMATIC IMPROVEMENT OF INSTRUCTIONAL PRACTICES 3 CR

This course leads students through reflective and observational processes they can use to regularly analyze evaluate, reflect on, and strengthen the effectiveness and quality of their practice, and use their findings to advance knowledge and practice in their field. Strategies for mentoring new teachers and engaging in action research will be explored and applied. Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6553 PRINCIPLES AND PRACTICE OF ACADEMIC ADVISING 3 CR

This course examines the foundations of academic advising as essential components of student success and retention in higher education. Topics include developmental advising; research on academic advising; models and delivery systems; advising skills; including diverse populations; influences on the helping process such as personal characteristics, verbal and nonverbal
responses and behaviors, and ethical considerations; and evaluation, assessment, and reward systems for advisors and advising programs. Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6566 INSTRUCTIONAL LEADERSHIP CAPSTONE COURSE K-12 6 CR

This course is the capstone course for all students in the Instructional Leadership Concentration, K-12 Track. The capstone is a special project conducted within an existing educational setting. It may be arranged within the organization in which the student is employed or in another organization which agrees to work with the student on a project of mutual interest. The capstone experience affords each student an opportunity to apply the skills, knowledge, and abilities gained through the leadership core and concentration-area content courses in a process that will generate a solution(s) to or facilitate substantive consideration of a current educational need or issue. Prerequisites: All LDR Core Courses All Instructional Leadership Concentration applied skills courses co-requisite LDR 6543

## LDR 6576 INSTRUCTIONAL LEADERSHIP CAPSTONE COURSE - HIGHER EDUCATION 6 CR

This course is the capstone course for all students in the Instructional Leadership Concentration, Higher Education Track. The capstone is a special project conducted within an existing educational setting. It may be arranged within the organization in which the student is employed or in another organization which agrees to work with the student on a project of mutual interest. The capstone experience affords each student an opportunity to apply the skills, knowledge, and abilities gained through the leadership core and concentration-area content courses in a process that will generate a solution(s) to or facilitate substantive consideration of a current educational need or issue. Prerequisites: All LDR Core Courses - Instructional Leadership Concentration Higher Education applied skills courses, Co-requisite LDR 6553

## LDR 6603 LEADING THE SUSTAINABLE BUSINESS 3 CR

This course emphasizes the three aspects of sustainable business that improve a firm's long-term performance: managing risks (regulatory, reputation, litigation, and market), values-driven leadership, and recognizing market opportunities created by environmental and social challenges. Students will learn how to articulate the business case for sustainability, develop and lead internal and external coalitions needed to drive organizational change, and implement metrics for measuring progress and providing accountability. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6623 BUSINESS MANAGEMENT AND ENVIRONMENTAL LEADERSHIP 3 CR

In this course, students will gain expertise, enhance skills and broaden perspectives on environmental and natural resource management and leadership. As managerial effectiveness is central to environmental leadership, this course focuses on the development of management and leadership skills including decision-making, motivation, working in teams, organizational cultures, organizational design, and change management. Student will acquire cutting-edge environmental thinking providing them with the ability to make difficult environmental management decisions and effectively respond to environmental issues. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6643 SUSTAINABILITY AND BUSINESS OPPORTUNITY 3 CR

The primary objective of this course is to provide students with the skills, practical knowledge and experience in understanding needs not met effectively by current business practices and in developing innovative and proactive business strategies to address them. They will realize the sustainability challenges business and society are facing, how sustainability can be a business opportunity, and how businesses can increase their competitive advantage through sustainable strategies and innovation. The course emphasizes on the tools necessary to perform each business function (such as marketing, manufacturing, distribution, purchasing, HR R\&D, information systems, finance, accounting) taking environmental and social implications into account. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6666 SUSTAINABLE BUSINESS ADMINISTRATION CAPSTONE 6 CR

The purpose of the integrative capstone course is to provide opportunities for students to apply the lessons learned in their previous courses to a real organization. Course instruction will center around a series of integrated modules that will focus on the practical implementation of all aspects of the curriculum. Under the direction of faculty, this capstone course engages the student to work with a business chosen by the student and the development of a plan to significantly improve its sustainable business practices. Students will explore interconnections between the strategic foundation of their client project and the cultural, sustainable and core purpose and goals of their client's organization within a global business context. Prerequisites: All LDR core courses, LDR 6603

## LDR 6703 FOUNDATIONS OF ATHLETIC ADMINISTRATION 3 CR

This course will present a philosophy of the leadership and organization of interscholastic athletic programs, principles, strategies and methods of athletic administration, frameworks to identify and unify the athletic community through characterbased standards, and best practices in fundraising, marketing, and promotion of athletic programs and events. Incorporates NIAAA Short Courses: LTC 501, 502, 611, 720 (See attached NIAAA Professional Development Book for course descriptions). Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6723 LEGAL AND ETHICAL ISSUES IN ATHLETIC ADMINISTRATION 3 CR

This course will guide students in utilizing institutional and established legal guidelines to consider all aspects of liability related to athletic performance, and creating and maintaining a strategic plan for managing risk and maintaining safety, equity, and integrity in the context of interscholastic athletic programs. Incorporates NIAAA Short Courses: LTC 504, 506, 508, 617.

## Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6743 ATHLETIC FACILITY AND EVENT MANAGEMENT 3 CR

This course presents opportunities for students to analyze best practices and challenges to securing, maintaining, and managing safe, resilient, and attractive indoor and outdoor athletic facilities and equipment that is readily available to students for athletic preparation and interscholastic competitive events. Incorporates NIAAA Short Courses: LTC 615, 616, 618, 630.
Prerequisites: All LDR Core Courses or admission to Concentration

## LDR 6766 ATHLETIC ADMINISTRATION CAPSTONE COURSE 6 CR

This course is the capstone course for all students in the Athletic Administration Concentration,. The capstone is a special project conducted within an existing athletic setting. It may be arranged within the organization in which the student is employed or in another organization which agrees to work with the student on a project of mutual interest. The capstone experience affords each student an opportunity to apply the skills, knowledge, and abilities gained through the leadership core and concentration-area content courses in a process that will generate a solution(s) to or facilitate substantive consideration of a current interscholastic athletic need or issue. Incorporates NIAAA Short Courses: LTC 710A - Current Issues in American Sports. Prerequisites: All LDR Core Courses; Athletic Administration applied skills courses; co-requisite LDR 6743

## LDR 6803 LEADERSHIP AND MANAGEMENT OF HEALTHCARE SYSTEMS 3 CR

This course is an in-depth study of a range of issues and related problems faced by practicing managers and leaders in the rapidly changing healthcare/health services delivery system. Special emphasis is placed on the issues relevant to current challenges, and this emphasis is of utilitarian value to the participants. Examples of issues include rural and urban healthcare, managed care, ethics of healthcare, integrating technology, and leadership styles and traits. Prerequisites: All LDR core courses or admission to the concentration

LDR 6823 LEGAL AND ETHICAL ISSUES IN HEALTHCARE LEADERSHIP 3 CR

The course studies the legal framework of health Services and healthcare delivery, as well as the ethical issues confronted by healthcare administrators in various healthcare settings. Topics will include licensure, medical malpractice, liability, insurance issues, legal standards for care, confidentiality of records (HIPPA), informed consent, and patient rights and patient advocacy.
Prerequisites: All LDR core courses or admission to the concentration

## LDR 6843 ORGANIZATION AND ECONOMICS OF HEALTHCARE DELIVERY SYSTEMS 3 CR

The course provides an overview of the development of the current status of the healthcare system in the United States, its organizational structure, and operation of the various healthcare organizations, governmental as well as non-governmental, at the federal, state, and local levels. The course examines the structure and issues of the major Healthcare delivery systems including operation, marketing, financial management and sustainability of outpatient clinics, physician's offices, hospitals, long-term care facilities, self-help organizations, patient advocacy groups, accrediting agencies, and the insurance industry. Concepts addressed include demand (what physicians, patients and families want), supply, distribution, utilization of resources, market theories, and cost-benefit analysis, as they apply to healthcare as a service industry and including current and future payment systems for healthcare. Prerequisites: All LDR core courses or admission to the concentration

## LDR 6866 HEALTHCARE LEADERSHIP CAPSTONE 6 CR.

This capstone course will provide students the opportunity to integrate and synthesize previous course work in leadership with healthcare content through the creation and implementation of applied programming or secondary/archival research. Prerequisites: All LDR core courses, LDR 6803


[^0]:    *Seated face-to-face (eight week) and online TVC (six week) classes meet on different term schedules during the summer semesters.

