## 20192102

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## A MESSAGE FROM THE PRESIDENT



Welcome to Grantham University! The University Catalog is where you'll find information on all of Grantham's certificate and degree programs, as well as our course descriptions. By choosing Grantham and putting our full resources, dedicated staff and decades of experience behind you, we are confident that you will achieve your education goals.
Our comprehensive curricula has been designed with your particular needs in mind. Whether you are a first-time or returning student, looking to start a new career or simply expand your knowledge, our programs are convenient, accessible and affordable. For more than six decades, Grantham has taken great pride in serving those who serve, and our dedication to active duty military, veterans, first responders and civil servants has given us an extreme advantage in developing education that works for a diverse and varied student body. We excel in meeting you where you are and providing the knowledge, tools, support and opportunity you need to thrive.

As a Fighting Eagle, you have many options in personalizing and tailoring your education to your lifestyle, talents and passions. I encourage you to work with our highly qualified admissions representatives and dedicated student advisors to determine what's best for you. We are here to guide you in making a plan and succeeding in your journey.

We know that the vibrant and student-centered education you receive at Grantham University will prepare you for real-world, hands-on experiences and aid you in becoming a versatile, dynamic and well-rounded contributor to not only your chosen career field, but to your family and community as a whole.

We are committed to providing you a rewarding learning experience at Grantham, and we are extremely proud to be a part of wherever your path leads.

Grantham is here to serve you, and you have our best wishes for success.

Sincerely,


Dr. Anthony R. Petroy<br>President<br>Grantham University

UNIVERSITY CATALOG

201907
grantham.edu I admissions@grantham.edu

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## CORE PROFESSIONAL COMPETENCIES

Grantham University provides online programs of study across multiple disciplines. The common denominator in all these programs consists of key skill sets that we believe our students need in order to become successful in their personal and professional lives. We call these skill sets "core professional

## COMMUNICATION

Formulating and expressing thoughts and ideas effectively using oral, written and non-verbal communication skills in person, in writing and in a digital world.

## DISTRIBUTED COLLABORATION

Working effectively across distributed locations and asynchronously to achieve a common goal through relationship-building, shared responsibility, empathy and respect.

## PROFESSIONAL AND SOCIAL RESPONSIBILITIES

Engaging in social responsibility through seeking justice, valuing diversity, respecting the environment; demonstrating professionalism through integrity, mutual accountability and ethical behavior. This includes considering the social and global impact of individual and organizational decisions, and an awareness of and adherence to regulations, professional standards and industry best practices.
competencies." The six CPCs are derived from careful examination of general education requirements, as well as recommendations from the National Association of Colleges and Employers annual job outlook survey.

## CRITICAL THINKING/PROBLEM SOLVING

Using analytical reasoning when gathering and evaluating relevant information to effectively formulate possible solutions for an issue, problem or a variety of issues. This includes the ability to recognize potential consequences of a decision.

## CAREER MANAGEMENT

Identifying knowledge, skills, abilities, and personal strengths and experiences necessary to pursue career goals. Recognizing areas for professional growth, how to navigate and explore job options and self-advocate for opportunities in the workplace.

## DATA APTITUDE

Developing information literacy and the capacity to manage data with subsequent finding, structuring, evaluating and interpreting in order to provide meaningful analysis to accomplish a specific purpose.

## GENERAL EDUCATION

At Grantham University, general education courses convey broad knowledge and intellectual concepts to students and develop skills and attitudes that contribute to civic engagement and advance professional attainment. General education courses place an emphasis on principles and theory not limited to a particular field of study. General education courses encompass written and
oral communication; quantitative principles, natural and physical sciences; social and behavioral sciences; and humanities and fine arts that are designed to develop essential academic skills for enhanced and continued learning. (Grantham would like to acknowledge that this language widely conforms to the definition of General Education established by DEAC.)

$\left.\begin{array}{|c|c|c|}\hline \text { CATEGORY } & \text { CHOOSE FROM COURSES LISTED BELOW }\end{array}\right]$| English Composition |
| :---: |
| Math |
| Any English Composition course such as EN100, EN101, EN102, EN261, EN361 |

[^0]
## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

Grantham University provides more than 50 online undergraduate and graduate degree and certificate programs through four divisions of higher education: the Mark Skousen School of Business, the College of Arts and Sciences, the College of Engineering and Computer Science and the College of Nursing and Allied Health.

Students may enroll in a certificate, an associate degree or a bachelor's degree program. For each of the University's programs described in this section, the following components are included:

Program descriptionProgram outcomes
Required General Education and elective courses and credit hours

Core program elements and credit hours
A detailed description of each course is provided in the Course Descriptions section (Section 4).

Please note that many bachelor's degree programs at Grantham contain all of the requirements for an associate degree and/or a certificate program. Undergraduate students whose courses satisfy the requirements for the related certificate (or associate degree) program and are desiring the credential before the completion of the declared program should review admissions requirements in the Student Handbook. Grantham will evaluate the student's record to verify applicable transfer credit and determine the impact on funding, since eligibility by program differs.


| Electronics Engineering Technology |  |  |  |  | BS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Engineering Management Technology |  |  |  | AS | BS |  |  |  |
| Financial Planning | BBA |  |  |  |  |  |  |  |
| Health Information Management |  |  |  |  |  |  |  | BS |
| Human Resources | Certificate |  |  |  |  |  |  |  |
| Information Systems |  |  |  |  | BS |  |  |  |
| Information Systems with a concentration in Cyber Security |  |  |  |  | BS |  |  |  |
| Information Systems with a concentration in Health Informatics |  |  |  |  | BS |  |  |  |
| Information Systems with a concentration in Web Development |  |  |  |  | BS |  |  |  |
| Introduction to Programming |  |  |  | Certificate |  |  |  |  |
| Medical Administrative Assist |  |  |  |  |  |  | Cerrificate |  |
| Medical Coding and Billing |  |  |  |  |  |  | AAS |  |
| Multidisciplinary Studies |  | AA | BA |  |  |  |  |  |
| Multidisciplinary Studies with a concentration in Homeland Security |  |  | BA |  |  |  |  |  |
| Paralegal Studies |  | AA |  |  |  |  |  |  |
| Practical Entrepreneurship | Cerrificate |  |  |  |  |  |  |  |
| Project Management | Certificate |  |  |  |  |  |  |  |
| RN to BSN Nursing Degree Completion |  |  |  |  |  | BSN |  |  |
| Strategic Communications |  |  | BA |  |  |  |  |  |

## MARK SKOUSEN SCHOOL OF BUSINESS

## MISSION STATEMENT

It is the mission of the Mark Skousen School of Business to develop entrepreneurially minded business students by providing innovative pedagogical methods through a student-centered approach to
learning that leads to a high-quality, relevant and sustainable business foundation.

The Mark Skousen School of Business offers the following certificate and undergraduate degree programs:

| PROGRAMS OF STUDY | CERTIFICATE | ASSOCIATE DEGREE | BACHELOR'S DEGREE |
| :---: | :---: | :---: | :---: |
| Accounting |  |  | Bachelor of Science |
| Business Administration |  |  | Bachelor of Business Administration |
| Business Administration and Management |  | Associate of Arts |  |
| Business Administration with a concentration in General Management |  |  | Bachelor of Business Administration |
| Business Administration with a concentration in Human Resource Management |  |  | Bachelor of Business Administration |
| Business Administration with a concentration in Logistics and Supply Chain Management |  |  | Bachelor of Business Administration |
| Business Administration with a concentration in Marketing |  |  | Bachelor of Business Administration |
| Business Administration with a concentration in Operations Management |  |  | Bachelor of Business Administration |
| Business Administration with a concentration in Procurement and Contract Management |  |  | Bachelor of Business Administration |
| Business Leadership | Certificate |  |  |
| Financial Planning |  |  | Bachelor of Business Administration |
| Human Resources | Cerrificate |  |  |
| Practical Entrepreneurship | Certificate |  |  |
| Project Management | Certificate |  |  |

Please note that all prerequisites to the required courses in the MSSB certificate programs in Project Management, Business Leadership, Human Resource Management and Practical Entrepreneurship are waived for students enrolled in those programs. Courses in the certificate programs must be taken in the prescribed sequence in which they are listed. Only students enrolled in the certificate programs are exempt from meeting the standard course prerequisites; all other MSSB undergraduate and graduate degree program prerequisites must be met for enrollment.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.1 BUSINESS LEADERSHIP

## CERTIFICATE PROGRAM

The Business Leadership Certificate program focuses on the application of leadership theory and development, oral and written communication, human capital management and effective team building to meet organizational strategic goals. Upon completion of this program, graduates may enter entry-level positions in business administration. Graduates may also continue their education and transfer courses within the certificate program to associate and/or bachelor's degree programs such as business management, business administration and human resource management.

Students enrolled in this program are required to follow courses in the sequence set out below.

## STUDENT LEARNING OUTCOMES

$>$ Compare and contrast leadership theories for application

- Demonstrate techniques to empower personnel to enhance performance

Organize and build effective teams

- Show ethical behavior in business

Illustrate effective verbal and nonverbal communication
Identify and analyze the decision and problem solving processes by using critical thinking skills

| BUSINESS LEADERSHIP CERTIFICATE |  | CREDIT <br> HOURS |
| :--- | :--- | :--- |
|  | REQUIRED COURSES |  |
| MGT150 | Principles of Business Management | 3 |
| ETH301 | Business and Society | 3 |
| BUS303 | Business Negotiations | 3 |
| MGT468 | Organizational Behavior | 3 |
| MGT431 | Performance Management | 3 |
| MGT461 | Leadership in Organizations | 3 |
|  |  | TOTAL CREDIT HOURS |

Prerequisites are not required for MSSB certificate students, though courses must be taken in their prescribed sequence. Up to 3 credit hours may be transferred in. This program is not approved for Federal Student Aid (Tittl IV) educational benefits.

### 1.2 HUMAN RESOURCES

## CERTIFICATE PROGRAM

The Human Resources Certificate program focuses on the application of human resource management. Upon completion of this certificate program, graduates may qualify for entry-level positions in human resource management or labor relations. Graduates may also continue their education and transfer courses from the certificate program to associate and/or bachelor's degree programs such as business management, business administration, human resource management or multidisciplinary studies.

Students enrolled in this program are required to follow courses in the sequence set out below.

## STUDENT LEARNING OUTCOMES

$>$ Identify the advantages and disadvantages of the various forms of business

Explain the importance of business ethics and workforce diversity in human resource management and how they are opportunities for effective management
Determine an employer's obligation to reasonably accommodate protected classes of employees

Differentiate between employers' reasonable actions and employees' privacy rights

Define human resource management and outline human resource planning

| HUMAN RESOURCES CERTIFICATE | CREDIT <br> HOURS |  |
| :--- | :--- | :---: |
|  | REQUIRED COURSES |  |
| HRM340 | Human Resource Management | 3 |
| MGT441 | Training and Development | 3 |
| MGT468 | Organizational Behavior | 3 |
| HRM370 | Employment Law | 3 |
| HRM451 | Compensation | 3 |
| HRM476 | Developing Human Resources | 3 |
|  |  | TOTAL CREDIT HOURS |

Prerequisites are not required for MSSB certificate students, though courses must be taken in their prescribed sequence. All courses must be completed at Grantham. No transfer credit is allowed.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.3 PRACTICAL ENTREPRENEURSHIP

## CERTIFICATE PROGRAM

During the Practical Entrepreneurship Certificate Program students will select an actual business idea and complete a feasibility study/ startup business plan. The program is not the study of business but rather the application of business principles to the students' business idea. Students should be prepared to accept some form of expense when developing their business entity and complying with registration and licensing requirements. By the end of the program, students will have completed the necessary work to open their own business.

Students enrolled in this program are required to follow courses in the sequence set out below.

## STUDENT LEARNING OUTCOMES

Demonstrate the use of tools needed for an innovative organization to succeed in the real world

## > Perform strategic planning

List the marketing management functions, including constructing a marketing plan that builds customer relationships

Define a business market and identify the major factors that influence business and consumer buying behaviors

Define the new product development process and the product life cycle
Construct a financial, operational and business plan for the first three years of a startup organization

| PRACTICAL ENTREPRENEURSHIP CERTIFICATE | CREDIT <br> HOURS |  |
| :--- | :--- | :---: |
| MGT150 | Principles of Business Management | 3 |
| ACC220 | Financial Accounting | 3 |
| ENT300 | Entrepreneurial Readiness | 3 |
| ENT310 | Entrepreneurial Marketing and Operations | 3 |
| ENT340 | Entrepreneurial Finance | 3 |
| ENT451 | Entrepreneurial Business Planning | 3 |
|  |  | TOTAL CREDIT HOURS |

Prerequisites are not required for MSSB certificate students, though courses must be taken in their prescribed sequence. Up to 3 credit hours may be transferred in. This program is not approved for Federal Student Aid (Title IV) educational benefits.

| PROJECT MANAGEMENT CERTIFICATE | CREDIT <br> HOURS |  |
| :---: | :--- | :---: |
| REQUIRED COURSES |  |  |
| MGT150 | Principles of Business Management | 3 |
| MA215 | Business Statistics | 3 |
| HU260 | Strategies for Decision Making | 3 |
| MGT335 | Introduction to Operations Management | 3 |
| MGT456 | Quality Management | 3 |
| PRJ450 | Project Management | 3 |
|  | TOTAL CREDIT HOURS | 18 |

Prerequisites are not required for MSSB certificate students, though courses must be taken in their prescribed sequence. All courses must be completed at Grantham. No transfer credit is allowed.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.5 ACCOUNTING

## BACHELOR OF SCIENCE DEGREE PROGRAM

The Grantham Accounting program provides a broad exposure to theories, principles and practices for increasingly needed accounting professionals. The Accounting curriculum offers a solid foundation in business, management, economics and organizational behavior. At the completion of the program, the student has an opportunity to effectively apply the skills learned in audit, tax, information systems and general financial areas to a final auditing project offered in the capstone course.

## STUDENT LEARNING OUTCOMES

- Analyze accounting problems in the foundational areas of business

Apply accounting concepts, tools and strategies to solve problems in global business settings

- Create and analyze accounting data for business decision-making

Explain ethical obligations for accounting and/or financial areas
$>$ Demonstrate critical thinking through applying decision-support tools

Demonstrate communication skills
Describe decision making skills that are relevant to professional, ethical and social responsibilities

Understand the importance of human and social diversity

| BACHELOR OF SCIENCE - ACCOUNTING |  | CREDIT <br> HOURS |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |
| English Composition (EN101 or above) |  | 6 |
| Math |  | 6 |
| MA105 | College Algebra | 3 |
| MA215 | Business Statistics (MA105) | 3 |
| Natural/Physical Science |  | 3 |
| Computer Science |  | 3 |
| CS155 | Computer Applications for Business | 3 |
| Communication |  | 6 |
| Humanities and Fine Arts |  | 6 |
| HU260 | Strategies for Decision Making | 3 |
| Social Sciences/Behavioral Sciences |  | 9 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 42 |

BACHELOR OF SCIENCE PROGRAM CORE

| ACC210 | Principles of Accounting I (MA105) | 3 |
| :---: | :---: | :---: |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| ACC235 | Principles of Accounting II (ACC210) | 3 |
| ACC310 | Intermediate Accounting I (ACC235) | 3 |
| ACC330 | Cost Accounting (ACC235) | 3 |
| ACC335 | Intermediate Accounting II (ACC310) | 3 |
| ACC340 | Accounting Information Systems (ACC330 \& ACC335) | 3 |
| ACC430 | Taxation - Individual | 3 |
| ACC435 | Taxation - Corporate (ACC335) | 3 |
| ACC450 | Auditing and Assurance I (ACC335 or ACC340) | 3 |
| ACC499 | Capstone Project (Completion of Degree Requirements) | 3 |
| LAW220 | Business Law I | 3 |
| LAW265 | Business Law II (LAW220) | 3 |
| MGT150 | Principles of Business Management | 3 |
|  | Program Core Requirements | 45 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 12 |
| $300+$ | Open Elective | 21 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.6 BUSINESS ADMINISTRATION

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The Business Administration program provides students with knowledge of the foundational business practices of finance, accounting, human resource management, operations and marketing, which are critical to a continued and dynamic profession in management.

## STUDENT LEARNING OUTCOMES

Demonstrate critical thinking through applying decision support tools
Demonstrate communication skills
Apply decision-making skills that are relevant to professional, ethical and social responsibilities
$\geqslant$ Utilize strategic, tactical and operational methods in the decisionmaking process to gain a competitive business advantage
Analyze economic, environmental, political, ethical, legal and regulatory guidelines
Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment

| BACHELOR OF BUSINESS ADMINISTRATION | CREDIT |
| :--- | :--- | :--- |
| HOURS |  |


| Humanities and Fine Arts |  | 6 |
| :---: | :---: | :---: |
| HU260 | Strategies for Decision Making | 3 |
| Social Sciences/Behavioral Sciences |  | 9 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 42 |
| BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE |  |  |
| IS242 | Management Information Systems | 3 |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| ETH301 | Business and Society | 3 |
| HRM340 | Human Resource Management (LAW220) | 3 |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Electives | 9 |
| 300+ | Open Electives | 30 |
|  | Total Open Electives | 39 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

### 1.7 BUSINESS ADMINISTRATION AND MANAGEMENT

## ASSOCIATE OF ARTS DEGREE PROGRAM

The Business Administration and Management program provides the student with a basic knowledge of science, technology and market commercialization. The student will identify and practice functional areas of business.

## STUDENT LEARNING OUTCOMES

Evaluate theories and actions that enable businesses/ organizations to grow
$>$ Evaluate the role of science, technology and market commercialization in the creation of viable products and services
$\geqslant$ Identify the basic theories, principles and practices related to each functional area of business

Demonstrate critical thinking and communication skills

| ASSOCIATE OF ARTS - BUSINESS ADMINISTRATION |
| :--- | :---: |
| AND MANAGEMENT | CREDIT | HOURS |
| :---: | :---: |


| ASSOCIATE OF ARTS PROGRAM CORE |  |  |
| :---: | :--- | :--- |
| IS242 | Management Information Systems | 3 |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
|  | Program Core Requirements | 21 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective |  |

### 1.8 BUSINESS ADMINISTRATION WITH A CONCENTRATION IN GENERAL MANAGEMENT

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The BBA with a concentration in General Management provides students the opportunity to explore various topics and methods that prepare them to investigate challenges of 21st-century organizations, and to face those challenges using innovative tools and techniques. This concentration emphasizes business development and growth, leadership and decision-making, finance, human capital and managing quality operations. The concentration in General Management is for students who seek a career in managing resources and organizational processes.

## CORE LEARNING OUTCOMES

Demonstrate critical thinking through applying decision support tools
Demonstrate communication skills
Apply decision making skills that are relevant to professional, ethical and social responsibilities

- Utilize strategic, tactical and operational methods in the decision making process to gain a competitive business advantage
- Analyze economic, environmental, political, ethical, legal and regulatory guidelines

Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment

## CONCENTRATION LEARNING OUTCOMES

Apply effective management methods and problem-solving skills to business development, finance, marketing, and information systems.

- Use information technology to support decision-making for business development, sustainability, and growth
Examine operational requirements for managing business organizations

| BACHELOR OF BUSINESS ADMINISTRATION WITH A CONCENTRATION IN GENERAL MANAGEMENT |  | CREDIT HOURS |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |
| English Composition (EN101 or above) |  | 6 |
| Math |  | 6 |
| MA105 | College Algebra | 3 |
| MA215 | Business Statistics (MA105) | 3 |
| Natural/Physical Science |  | 3 |
| Computer Science |  | 3 |
| CS155 | Computer Applications for Business | 3 |
| Communication |  | 6 |
| Humanities and Fine Arts |  | 6 |
| HU260 | Strategies for Decision Making | 3 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| Social Sciences/Behavioral Sciences |  | 9 |
| :---: | :---: | :---: |
| General Education Elective |  | 3 |
|  | General Education Requirements | 42 |
| BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE |  |  |
| IS242 | Management Information Systems | 3 |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| ETH301 | Business and Society | 3 |
| HRM340 | Human Resource Management (LAW220) | 3 |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| GENERAL MANAGEMENT CONCENTRATION COURSES |  |  |
| Managing Human Capital (Choose 1 of the following) |  | 3 |
| HRM355 | Labor Relations (LAW220) | 3 |
| HRM370 | Employment Law (LAW220) | 3 |
| HRM451 | Compensation (HRM340) | 3 |
| HRM476 | Developing Human Resources (HRM340) | 3 |
| Managing Finance \& Business Development (Choose 1 of the following) |  | 3 |
| FIN356 | Principles of Finance II (FIN307) | 3 |
| ENT301 | Entrepreneurship | 3 |
| ACC330 | Cost Accounting (ACC235) (ACC210 is prerequisite to ACC235) | 3 |
| ENT340 | Entrepreneurial Finance | 3 |
| Managing Marketing (Choose 1 of the following) |  | 3 |
| MKG360 | Marketing Communications (MKG131) | 3 |
| MKG450 | Marketing Analysis (MA215) | 3 |


| MKG460 | Public Relations | 3 |
| :---: | :---: | :---: |
| ENT310 | Entrepreneurial Marketing \& Operations | 3 |
| Managing Information \& Decision Making (Choose 1 of the following) |  | 3 |
| BUS303 | Business Negotiations | 3 |
| MGT461 | Leadership in Organizations | 3 |
| IS351 | Information Systems Project Management | 3 |
| IS355 | Risk Management | 3 |
| Managing Operations for Quality (Choose 1 of the following) |  | 3 |
| MGT335 | Introduction to Operations Management (MA215) | 3 |
| MGT430 | Introduction to Quality Management (MA215) | 3 |
| ENT451 | Entrepreneurial Business Planning (ENT310) | 3 |
| PRJ450 | Project Management (MA215, MA230, or MA170) | 3 |
| Concentration Elective (Choose 1 additional course from the above list) |  | 3 |
|  | Concentration Requirements | 18 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective (if planning to take ACC330, must take ACC210 \& ACC235 in open electives) | 9 |
| $300+$ | Open Elective | 12 |
|  | Open Electives | 21 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

### 1.9 BUSINESS ADMINISTRATION WITH A CONCENTRATION IN HUMAN RESOURCE MANAGEMENT

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The BBA with a concentration in Human Resource Management program is designed to provide professional development for students interested in becoming professionals in the field of Human Resource Management. The program is designed to provide a comprehensive study of core competencies within the field: Business Management, Business Law, Labor Relations, Employment Law, Training and Development, Performance Management, Quality Management, Compensation and Organizational Behavior.

## CORE LEARNING OUTCOMES

Demonstrate critical thinking through applying decision support tools

- Demonstrate communication skills

Apply decision making skills that are relevant to professional, ethical and social responsibilities

Utilize strategic, tactical and operational methods in the decision making process to gain a competitive business advantage

Analyze economic, environmental, political, ethical, legal and regulatory guidelines

Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment

## CONCENTRATION LEARNING OUTCOMES

Apply strategic human resource management techniques and analytical problem-solving methods to support organizational objectives

Develop management knowledge and skills that support organizational performance and the development of human capital

Analyze policies, procedures, and laws in the areas of HR management


| Computer Science | 3 |  |
| :---: | :---: | :---: |
| CS155 Computer Applications for Business | 3 |  |
| Communication | 6 |  |
| Humanities and Fine Arts | 6 |  |
| HU260 Strategies for Decision Making | 3 |  |
| Social Sciences/Behavioral Sciences | 9 |  |
| General Education Elective | 3 |  |
|  | General Education Requirements | 42 |

## BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE

| IS242 | Management Information Systems | 3 |
| :---: | :--- | :--- |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| ETH301 | Business and Society | 3 |
| HRM340 | Human Resource Management (LAW220) | 3 |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of <br> Degree Requirements) | 3 |
|  |  | Program Core Requirements |

hUMAN RESOURCE MANAGEMENT CONCENTRATION COURSES

| HRM370 | Employment Law (LAW220) | 3 |
| :---: | :--- | :---: |
| HRM499 | Integrative Experience in Human Resource <br> Management (Completion of Concentration <br> Requirements) | 3 |
| Choose four courses from the following: | 12 |  |
| HRM355 | Labor Relations (LAW220) | 3 |
| MGT441 | Training and Development | 3 |
| HRM451 | Compensation (HRM340) | 3 |
| HRM476 | Developing Human Resources (HRM340) | 3 |
| MGT431 | Performance Management | 3 |


| INT405 | Multinational Management | 3 |
| :---: | :--- | :---: |
| Concentration Requirements | 18 |  |
| OPEN ELECTIVES |  |  |
| $100-499$ | Open Elective | 9 |


| $300+$ | Open Elective | 12 |
| :---: | :--- | :--- |
| TOTAL DEGREE CREDIT HOURS | 120 |  |

### 1.10 BUSINESS ADMINISTRATION WITH A CONCENTRATION IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The BBA with a concentration in Logistics and Supply Chain Management program provides students the framework in which they are able to develop the critical skills, knowledge, and abilities necessary to be successful in logistics, transportation or supply chain management careers.

## CORE LEARNING OUTCOMES

Demonstrate critical thinking through applying decision support tools
Demonstrate communication skills

- Apply decision making skills that are relevant to professional, ethical and social responsibilities
$\geqslant$ Utilize strategic, tactical and operational methods in the decision making process to gain a competitive business advantage
Analyze economic, environmental, political, ethical, legal and regulatory guidelines
Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment


## CONCENTRATION LEARNING OUTCOMES

Develop managerial strategies in transportation
D Design logistical operations that reduce conflict channels using market distribution strategy development, implementation and management
Analyze the roles of stakeholders in transportation logistics

| BACHELOR OF BUSINESS ADMINISTRATION WITH A <br> CONCENTRATION IN LOGISTICS AND SUPPLY CHAIN <br> MANAGEMENT |  | CREDIT <br> HOURS |
| :--- | :---: | :---: |
| GENERAL EDUCATION |  |  |
| English Composition (EN101 or above) | 6 |  |
| Math |  | 6 |
| MA105 | College Algebra | 3 |
| MA215 | Business Statistics (MA105) | 3 |
| Natural/Physical Science | 3 |  |


| Computer Science |  | 3 |
| :---: | :---: | :---: |
| CS155 | Computer Applications for Business | 3 |
| Communication |  | 6 |
| Humanities and Fine Arts |  | 6 |
| HU260 | Strategies for Decision Making | 3 |
| Social Sciences/Behavioral Sciences |  | 9 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 42 |
| BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE |  |  |
| IS242 | Management Information Systems | 3 |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| ETH301 | Business and Society | 3 |
| HRM340 | Human Resource Management (LAW220) | 3 |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| LOGISTICS AND SUPPLY CHAIN MANAGEMENT CONCENTRATION COURSES |  |  |
| INT460 | Global Logistics Management | 3 |
| LOG320 | Logistics Management | 3 |
| LOG430 | Supply Chain Management | 3 |
| LOG435 | Transportation Management | 3 |


| LOG456 | Emerging Trends in Supply Chain and <br> Logistics Management | 3 |
| :---: | :--- | :---: |
|  | Integrative Experience in Logistics and <br> Transportation Management (Completion of <br> Degree Requirements) | 3 |
| Concentration Requirements | 18 |  |
| OPEN ELECTIVES |  |  |
| Cl |  |  |


| $100-499$ | Open Elective | 9 |
| :---: | :--- | :---: |
| $300+$ | Open Elective | 12 |
| TOTAL DEGREE CREDIT HOURS |  | 120 |

### 1.11 BUSINESS ADMINISTRATION WITH A CONCENTRATION IN MARKETING

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The BBA with a concentration in Marketing presents students with the complex realities commonly faced by marketing managers in a fast-paced, high-demand work atmosphere. Students following this concentration will evaluate the importance of communicating to a target market on behalf of an organization, while balancing the needs of consumers, stakeholders and organizations. Upon completion of this program, students will be prepared to pursue careers such as a marketing specialist, an advertising account manager, a marketing account manager or to engage in public relations consulting.

## CORE LEARNING OUTCOMES

$\geqslant$ Demonstrate critical thinking through applying decision support tools
Demonstrate communication skills
Apply decision-making skills that are relevant to professional, ethical and social responsibilities

- Utilize strategic, tactical and operational methods in the decisionmaking process to gain a competitive business advantage

Analyze economic, environmental, political, ethical, legal and regulatory guidelines

- Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment


## CONCENTRATION LEARNING OUTCOMES

Evaluate the importance of creating, communicating, delivering and exchanging product and service information that has value for consumer, clients, partners and society at large as it relates to their needs, wants and must haves

Analyze traditional and emerging marketing opportunities and channels

Differentiate and balance the ethical needs of the consumer, stakeholder and the organization through comparing the diverse decisions faced by marketing managers in today's global society

| HRM340 | Human Resource Management (LAW220) | 3 |
| :---: | :--- | :---: |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of <br> Degree Requirements) | 3 |
| C0301 | MARKETING CONCENTRATION COURSES |  |
| (CO101 or CO120) | 39 |  |
| MKG499 | Integrative Experience in Marketing <br> (Completion of Concentration Courses) | 3 |
| Choose three courses from the following: | 3 |  |
| MKG315 | Consumer Behavior (MKG131) | 9 |
| MKG360 | Marketing Communications (MKG131) | 3 |


| MKG475 | International Marketing (MKG131) | 3 |
| :---: | :---: | :---: |
| MKG450 | Marketing Analysis (MA215) | 3 |
| MKG460 | Public Relations (MKG360) | 3 |
| Choose one course from the following: |  | 3 |
| C0330 | Mass Media Communications | 3 |
| C0395 | Digital Media | 3 |
| CO401 | Communication Ethics | 3 |
|  | Concentration Requirements | 18 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 9 |
| $300+$ | Open Elective | 12 |
|  | Open Electives | 21 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

### 1.12 BUSINESS ADMINISTRATION WITH A CONCENTRATION IN OPERATIONS MANAGEMENT

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The BBA with a concentration in Operations Management prepares students to engage strategies on a day-to-day basis in business. Courses in this area provide students with a comprehensive understanding of operations management, human capital and innovation, and introduces supply chain management concepts. The knowledge and skills developed in this program enable students to understand how to make processes more efficient, productive and cost effective. This concentration prepares students for a successful career in operations management.

## CORE LEARNING OUTCOMES

$>$ Demonstrate critical thinking through applying decision support tools.
Demonstrate communication skills
Apply decision-making skills that are relevant to professional, ethical and social responsibilities
Utilize strategic, tactical and operational methods in the decision making process to gain a competitive business advantage

- Analyze economic, environmental, political, ethical, legal and regulatory guidelines
- Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment


## CONCENTRATION LEARNING OUTCOMES

Demonstrate how to effectively and efficiently execute operations through quality management and innovation

Apply quality management methods to improve performance and productivity
Assess processes and strategies that add value to operations

| BACHELOR OF BUSINESS ADMINISTRATION WITH A | CREDIT |
| :---: | :---: |
| CONCENTRATION IN OPERATIONS MANAGEMENT | HOURS |
| GENERAL EDUCATION |  |


| English Composition (EN101 or above) | 6 |
| :--- | :--- |
| Math | 6 |



| MA215 | Business Statistics (MA105) | 3 |
| :--- | :--- | :--- |

Natural/Physical Science 3
Computer Science 3
CS155 Computer Applications for Business 3

| 6 |
| :---: | :---: |

Humanities and Fine Arts 6
HU260 Strategies for Decision Making 3
Social Sciences/Behavioral Sciences 9
General Education Elective 3
General Education Requirements 42
BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE
IS242 Management Information Systems
3

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| MGT150 | Principles of Business Management | 3 |
| :--- | :--- | :---: |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| ETH301 | Business and Society | 3 |
| HRM340 | Human Resource Management (LAW220) | 3 |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of <br> Degree Requirements) | 3 |
| Program Core Requirements | 39 |  |

OPERATIONS MANAGEMENT CONCENTRATION COURSES

MGT335
 (MA215)

LOG430
Supply Chain Management
3

| MGT430 | Introduction to Quality Management (MA215) | 3 |
| :---: | :---: | :---: |
| MGT456 | Quality Management in Operations Management (MA215 or MA230) | 3 |
| Process \& Quality Improvement (Choose 1 of the following) |  | 3 |
| LOG310 | Continuous Improvement Tools and Techniques | 3 |
| IS311 | Security Operations | 3 |
| LOG456 | Emerging Trends in Supply Chain and Logistic Management | 3 |
| Human Capital Performance (Choose 1 of the following) |  | 3 |
| MGT441 | Training and Development | 3 |
| MGT431 | Performance Management | 3 |
|  | Concentration Requirements | 18 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 9 |
| $300+$ | Open Elective | 12 |
|  | Electives | 21 |
| TOTAL DEGREE CREDIT HOURS |  | 120 |

### 1.13 BUSINESS ADMINISTRATION WITH A CONCENTRATION IN PROCUREMENT AND CONTRACT MANAGEMENT

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The BBA with a concentration in Procurement and Contract Management program is designed to provide professional education in the field of contract management and administration. The program is focused on both public and government contracting. Students will gain knowledge and skills in procuring, negotiating and administering contracts with suppliers, distributors and end-product users. Students will also be able to oversee financially and legally sound contracts as applicable to a variety of industries and markets.

## CORE LEARNING OUTCOMES

Demonstrate critical thinking through applying decision support tools
Demonstrate communication skills
Apply decision making skills that are relevant to professional, ethical and social responsibilities

Utilize strategic, tactical and operational methods in the decision making process to gain a competitive business advantage

Analyze economic, environmental, political, ethical, legal and regulatory guidelines

Engage in integrated business problem-solving activities by distinguishing the theories, principles and concepts related to the foundational areas of business in a global environment

## CONCENTRATION LEARNING OUTCOMES

Apply and evaluate processes and procedures in developing and managing long-term contracts in both the private and public sectors

Develop and review contracts in the corporate world and government agencies
Explain the FAR requirements for acquisition planning, including: publicity, competition, qualifications, conflicts of interest and teaming arrangements

Describe the government's procurement options
Outline the contract close-out process from all sides, contractor, government and/or private entity

BACHELOR OF BUSINESS ADMINISTRATION

WITH A CONGENTRATION IN PROCUREMENT AND CONTRACT MANAGEMENT

CREDIT
HOURS
general education

English Composition (EN101 or above) 6

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| Math | 6 |  |
| :--- | :--- | :--- |
| MA105 | College Algebra | 3 |
| MA215 | Business Statistics (MA105) | 3 |
| Natural/Physical Science | 3 |  |
| Computer Science | 3 |  |
| CS155 | Computer Applications for Business | 3 |
| Communication | 6 |  |
| Humanities and Fine Arts | 6 |  |
| HU260 | Strategies for Decision Making | 3 |
| Social Sciences/Behavioral Sciences | 9 |  |
| General Education Elective | 3 |  |
|  | General Education Requirements | 42 |

BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE

| IS242 | Management Information Systems | 3 |
| :--- | :--- | :--- |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| ECN201 | Microeconomics (MA105) | 3 |
| ECN206 | Macroeconomics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| ETH301 | Business and Society | 3 |


| HRM340 | Human Resource Management (LAW220) | 3 |
| :---: | :---: | :---: |
| FIN307 | Principles of Finance I (MA215) | 3 |
| MGT468 | Organizational Behavior | 3 |
| BUS499 | Business Policy and Strategy (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| PROCUREMENT AND CONTRACT MANAGEMENT CONCENTRATION COURSES |  |  |
| BUS310 | Introduction to Federal Acquisition and Contract Management | 3 |
| BUS320 | Introduction to Public Procurement | 3 |
| LAW265 | Business Law II (LAW220) | 3 |
| LAW210 | Contract Administration | 3 |
| FIN310 | Procurement Pricing Analysis (LAW220 \& BUS303) | 3 |
| BUS491 | Integrative Experience in Procurement and Contract Management (Completion of Concentration Requirements) | 3 |
|  | Concentration Requirements | 18 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 3 |
| 300+ | Open Elective (BUS303 is a pre-requisite for FIN310 and should be taken as an open elective) | 18 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

### 1.14 FINANCIAL PLANNING

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The Financial Planning program is designed to provide professional education for financial advisement to individuals and corporations in order to best meet their long-term financial objectives. The program is focused on advisement of long-term financial objectives by analyzing the client's status and setting a program to achieve that client's goals. Financial planners specialize in tax planning, asset allocation, risk management, retirement and/or estate planning.

## CORE LEARNING OUTCOMES

Apply and evaluate financial planning theories in an integrated approach to real-life financial planning situations based on the Certified Financial Planning principles
Advise individuals and families on a variety of complex financial issues

Develop, design and maintain tailored and comprehensive financial plans
Analyze the ethical responsibility of financial planners and leaders in the financial planning industry

| BACHELOR OF BUSINESS ADMINISTRATION - |  |
| :---: | :---: |
| FINANCIAL PLANNING | CREDIT |
| GENERAL EDUCATION |  |
| HOURS |  |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| Computer Science |  | 3 | FIN350 | Investment Planning | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CS155 | Computer Applications for Business | 3 | FIN355 | Income Tax Planning | 3 |
| Communication |  | 6 | FIN360 | Retirement Planning | 3 |
| Humanities and Fine Arts |  | 6 | FIN361 | Estate Planning I (ETH352, FIN340, FIN350, FIN355 \& FIN360) | 3 |
| HU260 | Strategies for Decision Making | 3 |  |  |  |
| Social Sciences/Behavioral Sciences |  | 9 | FIN366 | Estate Planning II (FIN361) | 3 |
| General Education Elective |  | 3 | FIN499 | Financial Planning Capstone (Completion of Degree Requirements) | 3 |
| General Education Requirements |  | 42 | LAW220 | Business Law I | 3 |
| BACHELOR OF BUSINESS ADMINISTRATION PROGRAM CORE |  |  | LAW265 | Business Law II (LAW220) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 | Program Core Requirements |  | 45 |
| BUS101 | Introduction to Business | 3 | OPEN ELECTIVES |  |  |
| BUS303 | Business Negotiations | 3 | 100-499 | Open Elective | 15 |
| ECN201 | Microeconomics (MA105) | 3 | $300+$ | Open Elective | 18 |
| ECN206 | Macroeconomics (MA105) | 3 |  | TOTAL DEGREE CREDIT HOURS | 120 |
| ETH352 | Fundamentals and Ethics of Financial Planning | 3 |  |  |  |
| FIN340 | Insurance Planning | 3 |  |  |  |

## COLLEGE OF ARTS AND SCIENCES

## MISSION STATEMENT

The Grantham University College of Arts and Sciences prepares students for the workplace of today through the innovative use of online learning tools and curriculum designed to meet the
expectations of fast-evolving employment markets. Grantham's College of Arts and Sciences provides each student with a foundation to be successful in general education, certificates and undergraduate degree programs.

| PROGRAMS OF STUDY | ASSOCIATE DEGREE | BACHELOR'S DEGREE |
| :---: | :---: | :---: |
| Criminal Justice | Associate of Arts | Bachelor of Arts |
| Multidisciplinary Studies | Associate of Arts | Bachelor of Arts |
| Multidisciplinary Studies with a concentration in |  |  |
| Homeland Security | Associate of Arts | Bachelor of Arts |
| Paralegal Studies |  | Bachelor of Arts |
| Strategic Communications |  |  |

### 1.15 CRIMINAL JUSTICE (ASSOCIATE OF ARTS)

## ASSOCIATE OF ARTS DEGREE PROGRAM

The objective of the Criminal Justice degree program is to provide students with the knowledge and skills to enter the workforce or to pursue a more advanced degree in criminal justice. Required coursework builds a foundation in criminal justice theory and crime, the practice of law enforcement and the U.S. judicial system.

## STUDENT LEARNING OUTCOMES

Explain the various causes of crime using criminal justice theories, practices and process to a multicultural population

Compare and contrast historical and contemporary police functions, issues and responses to crime

Describe the nature and function of corrections, its services, practices and institutions

Apply fundamental concepts of the administration of justice
Note: Students seeking a career in law enforcement at the local or state level will require additional training and testing, which is determined by the Peace Officer Standards and Training (P.O.S.T.) in each student's state.

| ASSOCIATE OF ARTS - CRIMINAL JUSTICE | CREDIT |
| :--- | :---: |
| HOURS |  |


| Communication |  | 3 |
| :---: | :---: | :---: |
| Humanities and Fine Arts |  | 3 |
| Social Sciences/Behavioral Sciences |  | 3 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 30 |
| ASSOCIATE OF ARTS PROGRAM CORE |  |  |
| CJ101 | Introduction to Criminal Justice | 3 |
| CJ102 | Introduction to Criminology | 3 |
| CJ201 | Police Systems and Practices | 3 |
| CJ202 | Correction Systems and Practices | 3 |
| CJ203 | Juvenile Justice (CJ102) | 3 |
|  | Program Core Requirements | 15 |
| OPEN ELECTIVES |  |  |
| 100+ | Open Elective | 15 |
|  | TOTAL DEGREE CREDIT HOURS | 60 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.16 CRIMINAL JUSTICE (BACHELOR OF ARTS)

## BACHELOR OF ARTS DEGREE PROGRAM

The objective of the Criminal Justice degree program is to provide students with the knowledge and skills to enter the workforce and advance as professionals at the various stages of the criminal justice field. Required coursework builds a foundation and broad base of skills in advanced criminal justice theory and crime, the practice of law enforcement and the U.S. judicial system, which includes adult and juvenile corrections. Elective courses are available in law, homeland security and computer forensic investigations.

## STUDENT LEARNING OUTCOMES

$\geqslant$ Explain the various causes of crime using criminal justice theories, practices and processes to a multicultural population

Compare and contrast historical and contemporary police functions, issues and responses to crime

Describe the nature and function of corrections, its services, practices and institutions

Analyze relevant criminal law and procedures as they relate to the administration of justice

Differentiate between adult and juvenile procedures throughout the criminal justice system

Apply the concepts of professionalism, ethical behavior and social responsibility to make decisions as a criminal justice professional

Evaluate the three components of the criminal justice system
Note: Students seeking a career in law enforcement at the local or state level will require additional training and testing, which is determined by the Peace Officer Standards and Training (P.O.S.T.) in each student's state.

It is highly recommended that the following courses be taken as open electives for the Criminal Justice degree program, along with other 300/400-level courses to fulfill the 300+ Open Elective requirement:

CJ414 Multicultural Law Enforcement
CJ415 Police Community Relations

- CJ416 Victimology

CJ421 Advanced Criminal Law
CJ425 Judicial Process
Students have the option to take courses in two concentrations within the Criminal Justice degree program in either Computer Forensic Investigation or Homeland Security. Students are required to take the same General Education and Bachelor of Arts Core Program courses as the basic degree program. Additionally, the following courses are required for each concentration:

## CONCENTRATION IN COMPUTER FORENSIC INVESTIGATION

Building on the general criminal justice core, this concentration involves study in computer crime, computer forensics, ethical
hacking, computer crime scene investigation and criminal intelligence analysis.

CJ475 Introduction to Computer Crime
CJ476 Computer Forensics and Cyber Crime
CJ477 Computer Crime Scene Investigation

- CJ479 Information Security

CJ480 Criminal Intelligence Analysis
IS471 Computer Forensics

## CONCENTRATION IN HOMELAND SECURITY

The Homeland Security concentration prepares students for work in areas involving the protection of our nation's borders and recovery from emergencies. Graduates are qualified to work in such areas as border security and intelligence; terrorism prevention and analysis; and emergency and disaster planning.

CJ450 Understanding Terrorism
$>$ CJ451 Principles of Terrorism
CJ452 Terrorism and U.S. National Security

- CJ453 Border and Coastal Security

CJ454 Elements and Issues in Counterterrorism
CJ455 Emergency Planning

| BACHELOR OF ARTS IN CRIMINAL JUSTICE | CREDIT |
| :--- | :--- |
| HOURS |  |$|$| GENERAL EDUCATION | 6 |
| :--- | :--- |
| English Composition | 6 |
| Math | 3 |
| Natural/Physical Science | 6 |
| Computer Science | 6 |
| Communication | 9 |
| Humanities and Fine Arts | 3 |
| Social Sciences /Behavioral Sciences | 42 |
| General Education Electives |  |
| General Education Requirements |  |
| BACHELOR OF ARTS PROGRAM CORE | 3 |
| CJ101 | Introduction to Criminal Justice |
| CJ102 | Introduction to Criminology |
| CJ201 | Police Systems and Practices |
| CJ202 | Correction Systems and Practices |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| CJ203 | Juvenile Justice (CJ102) | 3 |
| :---: | :--- | :---: |
| CJ302 | Criminal Procedure (CJ101 \& CJ102) | 3 |
| CJ305 | Introduction to Criminal Justice Ethics (CJ101 <br> \& CJ102) | 3 |
| CJ309 | Criminal Law (CJ101 \& CJ102) | 3 |
| CJ401 | Community Policing (CJ101 \& CJ201) | 3 |
| PS380 | Psychology and the Law | 3 |
| CA408 | Research Methods | 3 |
| PA301 | Introduction to Public Administration | 3 |


| CJ499 | Criminal Justice Capstone (Completion of <br> Degree requirements) | 3 |  |  |
| :---: | :--- | :---: | :---: | :---: |
| EN361 | Technical Writing | 3 |  |  |
| Program Core Requirements |  | 42 |  |  |
| CONCENTRATION OR OPEN ELECTIVES |  |  |  |  |
| Optional: Select one of the concentrations (18 credits) OR: |  |  |  |  |
| $100-499$ | Open Elective | 18 |  |  |
| $300+$ | Open Elective | 18 |  |  |
| TOTAL DECREE CREDIT HOURS |  |  |  | 120 |

### 1.17 MULTIDISCIPLINARY STUDIES (ASSOCIATE OF ARTS)

## ASSOCIATE OF ARTS DEGREE PROGRAM

The Multidisciplinary Studies program provides the student with a core of general education studies.

## STUDENT LEARNING OUTCOMES

Effectively, communicate, analyze and synthesize knowledge from at least two disciplines

- Present ideas in written and visual form across a variety of contexts

Use electronic, print and/or media information sources
Employ critical thinking skills to effectively solve problems

| ASSOCIATE OF ARTS - MULTIDISCIPLINARY <br> STUDIES | CREDIT <br> HOURS |
| :--- | :---: |
| GENERAL EDUCATION |  |
| English Composition | 6 |
| Math | 6 |
| Natural/Physical Science | 3 |

### 1.18 MULTIDISCIPLINARY STUDIES (BACHELOR OF ARTS)

## BACHELOR OF ARTS DEGREE PROGRAM

The Multidisciplinary Studies degree program provides the opportunity for students to explore two disciplines throughout the degree program. This program is ideal for students who have a large number of transfer credits or credit for prior learning.

## STUDENT LEARNING OUTCOMES

$\geqslant$ Effectively communicate, incorporate and synthesize knowledge from at least two disciplines

Demonstrate a theoretical and conceptual foundation in two disciplines included in the liberal arts degree


This program is not approved for Federal Student Aid (Title IV) educational benefits

Demonstrate acquired skills in research, writing and presentation across two disciplines

Distinguish the differences in principles and methods between two disciplines

Use critical thinking skills to effectively solve problems

| BACHELOR OF ARTS - MULTIDISCIPLINARY <br> STUDIES | CREDIT <br> HOURS |
| :--- | :---: |
| GENERAL EDUCATION |  |
| English Composition | 6 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| Math | 6 |
| :--- | :---: |
| Natural/Physical Science | 3 |
| Computer Science | 3 |
| Communication | 6 |
| Humanities and Fine Arts | 6 |
| Social Sciences /Behavioral Sciences | 9 |
| General Education Elective | 3 |
| General Education Requirements | 42 |
| BACHELOR OF ARTS PROGRAM CORE |  |
| HU260 | Strategies for Decision Making |
| CO325 | Civility and Mass Media |


| FIN210 | Personal Finance | 3 |
| :---: | :--- | :---: |
| CA408 | Research Methods | 3 |
| EN361 | Technical Writing | 3 |
| CA499 | Professional Strategies (Completion of <br> Degree Requirements) <br> Program Core Requirements | 18 |
| $100-499$ | Open Elective | 3 |
| $300+$ | Open Elective | 27 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

This program is not approved for Federal Student Aid (Title IV) educational benefits.

### 1.19 MULTIDISCIPLINARY STUDIES WITH A CONCENTRATION IN HOMELAND SECURITY

## BACHELOR OF ARTS DEGREE PROGRAM

## CONCENTRATION IN HOMELAND SECURITY

The concentration has been developed to prepare students for work in border security, terrorism prevention, counter-terrorism and basic disaster management.
Effectively communicate, incorporate and synthesize knowledge from at least two disciplines
Demonstrate a theoretical and conceptual foundation in two disciplines included in the liberal arts degree
Demonstrate acquired skills in research, writing and presentation across two disciplines
$>$ Distinguish the differences in principles and methods between two disciplines; use critical thinking skills to effectively solve problems

- Use critical thinking skills to effectively solve problems

| BACHELOR OF ARTS IN MULTIDISCIPLINARY <br> STUDIES WITH A CONCENTRATION IN HOMELAND <br> SECURITY | CREDIT <br> HOURS |
| :--- | :---: |
| English Composition |  |
| Math | 6 |
| Natural/Physical Science | 6 |
| Computer Science | 3 |
| Communication | 6 |
| Humanities and Fine Arts | 6 |
| Social Sciences /Behavioral Sciences | 9 |
| General Education Elective | 3 |


|  | General Education Requirements | 42 |
| :---: | :---: | :---: |
| BACHELOR OF ARTS PROGRAM CORE |  |  |
| HU260 | Strategies for Decision Making | 3 |
| CO325 | Civility and Mass Media | 3 |
| FIN210 | Personal Finance | 3 |
| CA408 | Research Methods | 3 |
| EN361 | Technical Writing | 3 |
| CA499 | Professional Strategies (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 18 |
| HOMELAND SECURITY CONCENTRATION COURSES |  |  |
| CJ450 | Understanding Terrorism (CJ101 \& CJ102) | 3 |
| CJ451 | Principles of Terrorism (CJ450) | 3 |
| CJ452 | Terrorism and US National Security (CJ450) | 3 |
| CJ453 | Border and Coastal Security (CJ450) | 3 |
| CJ454 | Elements and Issues in Counter-terrorism (CJ451) | 3 |
| CJ455 | Emergency Planning (CJ101) | 3 |
|  | Concentration Requirements | 18 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 27 |
| $300+$ | Open Elective | 15 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.20 PARALEGAL STUDIES

## ASSOCIATE OF ARTS DEGREE PROGRAM

The Paralegal Studies degree program provides students with the skills necessary to develop, apply and maintain a working knowledge of the law and the elements within the law. The program is designed to prepare students for a career as a paralegal.

## STUDENT LEARNING OUTCOMES

- Demonstrate professional and ethical conduct according to the standards and principles set forth by the paralegal profession
Critically assess situations and alternative solutions presented by the attorney, client, and/or court

Conduct interviews and investigations in compliance with boundaries and limitations established by the paralegal profession

Demonstrate professional written and oral communication skills through effective correspondence with clients, attorneys, witnesses, and key court and business personnel

Analyze case law for relevance when preparing legal documents for attorney and court review

Demonstrate organizational skills that contribute to an efficient and effective legal practice (management of people, time, data, files)

| ASSOCIATE OF ARTS IN PARALEGAL STUDIES | CREDIT |  |
| :---: | :---: | :---: |
| HOURS |  |  |
| GENERAL EDUCATION |  |  |
| English Composition | 6 |  |
| EN101 | English Composition I | 3 |
| EN102 | English Composition II (EN101) | 3 |
| Math |  | 3 |
| Computer Science | 3 |  |
| CS105 | Introduction to Computer Applications | 3 |
| Communication |  |  |

### 1.21 STRATEGIC COMMUNICATIONS

## BACHELOR OF ARTS DEGREE PROGRAM

The Bachelor of Arts in Strategic Communications degree program provides a foundation of theories and principles in communication. This program is designed to optimize students' ability to analyze situations from multiple perspectives; define and collect relevant information; and develop, present, and justify solutions or innovations.

## STUDENT LEARNING OUTCOMES

Use critical thinking skills to effectively solve problems

| CO120 or <br> CO201 | Interpersonal Communications or Conflict <br> and Communications | 3 |
| :---: | :--- | :---: |
| Humanities and Fine Arts | 3 |  |
| HU260 | Strategies for Decision Making | 3 |
| Natural/Physical Sciences | 3 |  |
| Government (GP) or History (HS) Elective | 3 |  |
| General Education Elective | 3 |  |
| GU299 | General Education Capstone (Requires Dean <br> Approval) | 3 |
| General Education Requirements | 30 |  |
| PLS101 | Introduction to Paralegal Studies |  |
| PLS103 | Introduction to Law <br> PLS107 | Legal Ethics (PLS101) |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

Use appropriate communication skills across settings, purposes, and audiences

Critically solve communication problems ethically
Effectively analyze and synthesize knowledge from a variety of academic disciplines
Demonstrate skills in research while applying various communication theories in writing and presentation across a variety of disciplines

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| Demonstrate the ability to create and present a strategic communication plan that integrates information from a variety of sources. |  |  |
| :---: | :---: | :---: |
| Demonstrate familiarity with terminology and concepts basic to the field of strategic communication |  |  |
|  | ACHELOR OF ARTS IN STRATEGIC COMMUNICATION | CREDIT HOURS |
| GENERAL EDUCATION |  |  |
| English Composition |  | 6 |
| Math |  | 6 |
| Natural/Physical Science |  | 3 |
| Computer Science |  | 3 |
| Communication |  | 6 |
| C0101 | Introduction to Public Speaking | 3 |
| C0120 | Interpersonal Communication | 3 |
| Humanities and Fine Arts |  | 6 |
| Social Sciences/Behavioral Sciences |  | 9 |
| General Education Elective |  | 3 |
| General Education Requirements |  | 42 |
| BACHELOR OF ARTS PROGRAM CORE |  |  |
| HU260 | Strategies for Decision Making | 3 |


| CO201 | Conflict and Communication | 3 |
| :---: | :--- | :--- |
| CO210 | Business Communication | 3 |
| C0325 | Civility and Mass Media | 3 |
| CO301 | Introduction to Communication Theory | 3 |
| C0330 | Mass Media Communications | 3 |
| C0395 | Digital Media Communications | 3 |
| C0401 | Media Ethics | 3 |
| MKG131 | Foundations of Marketing | 3 |
| MKG360 | Marketing Communications (MKG131) | 3 |
| MKG460 | Public Relations (MKG360) | 3 |
| MGT468 | Organizational Behavior | 3 |
| ID490 | Interdisciplinary Capstone (Completion of <br> Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 21 |
| 300+ | Open Elective | 18 |
| TOTAL DEGREE CREDIT HOURS | 120 |  |

## COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

The College of Engineering and Computer Science is the oldest school at Grantham University, serving students in technical programs since 1952. Our graduates develop backgrounds in design and analysis and experience hands-on problem solving. Technology programs are infused with rich lab exercises using design software or development platforms that are typically found in the industry.

## MISSION STATEMENT

The mission of the College of Engineering and Computer Science is to prepare adult learners for careers in engineering, computer and information technologies through online integrated curricula that blend theory, application and general skills needed to succeed in a changing global society.

## ENGINEERING TECHNOLOGY DEGREE PROGRAMS

| PROGRAMS OF STUDY | ASSOCIATE DEGREE | BACHELOR'S DEGREE |
| :---: | :---: | :---: |
| Computer Engineering Technology |  | Bachelor of Science |
| Electronics and Computer |  |  |
| Engineering Technology | Associate of Science |  |
| Electronics Engineering Technology |  | Bachelor of Science |
| Engineering Management Technology | Associate of Science | Bachelor of Science |

### 1.22 COMPUTER ENGINEERING TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Computer Engineering Technology degree program is to provide students with the knowledge and skills to enter the workforce and advance as professional engineering technologists, specifically in the computing and computing technology field. Required coursework builds a foundation and broad base of skills in advanced circuit theory and digital design, microprocessor and programming. Elective courses are available in computer science, communications or control systems.

## PROGRAM EDUCATIONAL OBJECTIVES

The educational objectives of the programs are to produce students who, within a few years of graduation, should be:

Successfully employed in an engineering technology or related field or be accepted into a graduate program

- Effective in technical problem identification and analysis, problem solving or system design in a variety of technical roles

Effective as a professional through communication skills, project management skills, ethical conduction, social awareness and teamwork

Technically current through continued education and professional development

## STUDENT LEARNING OUTCOMES

Select and apply the knowledge, techniques, skills and modern tools of the discipline to broadly defined engineering technology activities
Select and apply a knowledge of mathematics, science, engineering and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

Conduct standard tests and measurements; conduct, analyze, and interpret experiments; apply experimental results to improve processes
Design systems, components or processes for broadly defined engineering technology problems appropriate to program educational objectives

Function effectively as a member or leader on a technical team
Identify, analyze and solve broadly defined engineering technology problems
Apply written, oral and graphical communication in both technical and non-technical environments; identify and use appropriate technical literature

Identify the need for and engage in self-directed continuing professional development, including the ability to identify strategies for acquiring competency in unfamiliar subject areas or skills

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

Address professional and ethical responsibilities, including a respect for diversity

- Identify the impact of engineering technology solutions in a societal and global context

Demonstrate a commitment to quality, timeliness and continuous improvement

Apply electric circuits, computer programming, associated software applications, analog and digital electronics, microcomputers, operating systems, local area networks and engineering standards to the building, testing, operation and maintenance of computer systems and associated software systems

Apply natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of computer systems and associated software systems

Analyze, design and implement hardware and software computer systems

Apply project management techniques to computer systems
Utilize statistics/probability, transform methods, discrete mathematics or applied differential equations in support of computer systems and networks

$\left.$| BACHELOR OF SCIENCE - COMPUTER ENGINEERING |
| :---: | :---: | :---: |
| TECHNOLOGY |
| GENERAL EDUCATION | | CREDIT |
| :---: |
| HOURS | \right\rvert\,


| C0101 | Introduction to Public Speaking | 3 |
| :---: | :---: | :---: |
| Humanities and Fine Arts |  | 6 |
| ET100 | Engineering \& Ethics | 3 |
| Social Sciences/Behavioral Sciences |  | 3 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 46 |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |
| CS265* | Programming in C++ (CS192) | 4 |
| CS285 | Advanced Programming in C++ (CS265) | 4 |
| CT212* | Digital Electronics/lab (CS192 \& ET105) | 4 |
| CT262 | Microprocessor Systems Engineering/lab (CT212 \& CS263 or CS265) | 4 |
| CT362 | Modern Digital Design/lab (CT212) | 4 |
| CT420 | Cyber Physical Systems Security (CT262 \& CS265) | 4 |
| ET105* | Fundamental Properties of DC Circuits/ lab (MA105) | 4 |
| ET115* | Fundamental Properties of AC Circuits/ lab (ET105 \& MA141) | 4 |
| ET212* | Electronics I/lab (ET115) | 4 |
| ET222 | Electronics II/lab (ET212) | 4 |
| ET310* | Circuit Analysis (ET115 \& MA312) | 4 |
| ET382 | Signals \& Systems Theoryllab (ET310, PH221, \& either CS263 or CS265) | 4 |
| ET410* | Technical Project Management | 3 |
| ET450* | Capstone Project (ET410) | 3 |
| IS216 | Computer Networks | 3 |
| 300-499 | CT or ET Elective w/Lab | 4 |
|  | Program Core Requirements | 61 |
| OPEN ELECTIVE |  |  |
| $300+$ | Open Elective | 13 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.23 ELECTRONICS AND COMPUTER ENGINEERING TECHNOLOGY

## ASSOCIATE OF SCIENCE DEGREE PROGRAM

The objective of the Electronics and Computer Engineering Technology degree program is to provide students with the knowledge and skills to enter the workforce as technicians. Required coursework builds a foundation in circuit theory and design, digital and analog electronics and computer programming. The program satisfies the first two years of the Bachelor of Science in Computer Engineering Technology or the Bachelor of Science in Electronics Engineering Technology.

## STUDENT LEARNING OUTCOMES

- Apply knowledge, techniques, skills and modern tools to narrowly defined engineering technology activities

Apply a knowledge of mathematics, science, electronics engineering and technology to engineering technology problems

- Conduct, analyze and interpret experiments

Identify, analyze and solve narrowly defined technical problems

- Function effectively on teams

Apply written, oral and graphical communication
Address professional, ethical and social responsibilities
> Demonstrate a commitment to quality, timeliness and continuous improvement

| ASSOCIATE OF SCIENCE <br> COMPUTER ENGINEERING TECHNOLOGY |  | CREDIT |
| :---: | :---: | :---: |
| GOURS |  |  |$|$

### 1.24 ELECTRONICS ENGINEERING TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Electronics Engineering Technology degree program is to provide students with the knowledge and skills to enter the workforce and advance as professional engineering technologists, specifically in the electronic field. Required coursework builds a foundation and broad base of skills in advanced circuit theory and design, digital and analog electronics, microprocessor fundamentals and signal processing. Elective courses are available in communications, power and control systems.

## PROGRAM EDUCATIONAL OBJECTIVES

The educational objectives of the programs are to produce students who, within a few years of graduation, should be:

Successfully employed in an engineering technology or related field or be accepted into a graduate program

Effective in technical problem identification and analysis, problem solving or system design in a variety of technical roles

Effective as a professional through communication skills, project management skills, ethical conduction, social awareness and teamwork

Technically current through continued education and professional development

## STUDENT LEARNING OUTCOMES

Select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly defined engineering technology activities
Select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies
$\rangle$
Conduct standard tests and measurements; conduct, analyze, and interpret experiments; and apply experimental results to improve processes
Design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives
$>$ Function effectively as a member or leader on a technical team
$>$ Identify, analyze, and solve broadly defined engineering technology problems

- Apply written, oral, and graphical communication in both technical and non-technical environments; and identify and use appropriate technical literature
Identify the need for and engage in self-directed continuing professional development, including the ability to identify strategies for acquiring competency in unfamiliar subject areas or skills
Address professional and ethical responsibilities including a respect for diversity
Identify the impact of engineering technology solutions in a societal and global context
Demonstrate a commitment to quality, timeliness, and continuous improvement
Apply circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems
- Apply physics or chemistry to electrical/electronic(s) circuits in a rigorous mathematical environment at or above the level of algebra and trigonometry
Analyze, design, and implement control systems, instrumentation systems, communications systems, computer systems, or power systems.
Apply project management techniques to electrical / electronic(s) systems
Utilize statistics/probability, transform methods, discrete mathematics, or applied differential equations in support of electrical / electronic(s) systems

Elective courses are available in communications, power and control systems.

BACHELOR OF SCIENCE - ELECTRONICS ENGINEERING TECHNOLOGY

GENERAL EDUCATION
English Composition (EN100, EN101, or EN102) 6

| EN261 Fundamentals of Technical Writing | 3 |
| :--- | :--- | :--- |


| Math | 14 |
| :--- | :--- |


| MA105* College Algebra | 3 |
| :--- | :--- | :--- |


| MA141* Pre-Calculus (MA105) | 3 |
| :--- | :--- | :--- |


| MA302* Calculus I (MA141) | 4 |
| :--- | :--- |


| MA312* Calculus II (MA302) | 4 |
| :--- | :--- | :--- |


| Natural/Physical Science | 8 |
| :--- | :--- |


| PH220 | Physics I (MA141) | 4 |
| :---: | :--- | :--- |
| PH221* | Physics II (PH220) | 4 |

Computer Science 3

| CS192 Programming Essentials | 3 |
| :--- | :--- | :--- |

Communication 3
C0101 Introduction to Public Speaking 3
Humanities and Fine Arts 6
ET100 Engineering \& Ethics 3
Social Sciences /Behavioral Sciences 3
General Education Elective 3
General Education Requirements
46
BACHELOR OF SCIENCE PROGRAM CORE

| CS265* | Programming in C++ (CS192) | 4 |
| :--- | :--- | :---: |
| CT212* | Digital Electronics/lab (CS192 \& ET105) | 4 |
| CT262 | Microprocessor Systems Engineering/lab <br> (CT212 \& CS263 or CS265) | 4 |
| ET105* | Fundamental Properties of DC Circuits/ lab <br> (MA105) | 4 |
| ET115* | Fundamental Properties of AC Circuits/ lab <br> (ET105 \& MA141) | 4 |
| ET212* | Electronics I/lab (ET115) | 4 |
| ET222* | Electronics II/lab (ET212) | 4 |
| ET310* | Circuit Analysis (ET115 \& MA312) | 4 |
| ET332 | Analog Integrated Circuits (ET222 \& MA302) | 4 |
| ET372 | Instrumentation and Measurement (CT212, <br> ET222, \& PH221) | 4 |
| ET382 | Signals \& Systems Theory/lab (ET310, <br> PH221 \& CS265) | 4 |


| ET410* | Technical Project Management | 3 |
| :--- | :--- | :---: |
| ET450 | Capstone Project (ET410) | 3 |
|  | Choose one of the following: | 4 |
|  | ET352 Communication Systems (ET222 8 <br> MA302) |  |
|  | ET485 Power Systems (ET310) |  |
|  | ET495 Control Systems (ET382) | 4 |
| $300-499$ | CT or ET Elective w/Lab | 58 |
|  | Program Core Requirements |  |


*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

### 1.25 ENGINEERING MANAGEMENT TECHNOLOGY (ASSOCIATE OF SCIENCE)

## ASSOCIATE OF SCIENCE DEGREE PROGRAM

The objective of the Engineering Management Technology degree program is to provide students with the knowledge and skills to enter the workforce as technicians. Required coursework builds a foundation in circuit theory, analog electronics and business. The program satisfies the first two years of the Bachelor of Science in Engineering Management Technology.

## STUDENT LEARNING OUTCOMES

- Apply knowledge, techniques, skills and modern tools to narrowly defined engineering technology activities
- Apply a knowledge of mathematics, science, electronics engineering and technology to engineering technology problems
> Conduct, analyze and interpret experiments
> Identify, analyze and solve narrowly defined technical problems
- Function effectively on teams
- Apply written, oral and graphical communication

Address professional, ethical and social responsibilities
Demonstrate a commitment to quality, timeliness and continuous improvement

| ASSOCIATE OF SCIENCE <br> MANAGEMENT TECHNOLOGY |  | CREDIT <br> HOURS |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |


| PH220 | Physics I (MA141) | 4 |
| :---: | :---: | :---: |
| Computer Science |  | 3 |
| CS192 | Programming Essentials | 3 |
| Communication |  | 3 |
| C0101 | Introduction to Public Speaking | 3 |
| Humanities and Fine Arts |  | 3 |
| ET100 | Engineering \& Ethics | 3 |
| Social Sciences/Behavioral Sciences |  | 3 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 31 |
| ASSOCIATE OF SCIENCE PROGRAM CORE |  |  |
| ACC226 | Managerial Accounting (MA105) | 3 |
| CT212 | Digital Electronics/lab (CS192 \& ET105) | 4 |
| ET105* | Fundamental Properties of DC Circuits/ lab (MA105) | 4 |
| ET115* | Fundamental Properties of AC Circuits/ lab (ET105 \& MA141) | 4 |
| ET212 | Electronics I/lab (ET115) | 4 |
| MGT150 | Principles of Business Management | 3 |
|  | Program Core Requirements | 22 |
| OPEN ELECTIVE |  |  |
| 100-499+ | Open Elective | 7 |
|  | TOTAL DEGREE CREDIT HOURS | 60 |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

### 1.26 ENGINEERING MANAGEMENT TECHNOLOGY (BACHELOR OF SCIENCE)

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Engineering Management Technology degree program is to provide students with the knowledge and skills to enter the workforce and obtain increasing roles of managerial responsibility within a technical environment. Required coursework integrates the broader issues of business with the fundamentals and challenges of technological development and change through a business core of accounting, finance and management, coupled with a technology core in circuit theory, digital electronics and programming. Elective courses allow for additional depth in business, computer science or engineering technology.

## PROGRAM EDUCATIONAL OBJECTIVES

$\Rightarrow$ Apply knowledge, techniques, skills and modern tools to broadly defined engineering technology activities

Apply a knowledge of mathematics, science, electronics engineering and technology to engineering technology problems

Conduct, analyze and interpret experiments and apply experimental results to improve processes

- Identify, analyze and solve broadly defined technical problems
$>$ Design electronic systems, components or processes for broadly defined problems
Function effectively on teams
Apply written, oral and graphical communication
Address professional, ethical, social and global responsibilities and issues

Demonstrate a commitment to quality, timeliness and continuous improvement

| $\begin{array}{c}\text { BACHELOR OF SCIENCE - ENGINEERING } \\ \text { MANAGEMENT TECHNOLOGY } \\ \text { GENERAL EDUCATION }\end{array}$ |  | $\begin{array}{c}\text { CREDIT } \\ \text { HOURS }\end{array}$ |
| :---: | :---: | :---: |
| English Composition (EN100, EN101, or EN102) |  |  |$]$| EN261 | Fundamentals of Technical Writing |
| :---: | :---: |


| Computer Science |  | 3 |
| :---: | :---: | :---: |
| CS192 | Programming Essentials | 3 |
| Communication |  | 3 |
| C0101 | Introduction to Public Speaking | 3 |
| Humanities and Fine Arts |  | 6 |
| ET100 | Engineering \& Ethics | 3 |
| Social Sciences /Behavioral Sciences |  | 3 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 45 |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |
| ACC226 | Managerial Accounting (MA105) | 3 |
| CS265* | Programming in C++ (CS192) | 4 |
| CT212* | Digital Electronics/lab (CS192 \& ET105) | 4 |
| CT262 | Microprocessor Systems Engineering/lab <br> (CT212 \& CS263 or CS265) | 4 |
| EMT320 | Engineering Economics (MA141) | 3 |
| EMT340 | Systems Engineering | 3 |
| ET105* | Fundamental Properties of DC Circuits/ Iab (MA105) | 4 |
| ET115* | Fundamental Properties of AC Circuits/ lab (ET105 \& MA141) | 4 |
| ET212* | Electronics I/lab (ET115) | 4 |
| ET222* | Electronics II/lab (ET212) | 4 |
| ET372 | Instrumentation and Measurement (CT212, ET222 \& PH221) | 4 |
| MGT150 | Principles of Business Management | 3 |
| MGT456 | Quality Management (MA215 or MA230) | 3 |
| MGT461 | Leadership in Organizations | 3 |
| PRJ450 | Project Management (MA170 or MA215 or MA230) | 3 |
| 300-499 | CT or ET elective w/lab | 4 |
|  | Program Core Requirements | 57 |
| OPEN ELECTIVES |  |  |
| $300+$ | Open Elective | 18 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

| PROGRAMS OF STUDY | CERTIFICATE | ASSOCIATE DEGREE | BACHELOR'S DEGREE |
| :---: | :---: | :---: | :---: |
| Advanced Cybersecurity | Certificate |  |  |
| Computer Science |  | Associate of Science | Bachelor of Science |
| Cybersecurity Concepts | Certificate |  |  |
| Cyber Security |  |  | Bachelor of Science |
| Information Systems | Certificate |  | Bachelor of Science |
| Introduction to Programming |  |  |  |

### 1.27 CYBERSECURITY CONCEPTS

## CERTIFICATE PROGRAM

The Cybersecurity Concepts program introduces students to security threats and vulnerabilities and the principles, practices, policies and standards for securing information systems. Networks, as the heart of information systems, are addressed through standard models and protocols. Through hands-on simulations and virtual labs, students learn to configure and secure computer networks. Practice exams allow students to prepare for the CompTIA Network+ and Security+ certification exams. Upon completion of this program, graduates may enter entry-level positions in cybersecurity. Graduates may also continue their education and transfer courses within the certificate program to bachelor's degree programs in information systems or cyber security.

## STUDENT LEARNING OUTCOMES

$\Rightarrow$ Identify the layers of the OSI model

- Explain common networking protocols

Set up and troubleshoot various network topologies

- Categorize threats and vulnerabilities to a network or information system

Explain and apply different strategies for securing networks or information systems

Determine the components and strategies for the implementation of an information systems security plan

Identify relevant laws and standards applicable to information systems security and computer crime

| CYBERSECURITY CONCEPTS CERTIFICATE | CREDIT <br> HOURS |  |
| :---: | :--- | :---: |
| REQUIRED COURSES |  |  |
| IS211 | Introduction to Information Systems Security | 3 |
| IS216* | Computer Networks | 3 |
| IS311 | Security Operations | 3 |
| IS316 | TCP/IP Networks (IS216) | 3 |
| IS411 | Network Security (IS216) | 3 |
| Choose one of the following: | 3 |  |
| IS242 | Management Information Systems | 3 |
| IS320 | Database Applications | 3 |
| IS471 | Computer Forensics | 3 |
| IS475 | Ethical Hacking (IS216) | 3 |
|  | TOTAL REQUIRED HOURS | 18 |
| *Courses marked with an asterisk must be passed with a "C'" or better in order to |  |  |
| complete the program. |  |  |

### 1.28 ADVANCED CYBERSECURITY

## CERTIFICATE PROGRAM

The objective of the Advanced Cybersecurity program is to provide students with the knowledge and skills required of cybersecurity professionals. Going beyond Network+ and Security+, this certificate focuses on additional areas of knowledge associated with
the CISSP certification, such as risk management and mitigation, access control and authorization methods, disaster recovery practices and standards, social engineering, cryptography and legal implications. Standard tools and virtual labs give students hands-on exposure to security scenarios.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

## STUDENT LEARNING OUTCOMES

Assess and analyze the threats to information systems
Evaluate the standards, processes, methods and tools used to mitigate risk

Analyze key attributes of various access control methods and authorization techniques
Compare and contrast various ciphers and encryption standards
Identify the elements and processes for developing, testing and implementing a business continuity plan

- Examine methods for reducing the security risks arising from the human element and organizational culture and structure

Identify the legal and ethical issues surrounding global information systems security

| ADVANCED CYBERSECURITY CERTIFICATE | CREDIT <br> HOURS |  |
| :---: | :--- | :---: |
| REQUIRED COURSES |  |  |
| IS355 | Risk Management | 3 |
| IS360 | Disaster Recovery | 3 |
| IS440 | Human Decision and Security Engineering | 3 |
| IS450 | Security Trends and Legal Issues | 3 |
| Choose two of the following: | 6 |  |
| IS461 | Cryptography (IS211) | 3 |
| IS471 | Computer Forensics | 3 |
| IS475 | Ethical Hacking (IS216) | 3 |
| IS481 | Database Security (IS320) | 3 |
|  |  | TOTAL REQUIRED HOURS |

### 1.29 INTRODUCTION TO PROGRAMMING

## CERTIFICATE PROGRAM

The Introduction to Programming certificate program introduces students to both application and web programming. Assuming no prior experience in programming, students are introduced to the programming mindset and then progressively develop skills in object-oriented programming using C++. Students also learn to create interactive web pages using HTML, XHTML, CSS and JavaScript. Upon completion, students should be prepared for entry-level website design and programming positions. Graduates may also continue their education and transfer courses within the certificate program to bachelor's degree programs in computer science.

## STUDENT LEARNING OUTCOMES

| INTRODUCTION TO PROGRAMMING CERTIFICATE | CREDIT <br> HOURS |  |  |  |
| :---: | :--- | :---: | :---: | :---: |
| REQUIRED COURSES |  |  |  |  |
| CS192 | Programming Essentials | 3 |  |  |
| CS197 | Programming in HTML (CS192) | 3 |  |  |
| CS208 | Programming in JavaScript (CS197 or <br> IS301) | 4 |  |  |
| CS265* | Programing in C++ (CS192) | 4 |  |  |
| CS285 | Advanced Programming in C++ (CS265) | 4 |  |  |
|  | TOTAL REQUIRED HOURS |  |  | 18 |
| *Courses marked with an asterisk must be passed with a "C'" or better in order to |  |  |  |  |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.
Create web pages

- Add interactivity to web pages
- Write, compile and debug application programs


### 1.30 COMPUTER SCIENCE (ASSOCIATE OF SCIENCE)

## ASSOCIATE OF SCIENCE DEGREE PROGRAM

The objective of the Computer Science degree program is to provide students with the knowledge and skills to enter the workforce in entry-level computing positions. Required coursework builds a foundation in networking and web design and fluency in a programming language. The program satisfies the first two years of the Bachelor of Science in Computer Science degree.

## STUDENT LEARNING OUTCOMES

- Apply knowledge of computing and mathematical reasoning related to computer science

Analyze a problem, identify and define the computing requirements appropriate to its solution

Design, implement and evaluate a computer-based system, process, component or program to meet desired needs

Communicate effectively with a range of audiences

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

Use current techniques, skills and tools necessary for computing practice

| ASSOCIATE OF SCIENCE - COMPUTER SCIENCE | CREDIT <br> HOURS |  |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |
| English Composition (EN100, EN101, or EN102) | 6 |  |
| EN261 | Fundamentals of Technical Writing | 3 |
| Math |  | 6 |
| MA105 | College Algebra | 3 |
| MA141* | Pre-Calculus (MA105) | 3 |
| Natural/Physical Science | 4 |  |
| PH220 | Physics I (MA141) | 4 |
| Computer Science | 3 |  |
| CS192 | Programming Essentials | 3 |
| Communication | 3 |  |


| Humanities and Fine Arts | 3 |  |
| :--- | :--- | :--- |
| Social Sciences /Behavioral Sciences | 3 |  |
| General Education Elective | 3 |  |
|  | General Education Requirements | 31 |
|  | ASSOCIATE OF SCIENCE PROGRAM CORE |  |
| CS197* | Programming in HTML (CS192) | 3 |
| CS208 | Programming in JavaScript (CS197 or IS301) | 4 |
| CS265* | Programming in C++ (CS192) | 4 |
| CS285 | Advanced Programming in C++ (CS265) | 4 |
| IS216 | Computer Networks | 3 |
|  | Program Core Requirements | 18 |
| OPEN ELECTIVES |  |  |
| $100-499$ | Open Elective | 11 |
|  | TOTAL DECREE CREDIT HOURS | 60 |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

### 1.31 COMPUTER SCIENCE (BACHELOR OF SCIENCE)

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Computer Science degree program is to provide students with the knowledge and skills to enter the workforce and advance as professional software engineers, developers and system analysts. Required coursework builds a foundation and broad base of skills in programming, databases, and systems analysis and design.

## STUDENT LEARNING OUTCOMES

Apply knowledge of computing and mathematical reasoning related to computer science

- Analyze a problem and identify and define the computing requirements appropriate to its solution

Design, implement and evaluate a computer-based system, process, component or program to meet desired needs

Address professional, ethical, legal, security, global, and social issues and responsibilities

Communicate effectively with a range of audiences
Use current techniques, skills and tools necessary for computing practice


| EN261 | Fundamentals of Technical Writing | 3 |
| :---: | :---: | :---: |
| Math |  | 13 |
| MA105 | College Algebra | 3 |
| MA141* | Pre-Calculus (MA105) | 3 |
| MA230 | Mathematical Statistics | 3 |
| MA302 | Calculus I (MA141) | 4 |
| Natural/Physical Science |  | 4 |
| PH220 | Physics I (MA141) | 4 |
| Computer Science |  | 6 |
| CS192 | Programming Essentials | 3 |
| CS197* | Programming in HTML (CS192) | 3 |
| Communication |  | 3 |
| Humanities and Fine Arts |  | 3 |
| Social Sciences /Behavioral Sciences |  | 6 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 44 |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |
| CS208 | Programming in JavaScript (CS197 or IS301) | 4 |
| CS265* | Programming in C++ (CS192) | 4 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| CS285* | Advanced Programming in C++ (CS265) | 4 |
| :--- | :--- | :--- |
| CS325 | Data Structures (CS285) | 3 |
| CS340 | Operating Systems (CS192) | 3 |
| CS367 | Programming Languages (CS285 or CS325) | 3 |
| CS405 | Software Engineering (IS336) | 4 |
| CS499 | Computer Science Capstone (Completion of <br> Degree Requirements) | 3 |
| IS216 | Computer Networks | 3 |
| IS311 | Security Operations | 3 |
| IS320 | Database Applications | 3 |
| IS336* | Systems Analysis \& Design (CS265 or IS242) | 3 |


| IS370 | Server Side Web Development (IS259 or IS320 \& CS197 or IS301) | 4 |
| :---: | :---: | :---: |
| IS450 | Security Trends and Legal Issues | 3 |
| MA315 | Discrete Math (MA141) | 3 |
| 300-499 | CS Elective | 8 |
|  | Program Core Requirements | 58 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 15 |
| $300+$ | Open Elective | 3 |
| TOTAL DEGREE CREDIT HOURS |  | 120 |

### 1.32 CYBER SECURITY

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Cyber Security degree program is to provide students with the knowledge and skills to enter the workforce and advance in professional cyber security or information security roles. Required coursework builds a foundation and broad base of skills in network protocols, advanced security concepts and operating systems and system architecture. Courses are aligned to the Network+, Security+ and CISSP industry-standard certifications.

## PROGRAM EDUCATIONAL OBJECTIVES

The educational objectives of the program are to produce students who, within a few years of graduation, should be:

Successfully employed in a position with a security focus in the government or private sectors or be in a graduate program

Using a variety of security-related skills to improve the security posture of an organization

- Effective as a professional through communication skills, project management skills, ethical conduct, social awareness and teamwork

Technically current through continued education, certifications and professional development

## STUDENT LEARNING OUTCOMES

Apply knowledge of computing and mathematics appropriate to the discipline

Analyze a system and identify and define the security risks and requirements for secure operation

Design, implement and evaluate a computer-based system, process, component or program to meet security needs

Address professional, ethical, legal, security, and social issues and responsibilities

Communicate effectively with a range of audiences
Analyze the local and global impact of computing on individuals, organizations and society

Recognize the need for and an ability to engage in continuing professional development

Use current techniques, skills and tools necessary for computing security practice

Identify and analyze security risks of an information system
Develop security and recovery policies appropriate to an information system

| BACHELOR OF SCIENCE - CYBER SECURITY | CREDIT |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| Humanities and Fine Arts |  | 3 |
| :---: | :---: | :---: |
| Social Sciences /Behavioral Sciences |  | 6 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 43 |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |
| CS340 | Operating Systems (CS192) | 3 |
| CS386 | Systems Architecture (IS242) | 4 |
| IS211* | Introduction to Information Systems Security | 3 |
| IS216* | Computer Networks | 3 |
| IS242 | Management Information Systems | 3 |
| IS311 | Security Operations | 3 |
| IS316 | TCP/IP Networks (IS216) | 3 |
| IS320 | Database Applications | 3 |
| IS336 | Systems Analysis \& Design (CS265 or IS242) | 3 |
| IS355 | Risk Management | 3 |
| IS360 | Disaster Recovery | 3 |

### 1.33 INFORMATION SYSTEMS

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Information Systems degree program is to provide students with the knowledge and skills to enter the workforce and advance in roles requiring the application of technology to information systems. Required coursework builds a foundation and broad base of skills in programming, web design and systems analysis and design. Elective courses are available in business, computer science or information systems.

## STUDENT LEARNING OUTCOMES

- Apply knowledge of computing and mathematics appropriate to the discipline
- Analyze a problem and identify and define the computing requirements appropriate to its solution

Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
Address professional, ethical, legal, security and social issues and responsibilities

Communicate effectively with a range of audiences
Analyze the local and global impact of computing on individuals, organizations and society

Recognize the need for and an ability to engage in continuing professional development

| IS411 | Network Security (IS216) | 3 |
| :---: | :--- | :---: |
| IS440 | Human Decision \& Security Engineering | 3 |
| IS450 | Security Trends and Legal Issues | 3 |
| IS461 | Cryptography (IS211) | 3 |
| IS471 | Computer Forensics |  |
| IS499 | Security Capstone (Completion of Degree <br> Requirements) <br> Choose one of the following: | 3 |
|  | IS351 Information Systems Project <br> Management | 3 |
|  | IS475 Ethical Hacking (IS216) |  |
|  | IS481 Database Security (IS320) <br> Program Core Requirements | 55 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 22 |
| TOTAL DEGREE CREDIT HOURS | 120 |  |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

Use current techniques, skills and tools necessary for computing practice

Analyze processes that support the delivery and management of information systems

| BACHELOR OF SCIENCE - INFORMATION SYSTEMS | CREDIT <br> HOURS |  |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |
| English Composition (EN100, EN101, or EN102) | 6 |  |
| EN261 | Fundamentals of Technical Writing | 3 |
| Math |  | 12 |
| MA105 | College Algebra | 3 |
| MA230 | Mathematical Statistics | 3 |
| Natural/Physical Science | 3 |  |
| Computer Science | 7 |  |
| CS192 | Programming Essentials | 3 |
| CS200 | Programming in Java (CS192) | 4 |
| Communication | 3 |  |
| Humanities and Fine Arts | 3 |  |
| Social Sciences /Behavioral Sciences | 6 |  |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| General Education Elective | 3 |  |
| :---: | :--- | :---: |
|  | General Education Requirements | 43 |
| CS386 | Systems Architecture (IS242) | 4 |
| CS405 | Software Engineering (IS336) | 4 |
| IS216 | Computer Networks | 3 |
| IS231 | E-Commerce | 3 |
| IS242 | Management Information Systems | 3 |
| IS301 | Web Design I | 4 |
| IS320 | Database Applications | 3 |
| IS311 | Security Operations | 3 |
| IS336* | Systems Analysis \& Design (CS265 or IS242) | 3 |
| IS351 | Information Systems Project Management | 3 |


| IS450 | Security Trends and Legal Issues | 3 |
| :---: | :---: | :---: |
| IS498 | Senior Research Project (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| PROGRAM ELECTIVES |  |  |
| 100-499 | Business, CS, or IS electives | 6 |
| 300-499 | CS or IS electives | 9 |
|  | Program Elective Requirements | 15 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 17 |
| $300+$ | Open Elective | 6 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |
| Courses marked with an asterisk must be passed with a " C " or better in order to complete the program. |  |  |

### 1.34 INFORMATION SYSTEMS WITH A CONCENTRATION IN CYBERSECURITY

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Information Systems degree program with a concentration in cybersecurity is to provide students with the knowledge and skills to enter the workforce and advance in roles requiring the application of technology, especially cybersecurity strategies and techniques, to information systems. Required coursework builds a foundation and broad base of skills in programming, web design, and systems analysis and design. The courses in the concentration extend the foundation in network protocols and security to include additional coursework aligned to the Network+ and CISSP industry-standard certifications..

## STUDENT LEARNING OUTCOMES

Apply knowledge of computing and mathematics appropriate to the discipline
Analyze a problem and identify and define the computing requirements appropriate to its solution

Design, implement and evaluate a computer-based system, process, component or program to meet desired needs

- Address professional, ethical, legal, security and social issues and responsibilities

Communicate effectively with a range of audiences
Analyze the local and global impact of computing on individuals, organizations and society

Recognize the need for and an ability to engage in continuing professional development

Use current techniques, skills and tools necessary for computing practice

Analyze processes that support the delivery and management of information systems

| BACHELOR OF SCIENCE - INFORMATION SYSTEMS <br> WITH A CONCENTRATION IN CYBERSECURITY |  | CREDIT <br> HOURS |
| :---: | :---: | :---: |
| English Composition (EN100, EN101, or EN102) | 6 |  |
| EN261 | Fundamentals of Technical Writing | 3 |
| Math | 12 |  |
| MA105 | College Algebra | 3 |
| MA230 | Mathematical Statistics | 3 |
| Natural/Physical Science | 3 |  |
| Computer Science | 7 |  |
| CS192 | Programming Essentials | 3 |
| CS200 | Programming in Java (CS192) | 4 |
| Communication | 3 |  |
| Humanities and Fine Arts | 3 |  |
| Social Sciences /Behavioral Sciences | 6 |  |
| General Education Elective | 3 |  |
| General Education Requirements | 43 |  |
| CS386 Systems Architecture (IS242) |  |  |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |


| CS405 | Software Engineering (IS336) | 4 |
| :---: | :--- | :--- |
| IS216* | Computer Networks | 3 |
| IS231 | E-Commerce | 3 |
| IS242 | Management Information Systems | 3 |
| IS301 | Web Design I | 4 |
| IS320 | Database Applications | 3 |
| IS311 | Security Operations | 3 |
| IS336* | Systems Analysis \& Design (CS265 or IS242) | 3 |
| IS351 | Information Systems Project Management | 3 |
| IS450 | Security Trends and Legal Issues | 3 |
| IS498 | Senior Research Project (Completion of <br> Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |


| CYBERSECURITY CONCENTRATION COURSES |  |  |
| :---: | :---: | :---: |
| IS211 | Introduction to Information Systems Security | 3 |
| IS355 | Risk Management | 3 |
| IS360 | Disaster Recovery | 3 |
| IS411 | Network Security (IS216) | 3 |
| IS440 | Human Decision \& Security Engineering | 3 |
|  | Concentration Requirements | 15 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 17 |
| $300+$ | Open Elective | 6 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |
| Courses marked with an asterisk must be passed with a "C"' or better in order to omplete the program. |  |  |

### 1.35 INFORMATION SYSTEMS WITH A CONCENTRATION IN HEALTH INFORMATICS

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Information Systems degree program with a concentration in Health Informatics is to provide students with the knowledge and skills to enter the workforce and advance in roles requiring the development, implementation, and maintenance of information systems in a healthcare environment. Required coursework builds a foundation and broad base of skills in programming, web design, and systems analysis and design. The courses in the concentration deepen understanding in the management and security of data and information in the healthcare setting.

## STUDENT LEARNING OUTCOMES

Apply knowledge of computing and mathematics appropriate to the discipline

Analyze a problem and identify and define the computing requirements appropriate to its solution

Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
Address professional, ethical, legal, security and social issues and responsibilities
Communicate effectively with a range of audiences

- Analyze the local and global impact of computing on individuals, organizations and society
Recognize the need for and an ability to engage in continuing professional development
Use current techniques, skills and tools necessary for computing practice
Analyze processes that support the delivery and management of information systems

BACHELOR OF SCIENCE - INFORMATION SYSTEMS WITH A CONCENTRATION IN HEALTH INFORMATICS

CREDIT HOURS

GENERAL EDUCATION

| English Composition (EN100, EN101, or EN102) | 6 |  |
| :---: | :--- | :---: |
| EN261 | Fundamentals of Technical Writing | 3 |
| Math |  | 12 |
| MA105 | College Algebra | 3 |
| MA230 | Mathematical Statistics | 3 |


| Natural/Physical Science | 3 |
| :--- | :--- |

Computer Science 7

| CS192 | Programming Essentials | 3 |
| :--- | :--- | :--- |
| CS200 | Programming in Java (CS192) | 4 |


| Communication | 3 |
| :--- | :--- |


| Humanities and Fine Arts | 3 |
| :--- | :--- |


| Social Sciences /Behavioral Sciences | 6 |
| :--- | :--- |

General Education Elective 3
General Education Requirements
43
BACHELOR OF SCIENCE PROGRAM CORE

| CS386 | Systems Architecture (IS242) | 4 |
| :---: | :--- | :---: |
| CS405 | Software Engineering (IS336) | 4 |
| IS216 | Computer Networks | 3 |
| IS231 | E-Commerce | 3 |
| IS242 | Management Information Systems | 3 |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| IS301 | Web Design I | 4 |
| :---: | :--- | :---: |
| IS320 | Database Applications | 3 |
| IS311 | Security Operations | 3 |
| IS336* | Systems Analysis \& Design (CS265 or IS242) | 3 |
| IS351 | Information Systems Project Management | 3 |
| IS450 | Security Trends and Legal Issues | 3 |
| IS498 | Senior Research Project (Completion of <br> Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| HEALTH INFORMATICS CONCENTRATION COURSES |  |  |
| AH356 | Information Security \& Privacy in Healthcare <br> Organizations | 3 |
| AH432 | Healthcare Informatics | 3 |


| CS205 | Computer Software Applications in Healthcare | 3 |
| :---: | :---: | :---: |
| IS376 | Advanced Database Systems | 3 |
| IS481 | Database Security (IS320) | 3 |
|  | Concentration Requirements | 15 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Elective | 17 |
| $300+$ | Open Elective | 6 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

*Courses marked with an asterisk must be passed with a "C'" or better in order to complete the program.

### 1.36 INFORMATION SYSTEMS WITH A CONCENTRATION IN WEB DEVELOPMENT

## BACHELOR OF SCIENCE DEGREE PROGRAM

The objective of the Information Systems degree program with a concentration in Web Development is to provide students with the knowledge and skills to enter the workforce and advance in web development roles. Required coursework builds a foundation and broad base of skills in programming, web design, and systems analysis and design. The courses in the concentration deepen skill level in advanced web design strategies and techniques.

## STUDENT LEARNING OUTCOMES

> Apply knowledge of computing and mathematics appropriate to the discipline

- Analyze a problem and identify and define the computing requirements appropriate to its solution
. Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
Address professional, ethical, legal, security and social issues and responsibilities
Communicate effectively with a range of audiences
- Analyze the local and global impact of computing on individuals, organizations and society

Recognize the need for and an ability to engage in continuing professional development
Use current techniques, skills and tools necessary for computing practice

Analyze processes that support the delivery and management of information systems

| BACHELOR OF SCIENCE - INFORMATION SYSTEMS |  |
| :---: | :---: | :---: |
| WITH A CONCENTRATION IN WEB DEVELOPMENT |  | CREDIT | HOURS |
| :---: | :---: |

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

| IS242 | Management Information Systems | 3 |
| :---: | :--- | :---: |
| IS301 | Web Design I | 4 |
| IS320 | Database Applications | 3 |
| IS311 | Security Operations | 3 |
| IS336* | Systems Analysis \& Design (CS265 or IS242) | 3 |
| IS351 | Information Systems Project Management | 3 |
| IS450 | Security Trends and Legal Issues | 3 |
| IS498 | Senior Research Project (Completion of <br> Degree Requirements) | 3 |
|  | Program Core Requirements | 39 |
| WEB DEVELOPMENT CONCENTRATION COURSES |  |  |


| CS208 | Programming in Javascript (CS197 or IS301) | 4 |
| :---: | :--- | :---: |
| CS350 | Introduction to jQuery (CS208 or IS306) | 3 |
| IS306 | Web Design II (IS301 or CS197) | 4 |
| IS370 | Server Side Web Development (IS259 or <br> IS320 AND CS197* or IS301*) | 4 |
| $100-499$ | Opencentration Requirements Elective | 15 |
| $300+$ | Open ELECTIVES |  |
|  | Opective <br> TOTAL DEGREE CREDIT HOURS | 120 |

*Courses marked with an asterisk must be passed with a " C " or better in order to complete the program.

## MISSION STATEMENT

The College of Nursing and Allied Health at Grantham University prepares healthcare professionals in nursing and allied health careers to expand their knowledge and skills in areas of leadership, community concepts, research and evidence-based practice related to current trends and issues in today's global society.

The School of Nursing offers the following programs:

| PROGRAMS OF STUDY | CREDENTIAL |
| :---: | :---: |
| RN to BSN Completion Program | BSN |

## SCHOOL OF NURSING

## MISSION STATEMENT

Grantham University School of Nursing faculty are committed to transforming nursing through the provision of an innovative advanced nursing education that removes barriers such as accessibility, deployment and discrimination. The School of Nursing provides an asynchronous online learning community for students from diverse cultures to expand the evidence-based practice of professional nursing through transformational leadership leading to improved health outcomes in a global society.

## PHILOSOPHY OF NURSING

The global society requires the nurse to be competent in digital literacy and technological skills to maintain evidence-based practice that leads to improved health outcomes and interdisciplinary collaboration. Nursing education embraces innovation in curriculum delivery and promotes asynchronous learning in a virtual environment.

Nursing practices in a multicultural society and creates a caring, respectful environment that values the uniqueness of each person. Nursing education fosters respect for cultural and ethnic diversity and focuses on personal and professional growth of the learner.

Nursing utilizes evidence-based practice to guide performance. Critical thinking involves the integration of inquiry, analysis and judgment to provide enhanced outcomes in patient-centered care. Post-licensure programs contribute to the body of nursing knowledge through strategic curriculum design that incorporates authentic, scholarly projects.

Communication, through written, verbal, non-verbal and electronic modes along with collaborative skills, produces a positive work

The School of Allied Health offers the following programs:

| PROGRAMS OF STUDY | CREDENTIAL |
| :---: | :---: |
| Medical Administrative Assistant | Certificate |
| Medical Coding and Billing | Associate of Applied Science |
| Health Information Management | Bachelor of Science |

environment, enhances the productivity of the nursing team and promotes interpersonal relationships leading to patient-centered care. Interdisciplinary practice depends on teamwork to produce effective outcomes in the contemporary healthcare environment.

Nursing education also participates in quality improvement to provide a current, rigorous curriculum that is consistent with contemporary practice and technological advances. Quality improvement is a core value in healthcare leading to improved safety and positive patient care outcomes.

Professional nursing participates in quality improvement processes and is committed to continual performance improvement to deliver the highest standards of care to a diverse population. Professional standards are upheld through moral, ethical and legal conduct with an assumption of accountability for all personal and professional actions. Evaluation of professional responsibilities is an ongoing process in response to the needs of the nursing profession in a global society.

In conclusion, the nursing faculty accepts responsibility to provide students with quality educational experiences necessary for personal and professional growth. Likewise, graduates understand the extent and limitations of their roles and are encouraged to increase their professional knowledge and responsibilities to society through continuing education. Consistent with the philosophical statements contained in this document and the University Vision \& Mission, the faculty will incorporate these beliefs throughout the nursing curriculum.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

### 1.37 RN TO BSN COMPLETION

## BACHELOR OF SCIENCE IN NURSING DEGREE PROGRAM

The RN to BSN Completion Program builds upon the foundation of previous nursing education at the associate degree level to enhance the theoretical concepts of the science of nursing. The RN to BSN Completion Program is evidence-based and developed according to best practices using the following professional standards: National League for Nursing Competencies for graduates of baccalaureate education; Quality and Safety in Education for Nursing Competencies; and American Association of Colleges of Nursing Essentials of Baccalaureate Education.

The program incorporates both didactic and practice experiences in the curriculum with the practice experiences using both direct human interface and indirect learning situations that allow the student to apply concepts in the course to clinical scenarios in a simulated environment. Graduates are prepared to function as nurse generalists in a variety of healthcare settings. All students are required to complete a capstone project in a clinical setting.

## PROGRAM MISSION

To expand the skills in areas of leadership, community concepts, research and professional practice related to current trends and issues in today's global society.

## STUDENT LEARNING OUTCOMES

Assess effective communication in oral, written, interpersonal and electronic modes

- Evaluate clinical judgments based on evidence-based practice standards and ethical practices

Ensure accountability when providing and ensuring safe, efficient, quality patient care

Synthesize available resources to apply critical thinking to complex clinical situations

- Incorporate culturally competent care concepts for individuals and families across the lifespan

Critique proficiency when caring for communities and populations
Analyze opportunities for personal and professional growth in pursuit of career goals

Integrate clinical technologies and informatics in practice

| RN TO BSN COMPLETION | CREDIT <br> HOURS |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |
| MA230 Mathematical Statistics | 3 |
| General Education Requirements | 3 |
| STUDENTS ENTERING WITH AN ASSOCIATE DEGREE <br> IN NURSING AND RN LICENSE | CREDIT <br> HOURS |


| Education $\varepsilon$ licensing completed prior to matriculation at Grantham |  |  |
| :---: | :---: | :---: |
| Basic RN Program - credits for nursing coursework |  | 30 |
| General Education transferable credits from an appropriately accredited institution |  | 21 |
| Experiential Credit for RN practice |  | 30 |
|  | BSN Degree Completion* | 36 |
| BSN PROGRAM CORE |  |  |
| NUR302 | Pathophysiology | 3 |
| HSN310 | Scholarly Writing for Healthcare Professions | 3 |
| NUR304 | Nursing Ethics | 3 |
| NUR306 | Pharmacology | 3 |
| NUR402*^ | Transition to Professional Nursing | 3 |
| NUR405*^ | Health Assessment for Professional Nursing | 3 |
| NUR410* | Theoretical Concepts of Research in Nursing | 3 |
| NUR415* | Nursing Informatics | 3 |
| NUR417*^ | Nursing Leadership and Management | 3 |
| NUR427*^ | Population Health in the Global Community | 3 |
| NUR441*^ | Case Management Concepts | 3 |
| NUR499*^ | RN-BSN Capstone Project (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 36 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

*Courses with an asterisk may not be transferred in and must be taken in that order. Non-matriculating students holding a current and unencumbered RN license may take an individual nursing course.
^Indicates practice experience exists in the course.
Note: Prior postsecondary education transcripts will be reviewed for possible transfer of credit for HSN310, MA230, NUR302, NUR304, and NUR306 for a maximum of 9 credits allowed for transfer.

Registered Nurses admitted to the RN to BSN Completion Program are granted 30 experiential credits for their nursing practice experience. By possession of an associate degree from an appropriately accredited institution, associate degree RNs are assumed to be competent in professional communication, healthcare system dynamics and the use of technology in the clinical practice arena. Associate degree RNs are able to prioritize patient care needs based upon risk and acuity and are competent in ethical practices and basic conflict management.

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

## RN TO BSN COMPLETION ACCELERATED OPTION

The RN to BSN Completion accelerated option is designed for the experienced Registered Nurse who has been in clinical practice for at least 2 years and who needs to complete the BSN as quickly as possible. Ideal candidates for this accelerated option will have: earned at least a 3.0 GPA in the entry-level RN coursework; limited outside responsibilities; a consistent work schedule; and the motivation to devote 10 months to furthering their career. In the accelerated option, students are authorized to complete 6-9 credits per term in the order shown. This authorization is revoked if the student is no longer making satisfactory academic progress as defined in the Student Handbook. A student who fails/withdraws or is withdrawn from a course may be placed into the standard option. A student may, at any time, place themselves into the standard option; however, the student may not move back and forth between the standard and accelerated options. All RN to BSN-specific requirements apply to the accelerated option.

| RN TO BSN COMPLETION ACCELERATED OPTION | CREDIT <br> HOURS |  |
| :---: | :---: | :---: |
| Term 1 |  |  |
| NUR402*^ | Transition to Professional Nursing | 3 |
| NUR306 | Pharmacology | 3 |
| HSN310 | Scholarly Writing for Healthcare <br> Professions | 3 |
| Term 2 |  |  |
| NUR302 | Pathophysiology | 3 |


| NUR405*^ | Health Assessment for Professional Nursing | 3 |
| :---: | :---: | :---: |
| NUR304 | Nursing Ethics | 3 |
| Term 3 |  |  |
| NUR410* | Theoretical Concepts of Research in Nursing | 3 |
| NUR415* | Nursing Informatics | 3 |
| MA230 | Mathematical Statistics (from GE core) | 3 |
| Term 4 |  |  |
| NUR417* | Nursing Leadership and Management | 3 |
| NUR427*^ | Population Health in the Global Community | 3 |
| Term 5 |  |  |
| NUR441*^ | Case Management Concepts | 3 |
| NUR499* | RN-BSN Capstone Project | 3 |
|  | Program Core + General Education Core | 39 |
| Basic RN program - credits for nursing coursework |  | 30 |
|  | General Education Transferable Credits | 21 |
|  | Experiential Credit for RN practice | 30 |
|  | TOTAL REQUIRED HOURS | 120 |

*Courses with an asterisk may not be transferred in and must be taken in that order. Non-matriculating students holding a current and unencumbered RN license may take an individual nursing course.
${ }^{\wedge}$ Indicates practice experience exists in the course.
Note: Prior postsecondary education transcripts will be reviewed for possible transfer of credit for HSN310, MA230, NUR302, NUR304, and NUR306 for a maximum of 9 credits allowed for transfer.

## SCHOOL OF ALLIED HEALTH

## MISSION STATEMENT

The Grantham University School of Allied Health provides healthcare practitioners with the knowledge and skills in areas of leadership, community concepts, research and evidence-
based practice required in a technological world, enabling them to use resources and collaborate in working toward the goal of improving healthcare.

### 1.38 MEDICAL ADMINISTRATIVE ASSISTANT

## CERTIFICATE PROGRAM

The six-course, 18 -credit Certificate Program prepares students to become a Medical Administrative Assistant. The program is designed for students entering the field of medical assistant administration, primarily in a medical office. The certificate allows students to master a set of skills pertaining to the performance of various office administration duties in a healthcare environment. This program focuses on practical learning of medical office functions, medical coding, insurance procedures, electronic records management and financial practices. This program provides
students with access to the National Healthcareer Association (NHA) portal used to practice, prepare and sit for the Medical Administrative Assistant Certification Exam.

## STUDENT LEARNING OUTCOMES

Illustrate the role and function of different types of healthcare facilities and environments

Utilize medical terms and abbreviations that are commonly used in health information management systems

## UNDERGRADUATE DEGREE AND CERTIFICATE PROGRAMS

Articulate understanding of local, state and federal regulations, including OSHA standards and HIPAA's rules for protected health information and ethical practices

Apply diagnosis coding skills for records management
Complete the CMAA Certification through National Healthcareer Association (NHA)

MEDICAL ADMINISTRATIVE ASSISTANT CERTIFICATE

> CREDIT HOURS

REQUIRED COURSES

CS205 Computer Software Application in

AH111c Healthcare

3

### 1.39 MEDICAL CODING AND BILLING

## ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

The Medical Coding and Billing program provides the student with the skills needed to enter the medical coding and billing profession. After graduation, the student may take the American Health Information Management Association's Certified Coding Associate exam, a medical coding and billing industry certification.

## STUDENT LEARNING OUTCOMES

Explain the role and function of different types of healthcare facilities and environments

Explain medical terms and abbreviations that are commonly used in health information management systems

Identify the constraints and guidelines that the Health Insurance and Portability and Accountability Act places on healthcare systems

Use healthcare-related coding and billing software to support healthcare administration functions

| ASSOCIATE OF APPLIED SCIENCE - MEDICAL CODING <br> AND BILLING |  | CREDIT <br> GENERAL EDUCATION |
| :--- | :---: | :---: |
| HOURS |  |  |
| English Composition |  |  |
| EN101 | English Composition I | 3 |
| Math | 3 |  |
| Natural/Physical/Computer Science | 3 |  |
| BIO113 | Anatomy and Physiology | 3 |
| BI0116 | Introduction to Pathophysiology | 3 |
| BI0117 | Introduction to Pharmacotherapy | 3 |
| Computer Science | 3 |  |
| CS105 | Introduction to Computer Applications | 3 |


| Communication |  | 3 |
| :---: | :---: | :---: |
| C0101 | Introduction to Public Speaking | 3 |
| Social Sciences/Behavioral Sciences |  | 3 |
| Humanities and Fine Arts |  | 3 |
| General Education Elective |  | 3 |
|  | General Education Requirements | 30 |
| ASSOCIATE OF APPLIED SCIENCE PROGRAM CORE |  |  |
| CS205 | Computer Software Applications in Healthcare | 3 |
| AH111 | Health Care Delivery Systems | 3 |
| AH112 | Introduction to Health Information Management | 3 |
| AH114 | Medical Terminology | 3 |
| AH212 | Basic Diagnosis Coding Systems (AH114) | 3 |
| AH213 | Basic Procedure Coding Systems (AH212) | 3 |
| AH214 | Reimbursement Methodologies | 3 |
| AH215 | Medical Assisting | 3 |
| AH216 | Professional Practice (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 27 |
| OPEN ELECTIVES |  |  |
| 100-499 | Open Electives | 3 |
|  | TOTAL DEGREE CREDIT HOURS | 60 |

[^1]
### 1.40 HEALTH INFORMATION MANAGEMENT

## BACHELOR OF SCIENCE DEGREE PROGRAM

The Health Information Management program provides the student with the skills needed to analyze information needs, design solutions and manage information storage, transfer and retrieval in healthcare environments.

## STUDENT LEARNING OUTCOMES

Use information systems tools, techniques and methodologies applicable to healthcare systems

Apply project management principles to information systems development efforts in healthcare institutions

- Structure information collection and presentation to facilitate executive-level planning and decision-making in healthcare environments
- Apply fundamental systems analysis and design concepts and problem-solving strategies to information technology problems
Analyze, design and implement solutions to healthcare information problems

Develop reporting and support capabilities for healthcare decisions

| BACHELOR OF SCIENCE - HEALTH INFORMATION <br> MANAGEMENT |  |
| :--- | :--- |
| GENERAL EDUCATION | CREDIT <br> HOURS |
| English Composition | 6 |
| Math | 9 |
| MA105 | College Algebra |
| Natural/Physical/Computer Science | 3 |
| BIO113 | Anatomy and Physiology |
| BIO116 | Introduction to Pathophysiology |
| Communication | 6 |
| Social Sciences/Behavioral Sciences | 3 |
| Humanities and Fine Arts | 6 |
| Computer Science | 6 |
| CS105 | Introduction to Computer Applications |
| General Education Elective | 3 |


|  | General Education Requirements | 42 |
| :---: | :---: | :---: |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |
| AH111 | Health Care Delivery Systems | 3 |
| AH114 | Medical Terminology | 3 |
| AH212 | Basic Diagnosis Coding Systems (AH114) | 3 |
| AH213 | Basic Procedure Coding Systems (AH212) | 3 |
| AH214 | Reimbursement Methodologies | 3 |
| AH356 | Information Security and Privacy in Healthcare Organizations | 3 |
| AH432 | Health Care Informatics | 3 |
| AH497 | Healthcare Systems Capstone (Completion of Degree Requirements) | 3 |
| HSN310 | Scholarly Writing for Healthcare Professions | 3 |
| CS205 | Computer Software Applications in Healthcare | 3 |
| MGT150 | Principles of Business Management | 3 |
| MGT461 | Leadership in Organizations | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| IS216 | Computer Networks | 3 |
| IS242 | Management Information Systems (CS105) | 3 |
| IS311 | Security Operations | 3 |
| IS320 | Database Applications (CS105) | 3 |
| IS336 | Information Systems Analysis (CS265 or IS242) | 3 |
| IS351 | Information Systems Project Management | 3 |
|  | Program Core Requirements | 57 |
|  | OPEN ELECTIVES |  |
| $300+$ | Open Electives | 21 |
|  | TOTAL DEGREE CREDIT HOURS | 120 |

## GRADUATE DEGREE AND CERTIFICATE PROGRAMS

Each graduate degree program is outlined as a program of study. A term is a period of eight weeks (56 days) in which students must complete all courses in which they have enrolled. A detailed description of each course is provided in Section 4 of the University Catalog.

| PROGRAM OF STUDY | MARK SKOUSEN SCHOOL OF BUSINESS | COLLEGE OF ARTS AND SCIENCES | COLLEGE OF ENGINEERING AND COMPUTER SCIENCE | COLLEGE OF NURSING AND ALLIED HEALTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | SCHOOL OF NURSING | $\begin{aligned} & \text { SCHOOL OF } \\ & \text { ALLIED } \\ & \text { HEALTH } \end{aligned}$ |
| Business Administration - Information Management | MBA |  |  |  |  |
| Business Administration - Project Management | MBA |  |  |  |  |
| Business Administration | MBA |  |  |  |  |
| Business Intelligence | MS |  |  |  |  |
| Health Systems Management |  |  |  |  | MS |
| Healthcare Administration |  |  |  |  | MHA |
| Human Resources | Cerrificate |  |  |  |  |
| Information Management - Project Management |  |  | MS |  |  |
| Information Management Technology |  |  | MS |  |  |
| Information Technology |  |  | MS |  |  |
| Leadership |  | MS |  |  |  |
| Nursing - Case Management |  |  |  | MSN |  |
| Nursing - Education |  |  |  | MSN |  |
| Nursing - Informatics |  |  |  | MSN |  |
| Nursing Management \& Organizational Leadership |  |  |  | MSN |  |
| Performance Improvement | MS |  |  |  |  |
| Project Management | Cerrificate |  |  |  |  |

## MARK SKOUSEN SCHOOL OF BUSINESS

It is the mission of the Mark Skousen School of Business to develop entrepreneurially minded business students by providing innovative teaching methods through a student-centered approach to learning that leads to a high-quality, relevant and sustainable business foundation.

The student must complete at least 36 credit hours in the degree program at Grantham to earn a graduate degree.

## THE MARK SKOUSEN SCHOOL OF BUSINESS OFFERS THE FOLLOWING GRADUATE DEGREES:

| PROGRAM | DEGREE |
| :--- | :---: |
| Business Administration | MBA |
| Business Administration - Information Management | MBA |

### 2.1 HUMAN RESOURCES (GRADUATE)

## CERTIFICATE PROGRAM

The Human Resources (Graduate) program focuses on the analysis of human resource management theories and development. The courses comprised will involve active engagement of management of human resource professionals toward strategic organizational goals and policy. The Human Resources (Graduate) certificate program builds from the undergraduate certificate and the BBA in Human Resources, moving from a technical and operational focus to a strategic and policy focus that requires in-depth general management and HR management practice knowledge. Upon completion of this program, graduates may enter managementlevel positions in human resource management or labor relations. Graduates may also continue their education and transfer courses from the certificate program to master's degree programs.

The completion of a bachelor's degree is required for admission to this certificate program.

Students enrolled in this program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

Analyze an approach for human resource management and diagram human resource planning

Implement strategic organizational change for increased quality, productivity and employee satisfaction

| Business Administration - Project Management | MBA |
| :--- | :---: |
| Business Intelligence | MS |
| Performance Improvement | MS |

The Master of Business Administration provides the student with an advanced knowledge of business, marketing, management, project management and information technology. Students who do not have a business background or business degree should complete the following recommended competencies prior to enrolling in an MBA program:

ACC220 Financial Accounting
FIN307 Principles of Finance I

- ECN201 Microeconomics

MA170 Finite Mathematics

## GRADUATE DEGREE PROGRAMS

### 2.2 PROJECT MANAGEMENT (GRADUATE)

## CERTIFICATE PROGRAM

The Project Management (Graduate) program is designed to enable students who are managers, through a combination of business, management and operational courses, to implement a streamlined project management approach. The certificate program will provide experienced managers with a complex project management skill set that will align to organizational strategic goals to increase visibility and value within the organization.

The completion of a bachelor's degree is required for admission to this certificate program.

Students enrolled in this program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

- Effectively manage multiple, interrelated, complex project components, including scheduling development and analysis and specific quantitative techniques developed for analyzing projects

Implement enterprise-level project portfolio management that aligns with the organization's strategic plans and goals

Construct and distinguish the aspects of project management development, including people-based project management

Avoid common project management pitfalls through effective forecasting of time, resource and budgeting requirements for a project to coordinate the work within a project team and meet project objectives

Implement the Ten PMBOK ${ }^{\circledR}$ Knowledge Areas

| PROJECT MANAGEMENT GRADUATE CERTIFICATE | CREDIT <br> HOURS |  |
| :---: | :---: | :---: |
| PRJ515 | REQUIRED COURSES |  |
| IS649 | Information Technology Project <br> Management (PRJ515) | 3 |
| PRJ636 | Project Management Organization <br> Framework and Risk (PRJ515) | 3 |
| PRJ656 | Project Management Integration <br> Framework (PRJ636) | 3 |
| RCH520 | Quantitative Analysis |  |
| PRJ695 | Project Management Capstone <br> (Completion of All Certificate <br> Requirements) | 3 |
|  | TOTAL REQUIRED HOURS |  |

### 2.3 BUSINESS ADMINISTRATION

The Master of Business Administration Degree provides students with a practical knowledge of a business environment. Students are offered the option of a generalized MBA (standard option or accelerated option) or a specialized degree program in one of two areas: Business Administration - Information Management and Business Administration — Project Management.

## MASTER OF BUSINESS ADMINISTRATION DEGREE PROGRAM STANDARD OPTION

This degree program provides students with a practical knowledge of a business environment. The MBA program covers finance, financial and managerial accounting, human resource management, information management, managerial economics, marketing, organizational behavior and quantitative analysis.

Students enrolled in any graduate business school program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

Analyze knowledge, techniques, skills and tools of past, present and future business models

Apply current knowledge and adapt to emerging applications of all foundational business areas

Integrate theory and practice for the purpose of strategic analysis and planning

- Use communication skills
$>$ Evaluate professional, ethical and social responsibilities in business management and team settings
Employ quantitative analysis in business

| MASTER OF BUSINESS ADMINISTRATION | CREDIT <br> HOURS |  |
| :--- | :--- | :---: |
| MGT500 | Management | 3 |
| MKG530 | Marketing Management | 3 |
| MGT517 | Organizational Behavior | 3 |
| ECN501 | Managerial Economics | 3 |
| ACC510 | Accounting | 3 |
| BUS575 | Strategies for Change | 3 |
| BUS615 | e-Business | 3 |
| RCH520 | Quantiative Analysis | 3 |
| FIN526 | Finance | 3 |

## GRADUATE DEGREE PROGRAMS

| MGT570 | Strategic Management | 3 |
| :---: | :--- | :---: |
| ETH560 | Business Ethics | 3 |
| MGT699 | Capstone Project (Completion of Degree <br> Requirements) | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

## MASTER OF BUSINESS ADMINISTRATION DEGREE PROGRAM ACCELERATED OPTION

Students who have three years of work experience in a businessspecific role or have a conferred bachelor's degree from an appropriately accredited institution with a concentration, emphasis, major or specialization in a business discipline and having earned a 3.0 GPA in that business degree and who have 36 hours per week for coursework, can apply for the accelerated MBA schedule.

In the accelerated schedule, students are authorized to take two courses (six credit hours) each term. This authorization extends to the point that a student is not making satisfactory academic progress, as defined in the Student Handbook. If a student's GPA is below the academic standing threshold between checks, the Dean reserves the right to reduce the student's credit hour load.

Students enrolled in any graduate business school program are required to follow courses in the sequence set out for that program.

The MBA is a general, graduate business degree program. This course of study emphasizes management, finance, financial and managerial accounting, macroeconomics, microeconomics, marketing, organizational behavior and quantitative analysis.

## STUDENT LEARNING OUTCOMES

Analyze knowledge, techniques, skills and tools of past, present and future business models

Apply current knowledge and adapt to emerging applications of all foundational business areas

Integrate theory and practice for the purpose of strategic analysis and planning

Use communication skills
Evaluate professional, ethical and social responsibilities in business management and team settings
Employ quantitative analysis in business

| MASTER OF BUSINESS ADMINISTRATION | CREDIT |
| :--- | :--- |
| HOURS |  |

Term 1

| MGT500 | Management | 3 |
| :--- | :--- | :--- |
| MKG530 | Marketing Management | 3 |

Term 2

| MGT517 | Organizational Behavior | 3 |
| :--- | :--- | :--- |
| ECN501 | Managerial Economics | 3 |

Term 3

| ACC510 | Accounting | 3 |
| :---: | :--- | :---: |
| BUS575 | Strategies for Change | 3 |
| Term 4 |  |  |
| BUS615 | e-Business | 3 |
| RCH520 | Quantitative Analysis (MA170) | 3 |
| Term 5 |  |  |


| Term 5 |  |  |
| :---: | :--- | :--- |
| FIN526 | Finance | 3 |
| MGT570 | Strategic Management | 3 |

Term 6
ETH560 Business Ethics

MGT699

| Capstone Project (Completion of Degree | 3 |
| :--- | :--- |

Requirements)
TOTAL REQUIRED HOURS

### 2.4 BUSINESS ADMINISTRATION - INFORMATION MANAGEMENT

## MASTER OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The Information Management degree program enhances managerial skills, business strategies and decision-making abilities with emerging technology trends found in current corporate operations.
Students enrolled in this program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

Analyze knowledge, techniques, skills and tools of past, present and future business models

Apply current knowledge and adapt to emerging applications of all foundational business areas

Integrate theory and practice for the purpose of strategic analysis and planning

- Use communication skills

Evaluate professional, ethical and social responsibilities in business management and team settings

- Employ quantitative analysis in business

Evaluate state-of-the-art information processing and computer networking strategies

Assess and develop plans for future information systems expansion and implementation

|  | INFORMATION MANAGEMENT | CREDIT <br> HOURS |
| :--- | :--- | :---: |
| MGT517 | Organizational Behavior | 3 |
| ACC510 | Accounting | 3 |
| ECN501 | Managerial Economics | 3 |
| ETH560 | Business Ethics | 3 |
| RCH520 | Quantitative Analysis | 3 |
| FIN526 | Finance | 3 |


| PRJ515 | Project Management Essentials | 3 |
| :---: | :--- | :---: |
| IS525 | Information Systems Strategic Planning | 3 |
| IS545 | Emerging Technologies | 3 |
| MKG530 | Marketing Management | 3 |
| MGT570 | Strategic Management | 3 |
| MGT699 | Capstone Project (Completion of Degree <br> Requirements) | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

### 2.5 BUSINESS ADMINISTRATION - PROJECT MANAGEMENT

## MASTER OF BUSINESS ADMINISTRATION DEGREE PROGRAM

The Project Management degree program provides MBA students with a curriculum prescribed in the Project Management Institute's Project Management Body of Knowledge Guide.

Students enrolled in this program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

Analyze knowledge, techniques, skills and tools of past, present and future business models

Apply current knowledge and adapt to emerging applications of all foundational business areas

Integrate theory and practice for the purpose of strategic analysis and planning
$\geqslant$ Use communication skills
Evaluate professional, ethical and social responsibilities in business management and team settings
$\Rightarrow$ Employ quantitative analysis in business

- Engage in practical exercises that improve organizational skills in the project management field

Develop the necessary tools to effectively plan, measure and control projects

|  | PROJECT MANAGEMENT | CREDIT <br> HOURS |
| :--- | :--- | :---: |
| MGT500 | Management | 3 |
| MGT517 | Organizational Behavior | 3 |
| ACC510 | Accounting | 3 |
| IS649 | Information Technology Project <br> Management | 3 |
| ECN501 | Managerial Economics | 3 |
| ETH560 | Business Ethics | 3 |
| RCH520 | Quantitative Analysis | 3 |
| FIN526 | Finance | 3 |
| PRJ515 | Project Management Essentials | 3 |
| PRJ636 | Project Management Organization <br> Framework and Risk (PRJ515) | 3 |
| PRJ656 | Project Management Integration <br> Framework (PRJ636) | 3 |
| PRJ695 | Project Management Capstone (Completion <br> of Degree Requirements) | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

## GRADUATE DEGREE PROGRAMS

### 2.6 BUSINESS INTELLIGENCE

## MASTER OF SCIENCE DEGREE PROGRAM

The Business Intelligence program is designed to provide students with a solid foundation in technology and decision-making tools that will contribute to their ability to collect, interpret and use information. This program integrates technological concepts within a relevant, functional business application framework. The program provides students with an advanced business education in the fields of technology and decision science.
Students enrolled in this program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

Build business models for forecasting and business analysis
Compare and contrast business intelligence technologies

- Integrate information from the organization into a
strategic system
- Use communication skills

Assess work flow, data analysis and technology through quantitative techniques
Analyze professional, ethical, legal, security, and social issues and responsibilities

Evaluate information about an organization's operational processes, financial situation and business performance

Assemble project plans to report project progress to stakeholders

|  | BUSINESS INTELLIGENCE | CREDIT <br> HOURS |
| :---: | :--- | :---: |
| BUS501 | Overview of Business Intelligence | 3 |
| MGT517 | Organizational Behavior | 3 |
| IS515 | Management of Information Systems | 3 |
| IS525 | Information Systems Strategic Planning | 3 |
| IS566 | Decision Support and Intelligence Systems | 3 |
| IS576 | Data Warehousing | 3 |
| MGT541 | Customer Relationship Management | 3 |
| MGT551 | Business Performance Management | 3 |
| MGT621 | Balanced Scorecards and <br> Performance Dashboards | 3 |
| MGT642 | Strategic Management of <br> Technology and Innovation | 3 |
| PRJ515 | Project Management Essentials | 3 |
| PRJ691 | Capstone Project - Business Intelligence <br> (Completion of Degree Requirements) | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

### 2.7 PERFORMANCE IMPROVEMENT

## MASTER OF SCIENCE DEGREE PROGRAM

The Performance Improvement program provides students with advanced skills in organizational resource management. Students are prepared to manage complex organizational challenges through performance improvement strategies and are adept at analyzing an organization, generating strategies to maximize performance and implementing solutions.
Students enrolled in this program are required to follow courses in the sequence illustrated in the chart.

## STUDENT LEARNING OUTCOMES

Evaluate organizational and human performance problems and issues
$>$ Use communication skills

- Prepare proposals and develop strategies to influence stakeholder decisions

Design and develop viable interventions to improve performance
Analyze professional, ethical, legal, and social issues and responsibilities

Measure and revise performance improvement solutions
Design and manage performance improvement projects
Employ and apply quantitative techniques in performance improvement areas

| PERFORMANCE IMPROVEMENT |  | CREDIT <br> HOURS |
| :---: | :--- | :---: |
| MGT517 | Organizational Behavior | 3 |
| MGT501 | Introduction to Organizational and <br> Human Performance | 3 |
| MGT514 | Principles of Human <br> Performance Technology | 3 |
| MGT515 | Measurement and Assessment Strategies | 3 |
| MGT547 | Learning and Performance |  |
| MGT553 | Performance Consulting, Persuasive <br> Communication and Influence Process | 3 |
| HRM620 | Strategic Human Resource Management | 3 |

## GRADUATE DEGREE PROGRAMS

| HRM651 | Performance Analysis | 3 | HRM699 | Capstone Performance Project (Completion <br> of Degree Requirements) | 3 |
| :--- | :--- | :---: | :---: | :--- | :---: |
| HRM652 | Evaluating Results and Benefits | 3 |  |  |  |
| HRM653 | Knowledge, Learning and <br> Enterprise Systems | 3 |  | TOTAL REQUIRED HOURS | 36 |
| HRM671 | Learning Theories and Technology | 3 |  |  |  |

## COLLEGE OF ARTS AND SCIENCES

The Grantham University College of Arts and Sciences prepares students for the workplace of today through the innovative use of online learning tools and curriculum designed to meet the expectations of fast-evolving employment markets. Grantham's College of Arts and Sciences provides each student with a foundation to be successful in general education, certificates and undergraduate degree programs

THE COLLEGE OF ARTS AND SCIENCES OFFERS THE FOLLOWING GRADUATE DEGREES

| PROGRAM | DEGREE |
| :---: | :---: |
| Leadership | MS |

### 2.8 LEADERSHIP

## MASTER OF SCIENCE DEGREE PROGRAM

The Master of Science in Leadership incorporates leadership theory and practice. The program curriculum provides students with an interdisciplinary framework for understanding their own leadership skill sets as well as various opportunities to practice them. Further, the interdisciplinary approach allows students the opportunity to explore the various theories and practices related to leadership and their individual leadership style. Students examine key concepts such as strategic communication, leading change and emotional intelligence. This examination promotes the use of hands-on, real-world experience coupled with learned theory, all of which is assessed via case studies and the completion of an e-portfolio.

## STUDENT LEARNING OUTCOMES

Evaluate leadership at various levels, including people, structures, culture and tasks

Explore key leadership areas such as management, ethics, strategic thinking and organizational culture

Analyze the importance of promoting diversity, inclusion and trust, while ensuring leadership accountability in a global setting
$>$ Implement leadership skills through action-learning and research projects

Examine and apply leadership theory through practical experience

|  | LEADERSHIP | CREDIT <br> HOURS |
| :--- | :--- | :---: |
| GU500 | Graduate Student Success | 1 |
| LD501 | Leadership Styles \& Development | 3 |
| LD510 | Grit, Performance \& Staying Power | 3 |
| LD520 | Critical Communication \& Leadership | 3 |
| LD530 | Leadership Theories \& Strategies | 4 |
| LD540 | Effective Coaching | 3 |
| LD550 |  <br> Leadership | 3 |
| LD560 | Ethics in Leadership | 3 |
| MGT517 | Organizational Behavior | 3 |
| LD580 | Leadership Strategies for Change | 3 |
| LD570 | Leading \& High Performance | 3 |
| LD599 | Leadership Capstone (Completion of <br> Degree Requirements) <br> TOTAL REQUIRED HOURS | 36 |

## SCHOOL OF NURSING

The Master of Science in Nursing programs at Grantham University prepare professional nurses to build upon and expand the knowledge and skills developed during a baccalaureate nursing education in areas of leadership and management; human diversity and social issues; health promotion and disease prevention; and research and evidence-based practice related to current trends and issues in today's global society.

| PROGRAM | DEGREE |
| :--- | :---: |
| Master of Science in Nursing <br> Case Management Specialization | MSN |
| Master of Science in Nursing <br> Education Specialization | MSN |
| Master of Science in Nursing <br> Informatics Specialization | MSN |
| Master of Science in Nursing <br>  <br> Organizational Leadership Specialization | MSN |

5. Combine theory and research-based knowledge from nursing and the sciences as they relate to the interdisciplinary team when designing, coordinating and evaluating quality patient care
6. Formulate career management strategies, including selfadvocacy, to enhance professional growth.

## MASTER OF SCIENCE IN NURSING <br> - CASE MANAGEMENT SPECIALIZATION

This specialization prepares nurses to deliver personalized services to patients. Students learn how to improve patient care outcomes through patient referrals and evaluation of the healthcare system and its ability to meet patient needs. Students gain knowledge and clinical expertise in the case management and working in health maintenance organizations. Students will complete Practice Experience (PE), a Capstone Project and Practicum specific to specialty track.

## STUDENT LEARNING OUTCOMES

Create a case management plan which includes identification of problems, determination of outcomes and coordination of resources and which facilitates the transition of care to the medical home model

- Evaluate client selection and assessment according to current practice models
- Compose a plan which evaluates the established outcomes and facilitates the termination of care
- Assess principles of advocacy both for the client and in the promotion of client self-advocacy
$\geqslant$ Integrate resources to facilitate collaboration and coordination of care in a variety of healthcare environments

| MASTER OF SCIENCE NURSING - CASE MANAGEMENT |  | CREDIT HOURS |
| :---: | :---: | :---: |
| NUR506 | Foundations of Advanced Practice Nursing | 3 |
| NUR552 | Legal and Ethical Issues of Advanced Practice Nursing | 3 |
| NUR542 | Concepts of Case Management | 3 |
| HSN501 | Healthcare Systems | 3 |
| HSN509 | Clinical and Administrative Systems | 3 |
| NUR516 | Nursing Research and Evidence-Based Practice | 3 |
| NUR545 | Life Care Planning | 3 |
| NUR547 | Case Management and Evidence-Based Practice | 3 |
| HSN521 | Modern Organizations and Healthcare | 3 |
| NUR513 | Diverse Populations and Healthcare | 3 |
| NUR605 | Case Management Research Seminar | 3 |
| NUR606 | Case Management Practicum | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

Note: for successful completion of the program, courses must be taken in the prescribed sequence.

## MASTER OF SCIENCE IN NURSING EDUCATION SPECIALIZATION

This specialization prepares the professional registered nurse with additional knowledge and clinical expertise in Nursing Education that builds on a baccalaureate nursing education and practice. This specialization prepares the graduate to understand emerging trends and roles in nursing education in both the academic and healthcare environments. Tenure, promotion, governance, academic freedom and ethical concerns will be emphasized.

## STUDENT LEARNING OUTCOMES

- Design curricula based on program outcomes, sound educational theory and contemporary health care practices
- Integrate strategies that address the unique learning needs of diverse students and assist in the socialization into the role of the nurse

Create assessment and evaluation strategies which are appropriate to the learner and support the teaching-learning process

Analyze educational experiences based on sound educational theory and evidence-based teaching practice that facilitates learning in all domains: cognitive, affective and psychomotor Incorporate knowledge of the social, economic and political arenas as well as the institutional culture and climate, which would facilitate practice in the educational environment

Students will complete Practice Experience (PE), a Capstone Project and Practicum specific to specialty track.

| MASTER OF SCIENCE NURSING - EDUCATION | CREDIT <br> HOURS |  |
| :--- | :--- | :---: |
| NUR506 | Foundations of Advanced Practice Nursing | 3 |
| NUR552 | Legal and Ethical Issued of Advanced <br> Practice Nursing | 3 |
| NUR533 | Curriculum Design and Learning Outcomes | 3 |
| HSN501 | Healthcare Systems | 3 |
| NUR538 | Assessment and Teaching to Diverse <br> Learning Styles | 3 |
| NUR516 | Nursing Research and <br> Evidence-Based Practice | 3 |
| NUR535 | Concepts of Distance Education | 3 |
| NUR539 | Organizational Dynamics and Healthcare | 3 |
| HSN521 | Modern Organizations and Healthcare | 3 |
| NUR513 | Diverse Populations and Healthcare | 3 |
| NUR603 | Nursing Education Research Seminar | 3 |
| NUR604 | Nursing Education Practicum | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

Note: for successful completion of the program, courses must be taken in the prescribed sequence.

## MASTER OF SCIENCE IN NURSING INFORMATICS SPECIALIZATION

This specialization prepares the professional registered nurse to use data from healthcare agencies and institutions to improve patient outcomes. Students explore theoretical underpinnings of this specialization and how it impacts the healthcare environment. Graduates of this specialization will be prepared to analyze clinical and financial information, process and report acquired data.

## STUDENT LEARNING OUTCOMES

Incorporate leadership in the synthesis, utilization and evaluation of all interdisciplinary information to promote quality improvement in a health care environment

Design health information systems to identify patterns and variances in data regarding risk behaviors, epidemiology and other health care problems/issues with the accompanying costs associated with the issue

Assess information systems to determine quality data output that can be utilized for improving nursing and informatics practice

Integrate ethical and legal principles to establish and maintain the security of all data and compliance with all regulatory entities

Evaluate the use of informatics methodologies to advocate for the patient's autonomy, dignity and rights and in policy development that would support both the patient and the institution

Students will complete Practice Experience (PE), a Capstone Project and Practicum specific to specialty track

| MASTER OF SCIENCE NURSING - INFORMATICS |  | CREDIT HOURS |
| :---: | :---: | :---: |
| NUR506 | Foundations of Advanced Practice Nursing | 3 |
| NUR552 | Legal and Ethical Issues of Advanced Practice Nursing | 3 |
| NUR540 | Essentials of Nursing Informatics | 3 |
| HSN501 | Healthcare Systems | 3 |
| HSN509 | Clinical and Administrative Systems | 3 |
| NUR514 | Project and Change Management | 3 |
| NUR516 | Nursing Research and Evidence-Based Practice | 3 |
| HSN548 | Information Security and Privacy in Healthcare Environments | 3 |
| HSN521 | Modern Organizations and Healthcare | 3 |
| NUR513 | Diverse Populations and Healthcare | 3 |
| NUR607 | Nursing Informatics Research Seminar | 3 |
| NUR608 | Nursing Informatics Practicum | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

Note: for successful completion of the program, courses must be taken in the prescribed sequence.

## MASTER OF SCIENCE IN NURSING - MANAGEMENT \& ORGANIZATIONAL LEADERSHIP SPECIALIZATION

This specialization prepares professional registered nurses to demonstrate the knowledge and skills they have acquired through a variety of experiences as nurse leaders/administrators in a healthcare environment. This specialization emphasizes the emerging trends in healthcare and the world health systems, developmental and accrediting trends within healthcare institutions, and government and political influence on the provision of healthcare.

## STUDENT LEARNING OUTCOMES

Adapt management principles to coordinate health care activities with regard to human, capital, system and community resources

Integrate the theories of leadership to provide a supportive work environment that encourages staff development and promotes a quality health care environment

Design strategic plans for the development and maintenance of health care environments to ensure quality improvement and provide for innovation and change

Evaluate commitment to adhere to current standards and regulatory agency requirements in the provision of nursing care
Incorporate leadership in the delivery of professional nursing practice that is safe, cost-effective and promotes continuity of care across the health care continuum

Students will complete Practice Experience (PE), a Capstone Project and Practicum specific to specialty track.

| MASTER OF SCIENCE IN NURSING - MANAGEMENT AND ORGANIZATIONAL LEADERSHIP |  | CREDIT HOURS |
| :---: | :---: | :---: |
| NUR506 | Foundations of Advanced Practice Nursing | 3 |
| NUR552 | Legal and Ethical Issues of Advanced Practice Nursing | 3 |
| NUR526 | Human Resources and Nursing Management | 3 |
| HSN501 | Healthcare Systems | 3 |
| NUR532 | Leadership in Healthcare Management | 3 |
| NUR516 | Nursing Research and Evidence-Based Practice | 3 |
| HSN536 | Concepts of Healthcare Informatics | 3 |
| NUR546 | Healthcare Strategic Management and Planning | 3 |
| HSN521 | Modern Organizations and Healthcare | 3 |
| NUR513 | Diverse Populations and Healthcare | 3 |
| NUR601 | Management and Organizational Leadership Seminar | 3 |
| NUR602 | Management and Organizational Leadership Research Practicum | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

## GRADUATE DEGREE PROGRAMS

## SCHOOL OF ALLIED HEALTH

Grantham University's Allied Health programs prepare healthcare leaders with the knowledge and skills to use resources, enabling them to work together to improve the well-being of our world. Graduate degrees in the School of Allied Health include:

Master of Science in Health Systems Management
Master of Healthcare Administration (MHA)

### 2.10 HEALTH SYSTEMS MANAGEMENT

## MASTER OF SCIENCE DEGREE PROGRAM

The Health Systems Management program is for professionals seeking advanced career positions in management. The student will acquire the knowledge needed to analyze information needs, design solutions and manage information storage, transfer and retrieval in healthcare environments. Students desiring to obtain a Master of Science in Health Systems Management must hold a bachelor's degree and have a recommended two to four (2-4) years of computer systems work experience or hold a bachelor's degree in computer or information systems or a related area.

## STUDENT LEARNING OUTCOMES

Use information systems tools, techniques and methodologies applicable to healthcare systems

Manage healthcare information systems development projects that meet health administration needs

Develop reporting and support capabilities for healthcare decisions

- Ensure information policy and strategy is consistent with the clinical, ethical, legal and financial requirements of healthcare institutions

Evaluate all aspects of the healthcare environment and integrate strategic thinking into the operations of the organization

| MASTER OF SCIENCE IN HEALTH SYSTEMS |
| :---: | :--- | :---: |
| MANAGEMENT | CREDIT | HOURS |
| :---: |

### 2.11 HEALTHCARE ADMINISTRATION

## MASTER OF HEALTHCARE ADMINISTRATION DEGREE PROGRAM

The Healthcare Administration program is for professionals seeking to attain senior managerial positions in healthcare. The program is designed to give the student skills to manage the unique challenges of healthcare using proven healthcare and business administration models.

## STUDENT LEARNING OUTCOMES

Assess the legal, regulatory and ethical challenges characteristic of the healthcare industry

Manage the performance of health professionals in diverse organizational environments

Apply information systems technologies to improve decisionmaking speed and effectiveness

Apply basic management skills to the unique challenges in the healthcare industry

Integrate multiple functional perspectives and different professional perspectives to create innovative solutions to complex problems

| MASTER OF HEALTHCARE ADMINISTRATION | CREDIT <br> HOURS |  |
| :---: | :--- | :---: |
| ACC510 | Accounting | 3 |
| AH511 | Health Services Management | 3 |
| AH531 | Healthcare Financial Management | 3 |

## GRADUATE DEGREE PROGRAMS

| AH543 | Healthcare Strategic Management | 3 |
| :---: | :--- | :---: |
| AH598 | Healthcare Administration Capstone <br> (Completion of Degree Requirements) | 6 |
| BUS575 | Strategies for Change | 3 |
| ECN501 | Managerial Economics | 3 |


| HRM661 | Human Resource Strategies | 3 |
| :---: | :--- | :---: |
| HSN521 | Modern Organizations and Healthcare | 3 |
| IS515 | Management of Information Systems | 3 |
| MKG530 | Marketing Management | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

## COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

The College of Engineering and Computer Science is the oldest school at Grantham University, serving students in technical programs since 1952. Our graduates develop backgrounds in design and analysis, and experience hands-on problem solving. Technology programs are infused with rich lab exercises using design software or development platforms that are typically found in the industry.

## MISSION STATEMENT

The mission of the College of Engineering and Computer Science is to prepare adult learners for careers in engineering, computer and
information technologies through online integrated curricula that blend theory, application and general skills needed to succeed in a changing global society.

| PROGRAM | DEGREE |
| :--- | :---: |
| Information Management - Project Management | MS |
| Information Management Technology | MS |
| Information Technology | MS |

### 2.12 INFORMATION MANAGEMENT - PROJECT MANAGEMENT

## MASTER OF SCIENCE DEGREE PROGRAM

The objective of the Information Management - Project Management degree program is to provide students with the knowledge and skills to manage information systems projects. Required coursework integrates project management principles with information technology in accordance with the Project Management Institute guidebook.

## STUDENT LEARNING OUTCOMES

- Use project management techniques to identify and define the computing requirements for an information system
> Implement and evaluate a technology-based information system, process or program to meet desired needs

Analyze an information system project based on the system's life cycle

Develop a project plan incorporating risk

- Implement strategic planning in the area of information systems
- Use current techniques, skills and tools necessary for technology management practice

Evaluate impacts of technological change on an organization
Address professional, ethical, legal, security, and social issues and responsibilities

Recognize the need for and an ability to engage in continuing professional development

| MASTER OF SCIENCE IN INFORMATION MANAGEMENT PROJECT MANAGEMENT |  | CREDIT <br> HOURS |
| :---: | :---: | :---: |
| ETH560 | Business Ethics | 3 |
| IS505 | Managing in an Age of IT Change | 3 |
| IS515 | Management of Information Systems | 3 |
| IS525 | Information Systems Strategic Planning | 3 |
| IS535 | Telecommunications | 3 |
| IS545 | Emerging Technologies | 3 |
| IS649 | Information Technology Project Management (PRJ515) | 3 |
| MGT517 | Organizational Behavior | 3 |
| PRJ515 | Project Management Essentials | 3 |
| PRJ636 | Project Management Organization Framework and Risk (PRJ515) | 3 |
| PRJ656 | Project Management Integration Framework (PRJ636) | 3 |
| PRJ695 | Project Management Capstone (Completion of Degree Requirements) | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

### 2.13 INFORMATION MANAGEMENT TECHNOLOGY

## MASTER OF SCIENCE DEGREE PROGRAM

The objective of the Information Management Technology degree program is to provide students with the knowledge and skills to lead change in a technological environment. Required coursework builds
a foundation in business technologies, project management and organizational change and planning.

## STUDENT LEARNING OUTCOMES

Use project management techniques to identify and define the computing requirements for an information system

## GRADUATE DEGREE PROGRAMS

Implement and evaluate a technology-based information system, process or program to meet desired needs

Implement strategic planning in the area of information systems
Use current techniques, skills and tools necessary for technology management practice

Evaluate impacts of technological change on an organization
Determine existing and emerging technologies relevant to operations of an organization
Address professional, ethical, legal, security, and social issues and responsibilities
Recognize the need for and an ability to engage in continuing professional development

| MASTER OF SCIENCE - INFORMATION <br> MANAGEMENT TECHNOLOGY |  |  |
| :--- | :--- | :---: |
| BUS615 | e-Business | CREDIT |
| HOURS |  |  |


| IS505 | Managing in an Age of IT Change | 3 |
| :---: | :--- | :---: |
| IS515 | Management of Information Systems | 3 |
| IS525 | Information Systems Strategic Planning | 3 |
| IS535 | Telecommunications | 3 |
| IS545 | Emerging Technologies | 3 |
| IS649 | Information Technology Project Management <br> (PRJ515) | 3 |
| IS665 | Data Communications | 3 |
| MGT517 | Organizational Behavior <br> PRJ515 Project Management Essentials | 3 |
| IS599 | Information Management and Technology <br> Capstone (To be taken in last semester) | 3 |
|  | TOTAL REQUIRED HOURS | 36 |

### 2.14 INFORMATION TECHNOLOGY

## MASTER OF SCIENCE DEGREE PROGRAM

The objective of the Information Technology degree program is to provide students with the knowledge and skills to manage information technology systems and projects in an organization. Required coursework builds a depth in business technologies, systems analysis and design, and technology management.

## STUDENT LEARNING OUTCOMES

Analyze a problem, and identify and define the computing requirements appropriate to its solution

Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
$>$ Implement strategic planning in the area of information systems

- Use current techniques, skills and tools necessary for computing practice

Determine existing and emerging technologies relevant to operations of an organization

Apply project management principles to information technology projects
Address professional, ethical, legal, security, and social issues and responsibilities
Recognize the need for and an ability to engage in continuing professional development

| MASTER OF SCIENCE - INFORMATION |  | CREDIT |
| :---: | :--- | :---: |
| TECHNOLOGY |  |  |
| HOURS |  |  |

## TEACH-OUT PROGRAMS

When the University closes a program, a Teach-out Plan is created to ensure active students in the program receive the education, materials and student services needed to complete the program. Students must remain in an active status to be considered for
the Teach-out Plan. Students in re-admittance status will need to choose a different program upon re-admittance.

The programs listed in this section are being taught out and are no longer open to new students.

### 3.1 BUSINESS ADMINISTRATION

## BACHELOR OF SCIENCE DEGREE PROGRAM

This program is being taught out and is no longer open to new students.

The Business Administration program prepares the student to use analytical skills in evaluating business-related issues. In addition, the student analyzes theories, principles and concepts in each area of business. Technology is used to enhance productivity and accomplish goals.

## STUDENT LEARNING OUTCOMES

Demonstrate critical thinking through applying decision-support tools
$>$ Demonstrate communication skills
Compare and contrast local, national and global business and cultural issues

Differentiate the theories, principles and concepts related to the foundational business areasEvaluate the role of competitive advantage using strategic and tactical methods

Evaluate the legal, social and economic environments of business
Describe and explain ethical obligations and responsibilities of business

Describe decision making skills that are relevant to professional, ethical and social responsibilities

Understand the importance of human and social diversity

|  | BACHELOR OF SCIENCE - <br> BUSINESS ADMINISTRATION | CREDIT <br> HOURS |
| :--- | :--- | :---: |
| GU101 | Student Success |  |
| CO101 | Introduction to Public Speaking | 3 |
| CS105 | Introduction to Computer Applications | 3 |
| EN101 | English Composition I | 3 |
| GP210 | American Government I | 3 |
| GS102 | Introduction to Life Science | 3 |
| HU260 | Strategies for Decision Making | 3 |
| MA105 | College Algebra | 3 |


| GU299* | General Education Capstone | 3 |
| :---: | :---: | :---: |
|  | General Education Requirements | 27 |
| 100-499 | General Education Electives | 6 |
|  | BACHELOR OF SCIENCE PROGRAM CORE |  |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| BUS499 | Business Policy and Strategy (Completion of Degree Requirements) | 3 |
| CS165 | Advanced Microcomputer Applications (CS105) | 4 |
| CS192 | Programming Essentials | 3 |
| ENT301 | Entrepreneurship (GU299) | 3 |
| ETH301 | Business and Society (GU299) | 3 |
| FIN210 | Personal Finance | 3 |
| FIN307 | Principles of Finance I (GU299 \& MA215) | 3 |
| INT405 | Multinational Management (GU299) | 3 |
| IS231 | E-Commerce (CS105) | 3 |
| LAW220 | Business Law I | 3 |
| LAW265 | Business Law II (LAW220) | 3 |
| MA215 | Business Statistics (MA105) | 3 |
| MGT150 | Principles of Business Management | 3 |
| MGT468 | Organizational Behavior (GU299) | 3 |
| MKG131 | Foundations of Marketing | 3 |
| MKG315 | Consumer Behavior (GU299 \& MKG131) | 3 |
|  | Program Core Requirements | 55 |
|  | OPEN ELECTIVES |  |
| $300+$ | Open Electives | 12 |
| 100-499 | Open Electives | 24 |
|  | Total Open Electives | 36 |
|  | TOTAL DEGREE CREDIT HOURS | 124 |
| *Students are required to complete all required general education courses before enroling in GU299. |  |  |

## TAUGHT-OUT PROGRAMS

### 3.2 BUSINESS MANAGEMENT (ASSOCIATE OF ARTS)

## ASSOCIATE OF ARTS DEGREE PROGRAM

This program is being taught out and is no longer open to new students.

The Business Management program provides the student with basic management theories and best practices. Students identify principles related to each functional area of business.

## STUDENT LEARNING OUTCOMES

- Analyze organizational structures as they relate to mission and strategies

Apply basic theories and best practices of business managers and leaders

Communicate effectively
$\geqslant$ Identify basic theories, principles and practices related to each of the functional areas of business

Demonstrate critical thinking and communication skills

| ASSOCIATE OF ARTS - BUSINESS MANAGEMENT | CREDIT <br> HOURS |  |
| :--- | :--- | :---: |
| GENERAL EDUCATION |  |  |
| GU101 | Student Success | 3 |
| C0101 | Introduction to Public Speaking | 3 |
| C0210 | Business Communication | 3 |
| CS105 | Introduction to Computer Applications | 3 |
| EN101 | English Composition I | 3 |


| EN102 | English Composition II (EN101) | 3 |
| :---: | :---: | :---: |
| FIN210 | Personal Finance | 3 |
| GP210 | American Government I | 3 |
| HU260 | Strategies for Decision Making | 3 |
| MA105 | College Algebra | 3 |
| GU299* | General Education Capstone | 3 |
|  | Total General Education | 33 |
|  | ASSOCIATE OF ARTS PROGRAM CORE |  |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| BUS101 | Introduction to Business | 3 |
| LAW220 | Business Law I | 3 |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
|  | Total Program Core | 18 |
|  | OPEN ELECTIVES |  |
| 100-499 | Open Electives | 12 |
|  | Total Open Electives | 12 |
|  | TOTAL DEGREE CREDIT HOURS | 63 |

*Students are required to complete all required general education courses before enrolling in GU299.

### 3.3 BUSINESS MANAGEMENT (BACHELOR OF SCIENCE)

## BACHELOR OF SCIENCE DEGREE PROGRAM

This program is being taught out and is no longer open to new students.

The Business Management program engages the student in business problem-solving activities. Students learn to communicate professionally in business situations while exploring legal and regulatory business practices. Economic and entrepreneurial opportunities are explored.

## STUDENT LEARNING OUTCOMES

Demonstrate critical thinking through applying decision-support tools

Demonstrate communication skills
Distinguish the theories, principles and concepts related to the foundational areas of business

Analyze the basic theories and best practices of business managers and leaders in a global settingEngage in integrated business problem-solving activities
Analyze economic, environmental, political, ethical, legal and regulatory contexts related to global business

Describe decision making skills that are relevant to professional, ethical and social responsibilities

Understand the importance of human and social diversity

| BACHELOR OF SCIENCE - BUSINESS MANAGEMENT | CREDIT <br> HOURS |  |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |
| GU101 | Student Success |  |
| C0101 | Introduction to Public Speaking | 3 |

## TAUGHT-OUT PROGRAMS

| CS105 | Introduction to Computer Applications | 3 |
| :--- | :--- | :--- |
| EN101 | English Composition I | 3 |
| GP210 | American Government I | 3 |
| GS102 | Introduction to Life Science | 3 |
| HU260 | Strategies for Decision Making | 3 |
| MA105 | College Algebra | 3 |
| GU299* | General Education Capstone | 3 |
|  |  | General Education Requirements |
| 100-499 | General Education Elective | 27 |
|  | BACHELOR OF SCIENCE PROGRAM CORE | 6 |
| BUS101 | Introduction to Business | 3 |
| MGT150 | Principles of Business Management | 3 |
| MKG131 | Foundations of Marketing | 3 |
| MA215 | Business Statistics (MA105) | 3 |
| ACC220 | Financial Accounting (MA105) | 3 |
| ACC226 | Managerial Accounting (MA105) | 3 |
| LAW220 | Business Law I | 3 |
| LAW265 | Business Law II (LAW220) | 3 |
| ETH301 | Business and Society (GU299) | 3 |
| HRM355 | Labor Relations (GU299 \& LAW265) | 3 |


| MKG360 | Marketing Communications (MKG131 \& GU299) | 3 |
| :---: | :---: | :---: |
| HRM340 | Human Resource Management (GU299 \& LAW265) | 3 |
| FIN307 | Principles of Finance I (GU299 \& MA215) | 3 |
| MGT335 | Introduction to Operations Management (GU299 \& MA215) | 3 |
| HRM370 | Employment Law (GU299 \& LAW265) | 3 |
| MGT468 | Organizational Behavior (GU299) | 3 |
| MGT430 | Introduction to Quality Management (GU299 \& MA215) | 3 |
| MKG450 | Marketing Analysis (GU299 and MA215) | 3 |
| MKG460 | Public Relations (MKG360 and GU299) | 3 |
| BUS499 | Business Policy and Strategy (Completion of Degree Requirements) | 3 |
|  | Program Core Requirements | 60 |
|  | OPEN ELECTIVES |  |
| $100+$ | Open Electives | 15 |
| $300+$ | Open Electives | 15 |
|  | Total Electives | 30 |
|  | TOTAL DEGREE CREDIT HOURS | 123 |
| Students are required to complete all required general education courses before enrolling in GU299. |  |  |

### 3.4 GENERAL STUDIES (ASSOCIATE OF ARTS)

## ASSOCIATE OF ARTS DEGREE PROGRAM

## This program is being taught out and is no longer open to new students.

The General Studies program engages the student in a wellrounded general education. Achieving effective writing skills is a major component of the program, as over 50 percent of the required courses involve writing for content and persuasion. In this program, students engage in introductory courses.

## STUDENT LEARNING OUTCOMES

Effectively communicate, analyze and synthesize knowledge from a variety of academic disciplines
> Analyze the perspectives and terminology of a variety of academic disciplines

Demonstrate critical thinking and communication skills

## ASSOCIATE OF ARTS - GENERAL STUDIES

CREDIT
HOURS

| GU101 | Student Success | 3 |
| :---: | :--- | :---: |
| CO101 <br> or CO120 | Introduction to Public Speaking or <br> Interpersonal Communication | 3 |
| CS105 | Introduction to Computer Applications | 3 |
| EN101 | English Composition I | 3 |
| EN102 | English Composition II (EN101) | 3 |
| GU299* | General Education Capstone <br> General Education Requirements | 18 |
| Gxx | General Education Elective |  |
| xxx | Social Science (PS, SO or SS) Elective [3 <br> credit hours must be Government (GP) or <br> History (HS)] | 6 |
| xxx | Math (MA) Elective |  |
| xxx | Science Elective | 3 |

## TAUGHT-OUT PROGRAMS



### 3.5 GENERAL STUDIES (BACHELOR OF ARTS)

## BACHELOR OF ARTS DEGREE PROGRAM

## This program is being taught out and is no longer open to

 new students.The General Studies program engages the student in higherlevel curriculum in mathematics, social and behavioral sciences, humanities, communication and natural sciences. The General Studies program places emphasis on writing for content and communication.

## STUDENT LEARNING OUTCOMES

Effectively communicate, analyze and synthesize knowledge from a variety of academic disciplines

Analyze the perspectives and terminology of an array of academic disciplines

Demonstrate critical thinking and communication skills
Apply the knowledge of the liberal arts and sciences in appropriate ways

Demonstrate skills in research, writing and presentation across a variety of disciplines

| BACHELOR OF ARTS - GENERAL STUDIES | CREDIT |
| :---: | :--- | :---: |
| HOURS |  |


| 100-200 | Electives in the College of Arts and Sciences | 12 |
| :---: | :---: | :---: |
|  | Subtotal Program Electives | 12 |
|  | OPEN ELECTIVES |  |
| $100+$ | Open Electives | 12 |
|  | TOTAL DEGREE CREDIT HOURS | 64 |
| *Students are required to complete all required general education courses before enrolling in GU299. This program is not approved for Federal Student Aid (Title IV) educational benefits. |  |  |


|  | General Education Requirements | 21 |  |
| :---: | :--- | :---: | :---: |
| xxx | Social Science (PS, SO or SS) Elective [3 <br> credit hours must be Government (GP) or <br> History (HS)] | 6 |  |
| xxx | Math (MA) Elective | 3 |  |
| xxx | Science Elective | 3 |  |
| BACHELOR OF ARTS PROGRAM CORE |  |  |  |


| PL201 | Introduction to Philosophy | 3 |
| :---: | :--- | :---: |
| FIN210 | Personal Finance | 3 |
| CA408 | Research Methods (GU299 \& EN361) | 3 |
| CA499 | Professional Strategies Capstone <br> (Completion of Degree Requirements) | 3 |
| EN361 | Technical Writing (EN101) | 3 |
| PA301 | Introduction to Public Administration | 3 |
| PL301 <br> or PL401 | Practical Philosophy or <br> Philosophy of Science and Technology | 3 |
|  | Program Core Requirements | 21 |


| PROGRAM ELECTIVES |  |  |
| :---: | :---: | :---: |
| $300+$ | Electives | 36 |
|  | Program Electives | 36 |
| OPEN ELECTIVES |  |  |
| 100+ | Open Electives | 33 |
|  | Total Electives | 69 |
| TOTAL DEGREE CREDIT HOURS |  | 123 |

*Students are required to complete all required general education courses before enrolling in GU299. This program is not approved for Federal Student Aid (Title IV) educational benefits.

## TAUGHT-OUT PROGRAMS

### 3.6 HEALTH SYSTEMS MANAGEMENT

## BACHELOR OF SCIENCE DEGREE PROGRAM

This program is being taught out and is no longer open to new students.

The Health Systems Management program provides the student with the skills needed to analyze information needs, design solutions and manage information storage, transfer and retrieval in healthcare environments.

## STUDENT LEARNING OUTCOMES

- Use information systems tools, techniques and methodologies applicable to healthcare systems

Apply project management principles to information systems development efforts in healthcare institutions

Structure information collection and presentation to facilitate executive-level planning and decision-making in healthcare environments

Apply fundamental systems analysis and design concepts and problem-solving strategies to information technology problems

Analyze, design and implement solutions to healthcare information problems

Develop reporting and support capabilities for healthcare decisions

| BACHELOR OF SCIENCE HEALTH SYSTEMS MANAGEMENT |  | CREDIT HOURS |
| :---: | :---: | :---: |
| GENERAL EDUCATION |  |  |
| GU101 | Student Success | 3 |
| C0101 | Introduction to Public Speaking | 3 |
| CS105 | Introduction to Computer Applications | 3 |
| EN101 | English Composition I | 3 |
| GP210 | American Government I | 3 |
| GS102 | Introduction to Life Science | 3 |
| HU260 | Strategies for Decision Making | 3 |
| MA105 | College Algebra | 3 |
| GU299* | General Education Capstone | 3 |
|  | General Education Requirements | 27 |
| GENERAL EDUCATION ELECTIVES |  |  |
| xxx | General Education Elective | 3 |
| xxx | General Education Elective | 3 |
| BACHELOR OF SCIENCE PROGRAM CORE |  |  |
| AH111 | Healthcare Delivery Systems | 3 |


| AH112 | Introduction to Health Information Management | 3 |
| :---: | :---: | :---: |
| AH356 | Information Security and Privacy in Healthcare Organizations | 3 |
| AH432 | Healthcare Informatics | 3 |
| AH497 | Health Systems Capstone (Completion Degree Requirements) | 3 |
| CS106 | Introduction to Computer Systems | 3 |
| CS116 | Introduction to Programming w/ Visual Basic (CS192) | 3 |
| CS192 | Programing Essentials | 3 |
| CS205 | Computer Software Applications in Healthcare | 3 |
| IS211 | Introduction to Information Systems Security | 3 |
| IS216 | Computer Networks | 3 |
| IS301 | Web Design I | 4 |
| IS306 | Web Design II (IS301 or CS197) | 4 |
| IS311 | Security Operations | 3 |
| IS320 | Database Applications (CS105) | 3 |
| IS336 | Systems Analysis and Design (IS242 or CS265) | 3 |
| IS351 | Information Systems Project Management | 3 |
| IS355 | Risk Management | 3 |
| IS376 | Advanced Database Systems | 3 |
| IS481 | Database Security (IS320) | 3 |
|  | Program Core Requirements | 62 |
| OPEN ELECTIVES |  |  |
| xxx | Open Electives | 18 |
| Total Open Electives |  | 85 |
| TOTAL DEGREE CREDIT HOURS |  | 122 |

## TAUGHT-OUT PROGRAMS

### 3.7 RN TO MSN PREPARATORY COURSEWORK

This program is being taught out and is no longer open to new students.

RN to MSN Preparatory Coursework contains 24 credits of undergraduate BSN course work, allowing RNs with an associate degree to go into the MSN program upon successful completion of the 24 credits.

Note: A BSN is not awarded after the completion of the credits of undergraduate BSN courses.

This program is only available to RNs who have graduated with an associate degree in nursing (ASN/ADN/AAS) with a CGPA of 2.5 or higher.

A competency exam confirming that the student has accomplished the program outcomes will be administered after successful completion of NUR427 and prior to beginning NUR506. The exam is a pass/fail and will determine matriculation to the MSN program. The student is allowed two attempts to pass the exam.

A student who is unsuccessful on the competency exam can choose to complete the remaining courses in the RN to BSN Completion Program and then apply to the MSN Program.

MSN degree is awarded once the student successfully completes the Bridge Program and a 36-credit-hour Master of Science in Nursing degree program

|  | RN TO MSN OPTION | CREDIT <br> HOURS |
| :---: | :--- | :---: |
| EN361 | Technical Writing | 3 |
| NUR302 | Pathophysiology | 3 |
| NUR306 | Pharmacology | 3 |
| NUR405 | Health Assessment for Professional Nursing | 3 |
| MA230 | Mathematical Statistics | 3 |
| NUR410 | Theoretical Concepts of Research in Nursing | 3 |
| NUR417 | Nursing Leadership and Management | 3 |
| NUR427 | Population Health in the Global Community | 3 |
|  | TOTAL REQUIRED HOURS | 24 |

Note: For successful completion of the program, courses must be taken in the prescribed sequence.

## COURSE DESCRIPTIONS

A course prefix identifies each Grantham discipline-specific course, as shown in this table.

| PREFIX | DESCRIPTION | PREFIX | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| ACC | Accounting | HS | History |
| AH | Allied Health | HSN | Allied Health and Nursing |
| AR | Art | HU | Humanities |
| BIO | Biological Science | ID | Interdisciplinary |
| BUS | Business Administration | IS | Information Systems |
| CA | College of Arts and Science | INT | International/Global |
| CH | Chemistry | LAW | Law |
| CJ | Criminal Justice | LD | Leadership |
| CO | Communication | LOG | Logistics |
| CS | Computer Science | MA | Mathematics |
| CT | Computer Engineering Technology | MGT | Management/HRM/HPI |
| ECN | Economics | MIL | Military |
| ED | Education | MKG | Marketing |
| EMT | Engineering Management Technology | NUR | Nursing |
| EN | English | PA | Public Administration |
| ENT | Entrepreneurship | PH | Physics |
| ET | Electronics Engineering Technology | PL | Philosophy |
| ETH | Ethics | PLS | Paralegal Studies |
| FIN | Finance | PRJ | Project Management |
| GP | Government and Politics | PS | Psychology |
| GS | General Science | RCH | Quantitative/Qualitative/Research |
| GU | Grantham University | so | Sociology |
| HRM | Human Resource Management/HPI | SS | Social Science |

Course descriptions are listed alphabetically.

## PREREQUISITES: MA105

This course focuses on ways in which accounting principles are used in business operations. Students learn to identify and use Generally Accepted Accounting Principles, ledgers and journals and steps of the accounting cycle. This course introduces bank reconciliation methods, balance sheets, assets and liabilities. Students also learn about financial statements, including assets, liabilities and equity. Business ethics are also discussed.

ACC220 FINANCIAL ACCOUNTING
3 CREDITS PREREQUISITES: MA105
This introductory financial accounting course introduces the student to the important role of financial accounting in modern business. The key role of financial accounting is to provide useful information to external users in order that a wide variety of economic decisions can be made. The course covers the theory and practice of accounting applicable to the recording, summarizing and reporting of business transactions. Topics include the different types of financial statements and accounts, asset valuation, revenue and expense recognition and appropriate accounting for asset, liability and capital accounts.

## ACC226 MANAGERIAL ACCOUNTING

3 CREDITS

## PREREQUISITES: MA105

This course is a continuation of Financial Accounting, shifting the focus from external reporting to internal needs of managers. Managerial accounting information helps managers accomplish three essential functions: planning, controlling and decisionmaking. The course provides students with an understanding of managerial accounting information to enable them to evaluate the usefulness of managerial accounting techniques in the real world. Topics include: managerial accounting terminology, budgeting, costing, break-even analysis and cost-volume-profitability analysis. The methods of identifying and extracting relevant information from managerial accounting systems as an input to decision making and performance evaluation are stressed throughout the course.

## ACC235 PRINCIPLES OF ACCOUNTING II

3 CREDITS PREREQUISITES: ACC210
This course expands on what the student learns in Accounting I. It is focused on corporate accounting. This course discusses how corporations are structured and formed, with an emphasis on corporate characteristics. Stocks, bonds, notes, purchase investments and analysis of financial statements are included, as well as an in-depth look at managerial accounting. Statements of cash flow, budgets and budget management are also examined.

ACC310 INTERMEDIATE ACCOUNTING I

## PREREQUISITES: ACC235

This course is designed to familiarize students with the fundamentals and objectives of financial and accounting practices. The basic aspects of the financial statement are analyzed, as is the relationship between the number of receipts and the time value of money. Students examine the elements of the income statement, the statement of cash flows and the methods of adjusting inventory measurements. Other topics include: balance sheets, inventory measurements, accounting issues with operational costs and the role played by investments in the accounting process.

ACC330 COST ACCOUNTING
3 CREDITS
PREREQUISITES: ACC235
This course explores the basic principles of cost accounting, the different types of costing and how organizations use cost information to make decisions. Other topics covered include: customer profitability analysis, service costs, budgeting and financial planning, transfer pricing, responsibility accounting, performance measurement and the importance of non-financial indicators.

ACC335 INTERMEDIATE ACCOUNTING II
3 CREDITS

## PREREQUISITES: ACC310

This course builds on the concepts students learned in Intermediate Accounting I. Students examine short-term liabilities, long-term liabilities, stockholders' equity, share-based compensation, pensions and post-retirement benefits, the statement of cash flows, and accounting changes and error correction. Other topics include: accounting for leases, accounting for tax on income, accounting for derivatives and full disclosure.

## ACC340 ACCOUNTING INFORMATION SYSTEMS <br> 3 CREDITS

## PREREQUISITES: ACC330 AND ACC335

This course provides an introduction to accounting information systems. Throughout this course, students are provided with accounting information system concepts to give them an understanding of how to analyze and modify systems controls to address threats and risks. The focus of this course is to gain knowledge of accounting information systems in order to perform the accounting function in contemporary business organizations.

## ACC399 SPECIAL TOPICS IN ACCOUNTING

3 CREDITS
PREREQUISITES: NONE
This course is open only by special arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

ACC430 TAXATION - INDIVIDUAL
3 CREDITS

## PREREQUISITES: NONE

This course introduces students to basic concepts of individual income taxation. Students examine the basic forms, allowable deductions and adjustments to income and tax credits. Other topics covered include: self-employment income and expenses; capital gains; income from rental properties, royalties, flow through entities and special property transactions; payroll taxes and retirement plans; at-risk rules and passive activity loss rules; and alternative minimum tax.

## ACC435 TAXATION - CORPORATE

3 CREDITS

## PREREQUISITES: ACC335

This course includes an overview of how corporations and other business entities are taxed, with the focus primarily on federal income tax. Topics covered include: tax policy issues, tax planning, tax research, property acquisitions and dispositions, nontaxable exchanges, sole proprietorships, partnerships, S corporations, tax compliance and jurisdictional issues.

## ACC440 FORENSIC ACCOUNTING

## 3 CREDITS

## PREREQUISITES: ACC220 OR ACC340

This course covers forensic accounting and the business and legal environments in which the forensic accountant operates. Students examine in detail: financial statement fraud, employee and vendor fraud, tax fraud, bankruptcy fraud, divorce fraud and money laundering. In addition, students explore the concepts of business valuation, commercial and economic damages and expert testimony.

## ACC450 AUDITING AND ASSURANCE

3 CREDITS

## PREREQUISITES: ACC335 OR ACC340

This course integrates previously learned accounting practice with auditing standards and procedures. Course content includes a detailed study of the auditing and assurance environment, concepts, tools and reports. Specific topics include: professional standards, audit reports, professional ethics, legal liability of auditors, audit evidence, audit planning and design, internal control, audit sampling, testing cycle controls, and performing substantive tests and completing the audit.

ACC460 GOVERNMENTAL AND NON-PROFIT ACCOUNTING 3 CREDITS
PREREQUISITES: ACC220 OR ACC335
This course is a study of the specialized accounting principles applicable to state and local governments and other non-profit organizations, with an emphasis on fund accounting principles used in the recording of assets, liabilities, equity, revenues and expenditures. It also covers the analysis and interpretation of financial statements of such governmental and nonprofit entities.

ACC499 CAPSTONE PROJECT

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

This capstone course is required for all accounting majors. Topics include managerial use of financial data, analysis of financial statements and ethics. The student selects a current issue in any area of accounting with a full-time accounting faculty member as the research advisor. The student submits a written paper.

ACC510 ACCOUNTING
3 CREDITS
PREREQUISITES: NONE
This course provides students with a framework for the analysis, use and design of internal accounting systems. This introduction to financial and managerial accounting prepares students to use accounting data for strategic and management purposes with an emphasis on profitability and understanding the strengths and weaknesses of an organization's accounting system. Students develop an understanding of the nature of costs, budgeting, cost allocation, standard costs and variances.

## ACC599 SPECIAL TOPICS IN ACCOUNTING

3 CREDITS

## PREREQUISITES: APPROVAL FROM THE DEAN

This course is open only by special arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

AH111 HEALTHCARE DELIVERY SYSTEMS
3 CREDITS

## PREREQUISITES: NONE

This course introduces students to different types of healthcare delivery systems and how to analyze the organization, financing, regulatory issues and delivery of different healthcare services. Topics covered include the "continuum of care" concept and methods and theories in healthcare delivery systems and computer applications in healthcare. Focus is placed on evolution and trends in managed healthcare, including research, statistics, quality management and integrating information technologies into medical office practices. Other processes such as staffing, productivity and improving quality are also discussed.

## PREREQUISITES: NONE

This course introduces students to different types of healthcare delivery systems as well as how to analyze the organization, financing, regulatory issues and delivery of a variety of healthcare services. Topics include the continuum of care; methods and theories in healthcare delivery systems; and computer applications in healthcare. Focus is placed on evolution and trends in managed healthcare, including research, statistics, quality management and integrating information technologies into medical office practices. Other processes such as staffing, productivity and improving quality are also explored. This course provides students with access to the National Healthcareer Association (NHA) portal used to practice, prepare and sit for the Medical Administrative Assistant Certification Exam.

## AH112 INTRODUCTION TO HEALTH INFORMATION MANAGEMENT

## PREREQUISITES: NONE

Students are introduced to health information management in healthcare delivery settings in the U.S., including filing systems, storage, circulation and documentation issues. Topics also explored are the electronic health record (EHR), patient confidentiality, the impact of the Health Insurance Portability and Accountability Act (HIPPA) on medical practices and various career opportunities for health information management professionals. Students apply health information management concepts and skills to course exercises to demonstrate functional knowledge.

## AH114 MEDICAL TERMINOLOGY

3 CREDITS

## PREREQUISITES: NONE

This course teaches the foundation of the language of healthcare. Students will learn how to pronounce medical terms and communicate medical information to both health professionals and patients. Students will also learn the principles of word-building needed for the extensive medical vocabulary used in healthcare. Students will utilize interactive technology to assist with learning, pronunciation and application in Anatomy and Physiology.

## AH212 BASIC DIAGNOSIS CODING SYSTEMS <br> 3 CREDITS

## PREREQUISITES: AH114

This course examines medical billing and coding in medical practice. All basic medical billing and coding issues are discussed, including coding diagnosis, the International Classification of Diseases Manual (ICD-10-CM), coding compliance and legal and ethical compliance. Students extrapolate coding information from the ICD-10-CM manual and examine usage guidelines for Volumes $\mathrm{I}, \mathrm{II}$ and III.

AH213 BASIC PROCEDURE CODING SYSTEMS

## PREREQUISITES: AH212

This course provides the student with in-depth coverage of procedural coding utilizing the HCPCS coding system composed of Current Procedure Terminology (CPT) and national codes. The course includes detailed application of the CPT classification system for outpatient services. Emphasis includes Evaluation and Management, Anesthesia, Surgery, Radiology, Pathology, and Laboratory and Medicine codes, as well as the use of modifiers. Students will apply coding and billing principles through the use of coding exercises and coding simulation software.

AH214 REIMBURSEMENT METHODOLOGIES
3 CREDITS PREREQUISITES: NONE
This course provides students with a working knowledge of medical insurance and its applications. Emphasis is on understanding insurance essentials, including the role of the medical insurance billing specialist and legal and ethical requirements. Medical documents and coding diagnoses and procedures are discussed. Students comprehend the claims process, focusing on charges, methods of payments, billing and reimbursement. Other topics covered are private payers, Blue Cross and Blue Shield, Medicaid and Medicare, TRICARE and worker's compensation. Patient billing software is also explored.

## AH215 MEDICAL ASSISTING

3 CREDITS
PREREQUISITES: NONE
This course covers an overview of medical assisting as a career. Students analyze job responsibilities of a medical assistant including patient interaction and communication, scheduling and maintaining accurate patient records. Processing insurance claims is described and students examine various bookkeeping systems. The importance of taking inventory is discussed, as well as the steps in making a purchasing decision. Students also explore specialized options for an administrative medical assistant.

AH215C MEDICAL ASSISTING
3 CREDITS

## PREREQUISITES: NONE

This course introduces students to the overall role of medical administrative assisting as a career. Students analyze job responsibilities of a medical administrative assistant including patient interaction and communication, scheduling, and maintaining accurate patient records. Students learn how to process insurance claims and examine various bookkeeping systems. This course focuses on the importance of inventory management as well as the process of purchasing decision making. Students also explore specialized options for an administrative medical assistant. Medical Assisting will be using an interactive learning platform throughout the course. This course provides students with access to the National Healthcareer Association (NHA) portal used to practice, prepare, and sit for the Medical Administrative Assistant Certification Exam.

AH216 PROFESSIONAL PRACTICE
3 CREDITS
PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
Students in this course will gain practical experience applying advanced ICD-10-CM and CPT coding skills. Students will code from a variety of healthcare settings including hospital, physicians' offices and/or other healthcare settings. Intensive coding application will be achieved through the use of real medical records, case studies and scenarios. The training in this course integrates coding and the classification of diseases and treatment in preparation for certification and employment as a clinical coding specialist.

## AH235 MEDICAL ADMINISTRATIVE ASSISTANT CERTIFICATION PREP <br> 4 CREDITS

 PREREQUISITES: COMPLETION OF ALL OTHER CERTIFICATE COURSES This course will prepare students to sit for the Certified Medical Administrative Assistant (CMAA) national certification exam offered by the National Healthcareer Association.
## AH356 INFORMATION SECURITY AND PRIVACY IN

 healthcare organizations3 CREDITS

## PREREQUISITES: NONE

This course explores the regulatory issues associated with the Health Insurance Portability and Accountability Act (HIPAA) and the implications of this Act related to data security and privacy issues in healthcare organizations. Topics examined are identifying and prioritizing information assets and threats to those assets; defining information security strategy and architecture; planning responses to intruders in an information system; and identifying legal and ethical issues and implications of information security.

## AH432 HEALTHCARE INFORMATICS

3 CREDITS

## PREREQUISITES: NONE

This course focuses on the day-to-day requirements of healthcare systems in the processing and storing of patient information and the medical management systems to facilitate appropriate and safe care. Students examine a broad range of topics including: aspects of the healthcare delivery system in relation to overall management functions, institutional, social and political forces in healthcare, the role of IT in healthcare management and information security, and patient privacy.

## AH497 HEALTH SYSTEMS CAPSTONE

3 CREDITS
PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
This course helps to develop and implement a unique project that demonstrates mastery of the program objectives. Program objectives include applying fundamental systems analysis and design concepts and program solving strategies to information technology problems; applying project management principles to information systems development efforts and analyzing, designing and implementing solutions to healthcare information challenges.

AH511 HEALTH SERVICES MANAGEMENT

## PREREQUISITES: NONE

This course explores the managerial roles, processes, technologies and tools applicable to a variety of health services organizations. Topics examined are key players and the impact they have on healthcare delivery systems, the production, cost and technology of healthcare, the demand for healthcare and the rise in healthcare consumerism. Also included are the healthcare industry's quest for quality and productivity, and trends that may likely shape the future of healthcare. In addition, best practices related to management, leadership, organization design and development are discussed.

Ah531 HEALTHCARE FINANCIAL MANAGEMENT
3 CREDITS

## PREREQUISITES: NONE

This course analyses the financial management challenges and best practice solutions in the healthcare industry. Students investigate the most common tools, processes and techniques used by financial managers in a healthcare environment. Examples used come from a variety of healthcare providers including HMOs, hospitals, physician practices, home health agencies, nursing units, surgical centers and integrated healthcare systems.

AH537 HEALTHCARE INFORMATION RESOURCES MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This course examines concepts and techniques in healthcare enterprises for information resources management. Topics include strategic assessment of information needs, resource allocation, techniques for prioritization and control, system acquisition and strategic planning for information system needs and the IT Life Cycle. Governance structures for IT systems planning and evaluation, strategies for aligning competing interests within an organization and stages of planning for an enterprise system is also investigated.

AH541 HEALTHCARE FINANCE AND ECONOMICS
3 CREDITS

## PREREQUISITES: NONE

This course addresses the differences between managerial and financial accounting within the modern healthcare organization. It begins with an analysis of healthcare finance and examines the various sources of funding within the field of healthcare. This course examines the various tools necessary to record, report, and accurately measure financial information. It will also provide students the ability to assess the monetary health of an organization based on both industry benchmarks and historical data. This course concludes with the importance of developing a strategic financial plan based on current and future funding trends.

## COURSE DESCRIPTIONS

AH543 HEALTHCARE STRATEGIC MANAGEMENT
3 CREDITS

## PREREQUISITES: NONE

This course explores the history, logic, structure and best practices of healthcare strategic management. Students investigate the organization's value chain, analyze the necessity for both the analytical and emergent models of strategic management, and review alternative processes related to developing and updating strategic plans. Best practices for implementing strategic plans fast and effectively are also investigated.

## AH551 LegAL AND ETHICAL ISSUES OF healthcare management <br> 3 CREDITS

## PREREQUISITES: NONE

This course examines the relationship between law and ethics and the influence they have on healthcare professionals. Advancements in both technology and pharmaceuticals will continue to increase life expectancy, as such, it is expected that there will be an ensuing, peripheral increase in ethical dilemmas. This course will review such dilemmas and the role that both health professionals and ethics committees will likely play now and in the future.

AH597 HEALTH SYSTEMS MANAGEMENT CAPSTONE 3 CREDITS PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS Students will investigate the processes of determining the direction of a healthcare system by establishing objectives and designing and implementing strategies. The course will stress the dynamic nature of the issues as they relate to rapidly evolving healthcare delivery systems.

## AH598 HEALTHCARE ADMINISTRATION CAPSTONE 6 CREDITS

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

This course assists the student to develop a capstone project which demonstrates mastery of program objectives. The project is research-based, relevant to current practice and focused on making a strategic change in the healthcare environment. The topic will be an area of interest for the student that will integrate coursework in functional areas of healthcare involving the basic direction and goals of an organization including the social, political, technological, economic and global environment. This researchbased course deepens student understanding of an important healthcare management issue by integrating professional experience with new knowledge. The course is the culminating experience for the student in healthcare administration.

AR201 INTRODUCTION TO MODERN ART

## PREREQUISITES: NONE

This course is a general introduction to major movements in the arts from the late 18th to the 21st Century. It is designed for the beginning student and assumes no previous experience in art or art history. The course will focus on painting and sculpture with reference to architecture and decorative arts. In addition to an introduction to the major artworks, the course will teach the fundamental of visual analysis and the language used to describe works of art.

AR301 MODERN ART IN THE U.S.
3 CREDITS
PREREQUISITES: NONE
This course provides students with a survey of American art in the 20th century. This course encompasses a chronological, organized and comprehensive anthology of readings that tell the whole story of art in America from 1900 to the present. Topics included are cultural and historical context for the first twenty years, for the jazz age, for the depression years, for World War II and the Cold War, for the Vietnam War era and finally for the age of Reagan and postmodernism.

AR310 ANCIENT ART: TOMBS AND TREASURES
3 CREDITS

## PREREQUISITES: NONE

This is a survey of Art which covers Prehistoric through Islamic Art. This course explores the art and architecture of ancient civilizations through the 11th century C.E. This course introduces the social and cultural hallmarks of various civilizations as expressed through the artwork of their tombs and treasures. Students will learn how to interpret the meaning of artwork by examining the subjects, symbols and materials used in the creation of the sculpture, painting or architecture.

## BIO133 ANATOMY AND PHYSIOLOGY

## PREREQUISITES: NONE

This course examines the twelve major systems of the human body. These systems include: skeletal, integumentary, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive. In addition, students develop the use of appropriate medical terminology, examine cell and tissue structure, and review how body systems maintain health homeostasis.

BIO116 INTRODUCTION TO PATHOPHYSIOLOGY
3 CREDITS

## PREREQUISITES: NONE

This course explores the pathophysiology of diseases and disorders of the principal organ systems of the human body. Topics presented include homeostasis and disease processes, trauma, cancer, pain management and an overview of common diseases and disorders of each organ system. Students ascertain how pathophysiological processes disrupt normal functioning of the human body

BIO117 INTRODUCTION TO PHARMACOTHERAPY 3 CREDITS

## PREREQUISITES: NONE

 [ENROLLMENT RESTRICTED TO ALLIED HEALTH STUDENTS]This course explores the role of pharmacotherapy in the treatment of physiological and psychological disorders and diseases. Students develop a framework for understanding diseases and disorders that are commonly associated with each major system and the pharmacological treatment commonly used in managing the pathology. Types of pharmacotherapies reviewed include muscle relaxants, anesthetics and pain medication.

## BUS101 INTRODUCTION TO BUSINESS

## 3 CREDITS

## PREREQUISITES: NONE

This introductory course provides students with a practical and concrete explanation of the concepts of business. Concepts, principles and operations of the private enterprise system are identified in this course. Students compare and contrast sole proprietorships, partnerships and corporations, and they learn the advantages and disadvantages of each. This course also discusses the functions of modern business management, marketing, and ethics and social responsibility. Human resource management is described, as well as how employers can motivate their employees. Bookkeeping, accounting, financial management and financial statements are also examined.

## BUS303 BUSINESS NEGOTIATIONS

3 CREDITS

## PREREQUISITES: NONE

Students will analyze and evaluate the fundamentals, major concepts and theories of bargaining and negotiation. Case studies will provide an experiential approach to learning the strategies and tactics of negotiation while examining power and emotions in interpersonal conflict and its resolution. International and crosscultural negotiations and ethical standards will be covered in this course.

BUS310 INTRODUCTION TO FEDERAL ACQUISITION AND CONTRACT MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This introductory course teaches review of the full acquisition life cycle from planning and requirements development to administration and closeout, including managing contracts. Students will gain a better understanding of the acquisition life cycle, roles of key players within the acquisition team, and the management of contracts and negotiations

## BUS32O INTRODUCTION TO PUBLIC PROCUREMENT 3 CREDITS

 PREREQUISITES: NONEThis course is an introduction to the fundamental principles of Government acquisition and contracting. In the course, students are presented with the fundamentals of the Federal Acquisition Regulation (FAR) and the federal acquisition and contract processes of the five phase acquisition life-cycle procurement planning, requirements determinations, acquisition strategies, government contract law, contract types and methods, and acquisition management techniques and closeout requirements.
BUS399 SPECIAL TOPICS IN BUSINESS
PREREQUISITES: APPROVAL OF THE DEAN
This course is open only by arrangement with the Dean of the Mark
Skousen School of Business. Courses in this area will address a
current or timely topic or those that are foreseen to be one-time
offerings. Special topics course offerings can vary from term to
term. Students can propose a special topics course in this area.

## buS491 INTEGRATIVE EXPERIENCE IN PROCUREMENT AND CONTRACT MANAGEMENT <br> 3 CREDITS

## PREREQUISITES: COMPLETION OF CONCENTRATION REQUIREMENTS

Gain an understanding on the value and importance of leadership development in successful contracting (buying/selling) and acquisition organizations. Through realistic scenario-based learning, students will discuss and practice the development of sound business solutions as a valued strategic and expert business advisor. Students will learn to analyze complex contracting situations with emphasis on critical thinking, problem solving, research and risk reduction. Exercises and a case study are designed to contribute real solutions on real contracting and acquisition problems.

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

This advanced course is designed to provide students with a comprehensive review of management and the total business enterprise. Students learn strategy formulation, implementation and evaluation concepts and techniques through an applied project. Students use this new knowledge, coupled with knowledge acquired from other courses, to chart the future direction of different types of organizations. The course builds on previous courses to offer insights and analytic tools, which a general manager needs to plan and implement successful business policies and strategies. The course emphasizes the practical application of business theory to business problems through a course project and the choice of an exam or internship opportunity. The internship opportunity is arranged by the student and approved by the instructor. This internship option is not available to students who are Ohio residents due to state requirements. Ohio students taking BUS499 must complete the examination that is part of the course.

BUS501 OVERVIEW OF BUSINESS INTELLIGENCE
3 CREDITS PREREQUISITES: NONE
This course surveys the field of business intelligence and establishes a foundation of knowledge regarding the integration of sales, human resource, customer, finance and product information data into a warehouse. Students discover the process of datadriven decision making and its role in today's organizations.

## BUS575 STRATEGIES FOR CHANGE

3 CREDITS

## PREREQUIITES: NONE

This course introduces students to a broad spectrum of issues related to change, including the dynamics of leadership, the failure of change, how to make planned change work and the implications of change for the 21st Century. Topics include the importance of leadership, how successful leadership can result in a more effective organization, how to implement new changes to promote a healthy organization, change in action, e-commerce, radical change and the implications of change for the 21st Century.

## BUS599 SPECIAL TOPICS IN BUSINESS

3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

BUS615 E-BUSINESS

## PREREQUISITES: NONE

This course covers the internet and related technologies which pose enormous opportunities for developing new business models and significant threats to existing models. Information professionals must be prepared to recognize opportunities and overcome challenges posed by the electronic economy. This course defines the core elements of developing an e-Business strategy, including branding, competitive analysis, technology assessment, business method models and preparing for emerging trends. Course assignments involve extensive case studies and online research using the latest e-tools. Students collaborate to create a prototype e-Business venture.

## CA408 RESEARCH METHODS

3 CREDITS

## PREREQUISITES: NONE

Research Methods presents a broad view of the methods and techniques for conducting academic and professional research. The course focuses on why and when research is performed, the methodologies involved and a description of the applied statistical tests most often used. Techniques and procedures are compared and contrasted so each student gains a firm understanding of what method or test to use and why. Topics include: the research enterprise, theory and research, ethics in research, research design, sampling techniques, questionnaires, interviews, observational techniques, secondary data, reliability and validity issues, data coding, hypothesis testing and sampling distributions. Students will be required to successfully complete the ethics certificate of completion using the Collaborative Institution Training Initiative to advance further in the program.

## CA499 PROFESSIONAL STRATEGIES

3 CREDITS

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

This course is designed as a senior-level capstone course to be taken at the end of the Multidisciplinary Studies degree program in the College of Arts and Sciences. This capstone course provides an opportunity for students to synthesize and articulate the theories and principles gained through their program of study, and to demonstrate mastery of the University's core professional competencies (critical thinking, communication, data aptitude, personal/social responsibility, career management, distributed collaboration).

## CH205 GENERAL CHEMISTRY (LAB INCLUDED)

4 CREDITS

## PREREQUISITES: MA105

This general chemistry course includes topics such as states of matter, thermo-chemistry, ionic and covalent bonding, molecular geometry, rates of reaction, oxidation-reduction equations, thermodynamics and organic chemistry. Includes a virtual lab.

## PREREQUISITES: NONE

This course examines a general overview of the criminal justice system, with an emphasis on decision points and administrative practices in police and other criminal justice agencies, as well as basic criminal procedures. Topics include: Causes of crime, criminal law, policing history and structure, police management and legal aspects, adjudication including the courts and sentencing, corrections drugs and crime, multinational criminal justice and the future of criminal justice.

## CJIO2 INTRODUCTION TO CRIMINOLOGY

3 CREDITS
PREREQUISITES: NONE
This course introduces the student to the major theories of crime by exploring the biological, psychological, sociological and economic theories. Traditional and contemporary theories of criminology are examined to better explain patterns and root causes of crime, crimes against persons and property, white-collar and organized crime, drug abuse and crime, technology and crime, terrorism, and criminology and social policy.

## CJ201 POLICE SYSTEMS AND PRACTICES

3 CREDITS

## PREREQUISITES: NONE

This course provides an overview of police issues, integrating the history, social context and theoretical understanding of policing in America. Relationships between communities, individuals and police organizations are studied. Topics include: evolution of policing, organizational structure and supervision, societal expectations and police corruption.

## CJ202 CORRECTIONAL SYSTEMS AND PRACTICES <br> 3 CREDITS

## PREREQUISITES: NONE

This course evaluates the history and progression of correctional systems. Contemporary correctional practices are analyzed and evaluated using a historical perspective with a modern emphasis on community and institutional corrections. This course balances current and past research, theories and applications and practical examples and issues. Topics include: historical perspectives, the court process, alternatives to imprisonment, correctional functions, institutional clients, rights of correctional clients, reintegration systems and the future of corrections.

## CJ203 JUVENILE JUSTICE I

3 CREDITS

## PREREQUISITES: CJ102

This course explores the evolution of the juvenile justice system and the different approaches followed by the court and correctional authorities. Current topics in juvenile justice include youth victimization, crime prevention, treatment and various juvenile sanctions. Distinction is made between the adult and juvenile system, with emphasis placed on the roles and functions of the juvenile justice system.

CJ230 SERIAL KILLERS

## PREREQUISITES: NONE

This course involves an examination of serial killers, including the history, profiling of the offenders and techniques for the investigation. Actual case studies are discussed. This course examines mature subject matter, some of which may include violent and sexually explicit material. By signing the enrollment agreement, you acknowledge the course content may be violent and you imply your willingness to read, research and participate in all discussion forums, written assignments and/or exams. As you participate in this course, you will be required to respond in a respectful and thoughtful manner.

CJ302 CRIMINAL PROCEDURE
3 CREDITS
PREREQUISITES: CJ101 AND CJ102
This course provides the student with the core knowledge of constitutional criminal procedure. Topics of study include: Fourth Amendment doctrines such as the exclusionary rule, the search warrant, plain view, arrest and Terry-stops and warrant-less searches. The focus of the exclusionary rule reflects the areas in which the Supreme Court has been most active in recent years. The conflicting approaches to the application of law evident between justices adhering to the Due Process Model and those following the Crime Control Model are addressed. Additional topics in the course include: meaning, context and constitutional foundation of criminal procedure; the right to counsel; rules of interrogation and confession; identification of suspects and entrapment; and the pretrial and trial process.

## CJ303 JUVENILE JUSTICE II

3 CREDITS

## PREREQUISITES: CJ203

This course is a comprehensive examination of the American juvenile justice system, examining social systems theory and prevention and intervention and treatment options. The course focuses on juveniles who have entered the system via intake and are now subject to trial, dispositions and corrections. Topics include the changing role of prosecution in juvenile matters, the role of defense attorneys, the use of waivers, adjudication and dispositional alternatives, nominal sanctions, juvenile probation and community-based corrections, and custodial sanctions and parole.

## CJ305 INTRODUCTION TO CRIMINAL JUSTICE ETHICS 3 CREDITS

## PREREQUISITES: CJ101 AND CJ102

This course examines the diverse ethical issues frequently encountered in the criminal justice system. Students study the writings of the major theorists such as Plato, Socrates and Aristotle. Classic ethical theories will be studied, reviewed and applied to such varied topics as the application of professional and personal discretion, the appropriate use of force, dimensions of professional responsibility and proper application of authority.

## PREREQUISITES: CJ101 AND CJ102

This course introduces the student to the foundational aspects of criminal law, including its historical background and fundamental elements. Major themes of both common law and the Model Penal Code, including the elements of statutory crimes, criminal responsibility and defenses are reviewed. Topics include: the historical background of criminal law, fundamentals of criminal law, jurisdiction, the criminal act, the mental element, matters affecting criminal responsibility, assault and related crimes, homicide, sex offenses and offenses to the family relationship, theft, robbery, burglary and related offenses, arson, kidnapping, narcotics and offenses by and against juveniles.

## CJ401 COMMUNITY POLICING

3 CREDITS

## PREREQUISITES: CJ101 AND CJ201

This course is designed to provide an analysis of both the community-oriented policing philosophy and its practical application through strategic oriented policing, neighborhood oriented policing and problem oriented policing methods. Additional aspects to be reviewed include the various roles in the systemic approach, organization and management styles of the police department, implementation methods, evaluation methods, and an examination of past and future practices under this new model in policing.

## CJ402 CRIMINAL INVESTIGATION

3 CREDITS
PREREQUISITES: CJ101 AND CJ201
This course provides a framework for understanding the criminal investigative process. Case studies throughout this course emphasize the applied technique of criminal investigation, crime scenes collection, street gangs and drugs. Topics include: the evolution of criminal investigation and criminalistics, the investigative process and the crime scene, gathering physical evidence and investigative reporting, interviewing and interrogation, injury and death investigations, sex-related offenses, crimes against children, computer crime, arson recognition, terrorism, and the control and investigation of drug sales and abuse.

## CJ403 WHITE COLLAR CRIME

3 CREDITS

## PREREQUISITES: CJ101 AND CJ102

This course surveys financial and corporate crime, including the influences of local economic conditions and the cost factors associated with crime. Topics include the development of whitecollar crime, effects on consumers, explaining conspiracies about white-collar crime, defending against white-collar crime, and detailing governmental and religious fraud.

CJ409 POLICE ADMINISTRATION

## PREREQUISITES: CJ101 AND CJ201

This course provides a review, analysis and evaluation of the various approaches to police management, including traditional scientific management, the behavioral systems approach and the human relations approach. Major conceptual contributions from the behavioral sciences and human relations are explored in the context of police management.

CJ414 MULTICULTURAL LAW ENFORCEMENT
3 CREDITS PREREQUISITES: CJ101, CJ201 AND CJ309
This course is intended to provide a guideline for dealing with diversity in a multicultural society. This includes diversity in recruiting, enhanced training, targeted language and communications skills, and an emphasis on embracing different ethnic and racial communities.

CJ415 POLICE COMMUNITY RELATIONS
3 CREDITS

## PREREQUISITES: CJ201 AND CJ401

This course is an in-depth examination of various controls and concepts used in community policing models. Decision points and administrative practices in police, criminal court and correctional bureaucracies are evaluated. The historical evolution of criminal justice agencies is reviewed with basic criminal procedures.

## CJ416 VICTIMOLOGY

3 CREDITS

## PREREQUISITES: CJ102

This course examines crime from the perspective of the victim. Victimization theory, offender-victim relationships, situational factors, responses to victims and the phenomenon of the violence of terrorism. This course will also examine the relationship between serial killers and their victims, victims of hate crimes, stalking and the demographic, social and behavioral characteristics of female and male offenders. Biological, psychological and sociological explanations are offered for serial murderers.

## CJ421 ADVANCED CRIMINAL LAW

3 CREDITS

## PREREQUISITES: CJ309

This course emphasizes the general principles that impact the criminal law. Knowledge of criminal law provides the student the tools necessary to apply general principles to the varied and changing definitions of specific crimes. This knowledge is also practical because the general principles form the basis for both the elements of the specific crimes that prosecutors must prove beyond a reasonable doubt and the defenses with which defendants can justify or excuse their guilt.

PREREQUISITES: CJ302 OR CJ309
This course evaluates the various components in judicial process and policymaking. The creation of the court systems, the structure of most courts and key players in the legal system are examined with focus on how each of these themes affects how judges make decisions, and how those decisions create and further develop policy. Topics include: courts and law, the federal and state court systems, judges, lawyers, trials and appeals, criminal justice and the courts, civil justice and the courts, judicial decision making and judicial policy making.

## CJ450 UNDERSTANDING TERRORISM

## PREREQUISITES: CJ101 AND CJ102

This course is an introduction to terrorist cults and personalities. Studies focus on a variety of aspects related to terrorist organizations and individuals, gaining an understanding of how various terrorist cults and personalities affect national security, how understanding terrorism personalities can aid the counterterrorism war and what the future looks like in the war against terrorism.

## CJ451 PRINCIPLES OF TERRORISM

3 CREDITS

## PREREQUISITES: CJ450

This course examines terrorism in the modern world with a review of the historical origins of terrorism. Topics include: patterns of terrorism, Latin American influences on terrorism, the origins of Middle Eastern terrorism, Osama bin Laden and al Qaeda, U.S. domestic terrorism issues, counter terrorism and U.S. responses, homeland security, employment of national and domestic intelligence resources against terrorism, weapons of mass destruction and future issues on terrorism.

## CJ452 TERRORISM AND U.S. NATIONAL SECURITY 3 CREDITS

## PREREQUISITES: CJ450

This course examines the relationship between terrorism and U.S. national security. It focuses on a variety of aspects related to U.S. policy on terrorism, the threat of terrorism to U.S. national security and the problems inherent to U.S. counterterrorism. The student gains a comprehensive understanding of how the U.S. views terrorism, how various policies affect outcomes of counterterrorism, strengths and weaknesses in policy and strategies, threats to U.S. national security and suggestions for solutions to these threats.

CJ453 BORDER AND COASTAL SECURITY

## PREREQUISITES: CJ450

This course is designed to teach the student to analyze the implications of September 11, 2001 and the new "war on terrorism" for border controls, cross-border relations and economic integration in North America. This course also examines U.S.-Canada and U.S.Mexico relations in the wake of the terrorist attacks, the management of trade and migration flows and the reconceptualization of North America's borders in the post 9-11 world.

CJ454 ELEMENTS AND ISSUES IN COUNTERTERRORISM 3 CREDITS PREREQUISITES: CJ451
This course is a comprehensive review of issues and elements to be considered in the planning and organization of a counterterrorism program. It presents an examination of techniques and procedures, which can be applied to programs developed at both the national and local level. Such measures as financial investigations, technical defenses and counterintelligence activities are studied.

CJ455 EMERGENCY PLANNING

## PREREQUISITES: CJ101

This course examines emergency planning as it relates to surviving natural and man-made disasters. Risk analysis and the formulation of a comprehensive plan, followed by a vigorous and continuous testing program, are essential elements to surviving an emergency. Topics include threat assessment, risk analysis, formulating the plan, staffing the emergency operations center, coordinating with supporting agencies and the importance of continuing liaison, managing an actual incident and conducting an effective follow-up analysis. Various actual case studies are discussed.

## CJ475 INTRODUCTION TO COMPUTER CRIME

3 CREDITS

## PREREQUISITES: CJ402

This course focuses on the history of digital crime, as well as tools of computer hackers, virus writers, terrorists and other offenders. Using real life examples and case studies, the course examines the history, development, extent and types of digital crime and digital terrorism as well as current legislation and law enforcement practices designed to prevent, investigate and prosecute these crimes.

## CJ476 COMPUTER FORENSICS AND CYBER CRIME <br> 3 CREDITS

## PREREQUISITES: CJ475

This course familiarizes students with the techniques used to investigate computer crimes, providing students with cutting-edge techniques used to investigate computer crime scenes, as well as computer hardware and software to solve computer crimes. Topics include: The history of computer crime and legal and social issues relating to computer crime.

## CJ477 COMPUTER CRIME SCENE INVESTIGATION 3 CREDITS

## PREREQUISITES: CJ476

This course provides a complete overview of computer forensics for students in law enforcement and administration of justice using case studies and vignettes of actual computer crimes. It contains practical information on solving computer crimes and catching the hacker, including data recovery techniques, auditing methods and services, data seizure and analysis, preservation of computer evidence, reconstruction of events and information warfare.

## CJ479 INFORMATION SECURITY

3 CREDITS
PREREQUISITES: CJ476
This course gives students and professionals the necessary managerial, technical and legal background to support investment decisions in security technology. It discusses security from the perspective of hackers (i.e., technology issues and defenses) and lawyers (i.e., legal issues and defenses). This cross-disciplinary course is designed to help users quickly become current on what has become a fundamental issue.

## CJ480 CRIMINAL INTELLIGENCE ANALYSIS

3 CREDITS PREREQUISITES: CA408
The course provides the student with the methods and techniques of criminal intelligence analysis and strategic organized crime. Students learn how to predict trends, weaknesses, capabilities, intentions, changes and warnings needed to dismantle criminal organizations. Students are introduced to techniques such as association and link analysis, visual investigative analysis (VIA), telephone toll analysis, matrix analysis, reporting and application to violent crime and organized crime to include drug, white collar and money laundering. This course emphasizes criminal intelligence as opposed to criminal investigation.

## CJ499 CRIMINAL JUSTICE CAPSTONE

## 3 CREDITS

PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
This course serves as an opportunity for students pursuing a Bachelor's degree in Criminal Justice to demonstrate their mastery of program objectives and knowledge of their field. This capstone encompasses a range of topics and involves the completion of a major research paper that exhibits significant comprehension of one subject area within the field of Criminal Justice.

C0101 INTRODUCTION TO PUBLIC SPEAKING
3 CREDITS

## PREREQUISITES: NONE

This course provides students with a broad overview of public speaking, including such topics as audience analysis, idea generation and development, speech organization and speech delivery. Topics include how to outline speeches, create effective introductions and conclusions, use appropriate language and control nervousness. In addition, students examine guidelines for and practice delivering informative and persuasive speeches. Students will record themselves delivering speeches, thus they will need to know how to use a webcam and how to upload video files from their devices into the assignment dropbox in the Learning Management System.

## CO120 INTERPERSONAL COMMUNICATION

3 CREDITS

## PREREQUISITES: NONE

This course explores the challenges of building and maintaining relationships through verbal and nonverbal language; conflict management; perception; and listening skills. Ideas are applied to everyday aspects of interaction in both personal and professional relationships. The course also provides an in-depth perspective on communication and the role is play in everyday challenges. Students will record themselves delivering speeches, thus they will need to know how to use a webcam and how to upload video files from their devices into the assignment dropbox in the Learning Management System.

## CO201 CONFLICT AND COMMUNICATIONS

3 CREDITS

## PREREQUISITES: NONE

The course introduces the concepts and theories related to conflict communication, conflict styles and conflict resolution techniques. Students will develop and apply skills needed to resolve conflict in various personal and professional arenas. Students will record themselves delivering speeches, thus they will need to know how to use a webcam and how to upload video files from their devices into the assignment dropbox in the Learning Management System.

## CO210 BUSINESS COMMUNICATION

3 CREDITS

## PREREQUISITES: NONE

Through this course, students will develop professional communication skills needed in the fast-moving professional environment. With a focus on oral and written communication for business, students discover how to design and deliver messages in both formal and informal venues. Students will record themselves delivering speeches, thus they will need to know how to use a webcam and how to upload video files from their devices into the assignment dropbox in the Learning Management System.

CO301 INTRODUCTION TO COMMUNICATION THEORY 3 CREDITS

## PREREQUISITES: C0101 OR C0120

Our daily decisions and experiences can be explained by communication theory. Introduction to Communication Theory explains the key concepts and theories of human communication. This course will examine the key theories of human communication, both general theories and those specific to particular contexts, such as intrapersonal, interpersonal, small group, intercultural and public communication.

## C0325 CIVILITY AND MASS MEDIA

3 CREDITS

## PREREQUISITES: NONE

This course draws from theories in the fields of communication, sociology, and philosophy in order to provide a comprehensive overview of the concept of civility. The theories provide a lens through which communication in the digital age, and its impact on individuals and communities, will be examined. Practical tools and techniques offer an opportunity for the application of effective and appropriate civil communication in various social contexts.

## CO330 MASS MEDIA COMMUNICATIONS

3 CREDITS

## PREREQUISITES: C0101 OR C0120

Mass Media Communications is designed to familiarize students with the field of communications. This course is intended to introduce the basic factors affecting mass communications in the digital age. History, models, theories, concepts and terminology of mass communication trend in newspapers, radio, television, film, books, the internet, advertising, public relations, visual messages, media law and ethics are also examined. This course will enable students to understand the complex interactions between media and society, and think critically about the ways in which mass media inform our everyday lives.

## C0395 DIGITAL MEDIA

3 CREDITS
PREREQUISITES: C0101 OR C0120
This course explores the way we read, write and speak the language of digital media by bridging theory to practice. Students will learn how and why the digital world is constructed the way it is through the examination of topics such as the definition of digital media, Internet customers and potential customers, blogging and web design, and social media tools and channels. Additionally, students will examine many of the practical and critical skills necessary to become technically proficient in digital/social media use.

C0401 MEDIA ETHICS

## PREREQUISITES: C0101 OR C0120

Media Ethics explores the origins of ethical behavior, issues and dilemmas in mass communication. Additionally, students will examine classical and contemporary approaches and their application to modern media practices.

CS105 INTRODUCTION TO COMPUTER APPLICATIONS 3 CREDITS

## PREREQUISITES: NONE

Students are introduced to basic computer concepts as well as techniques and tools for folder and file navigation and manipulation. Students explore the fundamentals of an office productivity suite, developing skills in word processing, spreadsheet and presentation applications.

## CS106 INTRODUCTION TO COMPUTER SYSTEMS <br> 3 CREDITS

## PREREQUISITES: NONE

This course covers basic computer concepts including binary logic, how computer hardware works, how programs are designed and written and advanced applications like artificial intelligence. This course introduces students to terminology and concepts they will see throughout the program.

## CS116 INTRODUCTION TO PROGRAMMING WITH VISUAL BASIC <br> 3 CREDITS

PREREQUISITES: CS192
This course covers fundamental programming concepts. It develops programming skills and problem solving techniques. The course introduces the fundamentals of computer programming, using Visual Basic software. Skills learned can be applied to mastering any programming language. Detailed case studies reinforce application of the fundamental concepts.

CS155 COMPUTER APPLICATIONS FOR BUSINESS 3 CREDITS

## PREREQUISITES: NONE

This course explores applications within the Microsoft Office Suite with an emphasis on the tools needed in a business context. While covering Word, Excel, and PowerPoint, focus is placed on the use of Excel for analyzing and presenting data. Techniques for the creation of professional documents are addressed.

[^2]CS192 PROGRAMMING ESSENTIALS

## PREREQUISITES: NONE

This course introduces problem-solving concepts needed for programming. It covers fundamental control structures such as the sequential structure, the selection structure and the repetition structure. The use of logic in designing programs has general application.

## CS197 PROGRAMMING IN HTML

3 CREDITS
PREREQUISITES: CS192 (CREDIT CANNOT BE OBTAINED FOR BOTH CS197 AND IS301).
This course covers the basics of mastering Hypertext Markup Language (HTML) and Extensible Hypertext Markup Language (XHTML). Topics include creating a web page, use of links, tables, scripting for HTML, adding graphics, Cascading Style Sheets and multimedia.

## CS200 PROGRAMMING IN JAVA

4 CREDITS

## PREREQUISITES: CS192

This course is devoted to object-oriented programming using Java. Topics include object-oriented programming, classes and instances, looping, arrays, flow control, packages, interfaces, streams, files, Java applet programming and applying advanced graphical user interface elements.

## CS205 COMPUTER SOFTWARE APPLICATIONS IN HEALTHCARE <br> 3 CREDITS

PREREQUISITES: NONE
This course provides an overview of commonly available software tools used in healthcare, including an introduction to encoding tools and computer-assisted coding software used in healthcare data processing. Focus is placed specifically on healthcare software and its many uses, functions and applications in the medical office. Other processes such as medical office billing and information technology are also discussed.

## CS208 PROGRAMMING IN JAVASCRIPT

4 CREDITS

## PREREQUISITES: CS197 OR IS301

This course covers JavaScript programming basics such as operators, expressions, arrays, loops, conditional statements, as well as advanced topics like AJAX.

## CS263 PROGRAMMING IN C

 4 CREDITS
## PREREQUISITES: CS192

[ONLY AVAILABLE TO STUDENTS FOR WHICH IT IS A REQUIRED PROGRAM COURSE.]

This course is an introduction to programming using C . Topics include flow of control, functions and structured programming, pointers, arrays and file manipulation.

CS265 PROGRAMMING IN C++
4 CREDITS

## PREREQUISITES: CS192

This course is an introduction to $\mathrm{C}++$ programming. Topics include control structures, arrays, pointers, classes, overloading, inheritance, file processing and data structures.

## CS285 ADVANCED PROGRAMMING IN C++ <br> 4 CREDITS

PREREQUISITES: CS265 WITH A "C" OR BETTER
This course is a continuation of Programming in C++. It presents advanced concepts of C++ and object-oriented design. Specific topics include: inheritance, polymorphism, dynamic memory management, overloading, templates and exception handling.

## CS325 DATA STRUCTURES

3 CREDITS
NOTE: COURSE FORMERLY KNOWN AS CS270 PREREQUISITES: CS265 WITH A "C" OR BETTER OR CS285 WITH A "C" OR BETTER, DEPENDING ON PROGRAM REQUIREMENTS
Using the C++ programming language standard, this advanced programming course delivers a disciplined approach to algorithms and data structures, and includes abstract data types and advanced data structures.

## CS336 SYSTEM ANALYSIS AND DESIGN

## PREREQUISITES: CS192

[ONLY AVAILABLE TO STUDENTS FOR WHICH IT IS A REQUIRED PROGRAM COURSE.]
This course covers the process of analyzing and designing information systems in support of business requirements. The system development life cycle (SDLC) is examined along with its impact on analysis and design. Strategies and techniques for solving complex problems are also presented.

## CS340 OPERATING SYSTEMS

3 CREDITS

## PREREQUISITES: CS192

This course introduces operating system fundamentals and compares a variety of operating systems. Servers and networking basics are included.

## CS350 INTRODUCTION TO JQUERY

3 CREDITS

## PREREQUISITES: CS208 OR IS306

This course introduces students to the powerful jQuery framework library. For students already familiar with HTML, JavaScript, CSS and the DOM, this course addresses how to quickly and easily create interactive websites with enhanced user interfaces. Advantages of using the library for such things as form validation, event handling and AJAX interactions are also explored.

CS367 PROGRAMMING LANGUAGES
3 CREDITS

## PREREQUISITES: CS285 OR CS325

This course provides the tools necessary for the critical evaluation of existing and future programming languages and constructs. It also introduces compiler design and construction.

## CS371 DATABASE DESIGN

## 4 CREDITS

## PREREQUISITES: NONE

[ONLY AVAILABLE TO STUDENTS FOR WHICH IT IS A REQUIRED PROGRAM COURSE.]

This course presents the fundamental concepts of database systems such as the hierarchical, networks and relational database models. SQL, entity-relationship modeling and normalization are introduced. Both logical and physical database design are covered along with implementation and maintenance issues.

## CS386 SYSTEMS ARCHITECTURE <br> 4 CREDITS

## PREREQUISITES: IS242

This course provides technical knowledge of computer hardware and system software. The material covered in the course presents the background needed for systems analysis, design, configuration, procurement and management.

## CS405 SOFTWARE ENGINEERING <br> 4 CREDITS

PREREQUISITES: CS336 WITH A "C" OR BETTER OR IS336 WITH A "C" OR BETTER
This course covers the fundamentals of software engineering using a project management methodology and systems approach. Requirements analysis, system design and object-oriented analysis and design are covered.

## CS406 ADVANCED SOFTWARE ENGINEERING <br> 4 CREDITS <br> PREREQUISITES: CS405 WITH A "C" OR BETTER <br> This course addresses more advanced topics in software engineering. Topics include the study of traditional and agile project planning, management, and development, object-oriented design, software testing and quality assurance.

## CS411 ARTIFICIAL INTELLIGENCE

4 CREDITS

## PREREQUISITES: CS325

This course covers the techniques and methodologies to develop intelligent machines and expert systems. Topics include a survey of the history of artificial intelligence, state space and heuristic searches, knowledge representation, natural language and automated reasoning.

CS412 PROGRAMMING IN C\# WITH .NET

## PREREQUISITES: CS200 AND EITHER CS263 OR CS265

This course introduces the fundamentals and features of programming using the .NET framework. These fundamentals are employed to design, implement and deploy applications using C\# as the client language.

4 CREDITS

## PREREQUISITES: CS325 WITH A "C" OR BETTER

This course covers developing and analyzing algorithms for common computing tasks. In addition to covering metrics for evaluating algorithms, topics include elementary data structures, recursion, trees, sorting methods, binary searching, hashing, radix searching and external searching.

## CS430 MOBILE APPLICATION DEVELOPMENT 4 CREDITS

PREREQUISITES: CS208 OR IS301
This course focuses on building applications for both iOS and Android platforms. Since the use of separate development environments is time-consuming, complex and costly, this course emphasizes the use of cross-platform development methods consisting of HTML, CSS, Ionic, Apache Cordova, Angular JS, Android SDK, OSX and Xcode.

CS499 COMPUTER SCIENCE CAPSTONE
3 CREDITS
PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
This capstone course requires demonstration of the knowledge and skills gained throughout the Computer Science degree program by designing and implementing a software program or computer-related system to solve a real-world problem. The project requires project definition, requirements determination, design, implementation, test and documentation of the system.

## CT212 DIGITAL ELECTRONICS (LAB INCLUDED) 4 CREDITS

## PREREQUISITES: CS192 AND ET105 WITH A "C" OR BETTER

This is an introductory course to the fundamentals of digital electronics. Topics include number systems and codes, logic gates, Boolean algebra, combinational circuits and PLCs. Sequential circuits are introduced. Circuits are implemented using circuit simulation software and also using a hardware description language.

CT262 MICROPROCESSOR SYSTEMS ENGINEERING (1 CREDIT
HOUR HARDWARE BASED LAB INCLUDED)
4 CREDITS

## PREREQUIIITES: CT212 AND EITHER CS263 WITH A "C" OR BETTER OR CS265 WITH A "C" OR BETTER

This course provides a systems-level understanding of microprocessors. Students write practical programs and learn to plan, write and test software solutions for real applications. A solid understanding of the role of the various types of memory on the modern microcomputer system is covered. The included safety module must be passed in order to progress in and pass this course.

## CT312 ADVANCED MICROPROCESSORS (LAB INCLUDED) <br> 4 CREDITS

## PREREQUISITES: CT262 WITH A "C" OR BETTER

This course uses practical applications and microprocessor-based systems to help the upper-level student gain a unique perspective in this cutting-edge technology. Topics include microcontroller concepts, assembly-language programming, programming examples and input/output interface examples.

CT362 MODERN DIGITAL DESIGN (LAB INCLUDED) 4 CREDITS

## PREREQUISITES: CT212 WITH A "C" OR BETTER

This is an intermediate course in digital logic design. Topics include synchronous and asynchronous sequential logic, logic families and digital/analog interfacing. Analysis and design problems are approached using circuit simulation and a hardware description language.

## CT420 CYBER PHYSICAL SYSTEMS SECURITY <br> 4 CREDITS

PREREQUISITES: CT262 AND CS265
This course introduces the techniques, methodologies, and tools used in building and maintaining secure networks and control systems. These systems rely on unification of technologies such as computers, programmable logic controllers, operator interfaces, and microprocessor based devices together into supervisory, control and data acquisition (SCADA) or industrial control systems (ICS). After exploring the real-world threats and vulnerabilities that exist within the industrial automation and control system architectures, a standards based approach is explored for the protection of such systems, taking into consideration the procedural and technical differences between security for traditional IT environments and those solutions appropriate for SCADA or ICS.

ECN201 MICROECONOMICS

## PREREQUISITES: MA105

This course provides the student with a sound foundation in economic thinking that is central to business. Topics that are covered include: supply and demand, opportunity costs, elasticities, utility theory, the economic concept of the firm, the relationship between costs and capital in the short-run, and in the long-run, competition, monopoly, anti-trust laws, and public and private goods.

ECN206 MACROECONOMICS
3 CREDITS

## PREREQUISITES: MA105

This introductory course provides an overview of current and traditional concerns and methods of macroeconomics. Topics that are covered include: economic growth, unemployment inflation, government deficits, monetary policy, investment and capital, the role and methods of the Federal Reserve, Keynesian and monetarist theories and comparative advantage.

ECN399 SPECIAL TOPICS IN ECONOMICS
3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

ECN501 MANAGERIAL ECONOMICS
3 CREDITS
PREREQUISITES: NONE
This advanced course applies microeconomic theory to the management of the firm by focusing on the use of microeconomics to enhance decision-making. The course explores the complex relationships between manager decisions and the impact of those decisions on product demand and profitability. Students delineate the economic environment in which the firm operates and learn to think strategically within this environment.

## ECN599 SPECIAL TOPICS IN ECONOMICS <br> \section*{PREREQUISITES: APPROVAL OF THE DEAN}

3 CREDITS

This course is open only by special arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

EMT320 ENGINEERING ECONOMICS
3 CREDITS

## PREREQUISITES: MA141 WITH A "C" OR BETTER

This course emphasizes the systematic evaluation of the cost and benefits associated with proposed technical projects. Topics covered include the time value of money, evaluation of project alternatives, replacement analysis and cost estimation techniques.

## EMT 340 SYSTEMS ENGINEERING

3 CREDITS

## PREREQUISITES: NONE

This course teaches the principles and practices of systems engineering management. It covers systems engineering life cycles, processes, analyses, planning and managing. Some of the topics include requirements, configuration management, trade studies, modeling and simulation, technical reviews, plans and procedures, project planning and control and risk.

## EN100 FUNDAMENTALS OF WRITTEN COMMUNICATION 3 CREDITS

## PREREQUISITES: NONE

In this course, the standard conventions of written communication will be applied to generate documents for various audiences (academic, personal, business, technical, social media, etc.)

## ENIO1 ENGLISH COMPOSITION I

3 CREDITS

## PREREQUISITES: NONE

This course emphasizes the writing process. Students will apply principles of good writing practice through various genre (narrative, persuasive, expository writings). Additionally, students will analyze reading material as part of the critical and creative thinking processes associated with written communication.

## EN102 ENGLISH COMPOSITION II

## PREREQUISITES: NONE

This course focuses on the research and writing skills required to develop a researched argument (academic research paper). Elements of rhetoric, information literacy, and argumentation will be introduced along with an emphasis on developing a thesis statement, distinguishing supporting evidence, and providing counter-arguments along with arguments.

## EN261 FUNDAMENTALS OF TECHNICAL WRITING <br> 3 CREDITS

## PREREQUISITES: NONE

This course introduces students to the purpose and scope of technical writing. Topics include standard conventions of written English; audience analysis; writing concisely for clarity and thoroughness; and determining how to present information appropriately in different professions (criminal justice, business, education, etc.) NOTE: Credit may not be awarded for both EN261 and EN361.

EN301 SURVEY OF AMERICAN LITERATURE I

## PREREQUISITES: NONE

This course examines America's literary heritage from the times of Christopher Columbus through Walt Whitman and Emily Dickinson. Literary topics include the literature of early America (e.g. authored by Columbus, Captain John Smith, William Bradford, the New England Primer and Jonathan Edwards), the literature of the eighteenth century (e.g. authored by Benjamin Franklin, Thomas Paine and Thomas Jefferson) and the literature of the early-to midnineteenth century (e.g., authored by Washington Irving, Cooper, Poe, Emerson, Melville, Douglass, Lincoln and Hawthorne).

## EN320 CREATIVE WRITING

3 CREDITS
PREREQUISITES: NONE
This course will explore the basic elements of writing creatively with an emphasis in fiction. The basic steps for writing a piece of short fiction (such as plot, structure, characterization, and descriptive writing) will be explored. Opportunities for students to hone these skills, as well as create, write, and revise their own piece of short fiction. Students will also be expected to workshop other student work and learn to work as a writing community.

EN361 TECHNICAL WRITING
3 CREDITS PREREQUIITES: NONE

This course explores the fundamental principles of successful professional communication. Students learn how to write business correspondence, job search correspondence, public relations documents, and professional reports. Students also gain experience in defining their audiences and purpose, designing document layout, as well as writing, revising, and proofreading text. In completing the requirements of this course, students showcase and evaluate their own writing and design skills in a professional correspondence portfolio. Additionally, through a series of reflective journal exercises, students reflect on their learning and writing progress. NOTE: Credit may not be awarded for both EN261 and EN361.

## EN380 TECHNICAL WRITING FOR THE MEDICAL

 PROFESSION3 CREDITS PREREQUISITES: NONE
Technical Writing for the Medical Profession is designed to develop writing, research, and critical thinking skills to help students create organized, professional writing. Specific skills and knowledge such as finding and using sources, organizing ideas, APA format, and technical skills (grammar, punctuation, and spelling) are incorporated into this course. While this course focuses on writing tasks specific to the medical profession, the skills and knowledge in this course apply across all writing environments.

ENT300 ENTREPRENEURIAL READINESS
3 CREDITS

## PREREQUISITES: NONE

This course will assist the student in assessing desire to become an entrepreneur, assist the student in formulating a business opportunity and assist the student in completing a feasibility study. At the end of the course students will be asked to determine whether they believe they have the knowledge, skills, abilities and resources to continue on in their journey to become an entrepreneur.

## ENT301 ENTREPRENEURSHIP

3 CREDITS

## PREREQUISITES: NONE

This penultimate course in the core business curriculum is an advanced undergraduate course focusing on entrepreneurship and small business ownership. The major topic of the course is the development of an entrepreneurial endeavor, including analyzing the venture creation process, understanding the groundwork for becoming an entrepreneur and studying real-life examples that illustrate entrepreneurial ethics and the global dimensions of entrepreneurship.

## ENT310 ENTREPRENEURIAL MARKETING AND OPERATIONS <br> 3 CREDITS

PREREQUISITES: NONE
This course will assist the student in completing a marketing plan and an operations plan including market research and regulations impacting the small business owner. At the end of this course, students will have the completed marketing plan and operation plan to insert into their final business plan covering the processes, procedures and policies to move forward.

## ENT340 ENTREPRENEURIAL FINANCE

3 CREDITS

## PREREQUISITES: NONE

In this course, students learn the basics of accounting and financing for the entrepreneur and how they may guide informed decision making. Topics covered include how numbers are entered in the accounting system and how the system produces important financial reports. Students will gain an appreciation for the importance of knowing the standard set of financial statements and learning how to interpret: the balance sheet, the income statement, the statement of cash flows and the statement of owner's equity. Finally, the course discusses start-up and growth financing.

## ENT399 SPECIAL TOPICS IN ENTREPRENEURSHIP 3 CREDITS

 PREREQUISITES: APPROVAL OF THE DEANThis course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

ENT451 ENTREPRENEURIAL BUSINESS PLANNING 3 CREDITS

## PREREQUISITES: ENT310

This course will assist the student in gathering their materials together and completing a full comprehensive business plan. At the end of the course the student will be asked what their next steps will be should they wish to pursue opening up a business.

## ENT599 SPECIAL TOPICS IN ENTREPRENEURSHIP 3 CREDITS

 PREREQUISITES: APPROVAL OF THE DEANThis course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

ET100 ENGINEERING AND ETHICS
3 CREDITS

## PREREQUISITES: NONE

This course places a strong emphasis upon internet research of case studies, professional codes of ethics and additional tools for solving engineering ethics problems. The professional role that engineering and engineering technologists have to ethically serve society is an underlying theme.

ET105 FUNDAMENTAL PROPERTIES OF DC CIRCUITS (LAB INCLUDED)

4 CREDITS

## PREREQUISITES: MA105 WITH A "C" OR BETTER

This is a comprehensive course on the properties of Direct Current (DC) circuits. Topics include electrical components, electrical quantities and units, voltage, current and resistance. Basic circuit principles are presented for the analysis of series and parallel circuits. Magnetism and electromagnetism is also covered. A circuit simulation tool is used to build and test circuits.

## ET115 FUNDAMENTAL PROPERTIES OF AC CIRCUITS (LAB INCLUDED) <br> 4 CREDITS

## PREREQUISITES: ET105 WITH A "C" OR BETTER, MA141 WITH A "C" OR BETTER

This course is a continuation of ET105. The student is introduced to the concepts and laws which describe the behavior of AC circuits. After an introduction to capacitive and inductive circuits, the behavior of RL, RC and RLC circuits is analyzed using circuit theories. Transformer theory is also covered. A circuit simulation tool is used to build and test AC circuits and to demonstrate the use of an oscilloscope.

## ET212 ELECTRONICS I (LAB INCLUDED)

4 CREDITS

## PREREQUISITES: ET115 WITH A "C" OR BETTER

This foundational course in analog electronics introduces the student to the fundamentals of diode and transistor circuit analysis and design. Topics include semiconductors, diode theory and circuits, bipolar transistors, transistor biasing, AC models and voltage amplifiers. Circuit simulation software is used to analyze and design basic diode and transistor circuits.

## ET222 ELECTRONICS II (LAB INCLUDED)

4 CREDITS PREREQUISITES: ET212 WITH A "C" OR BETTER
This course is the second in a two-part sequence on electronic devices. Building on the principles of transistor operation in the first electronics course, this course continues with the analysis of power amplifiers, emitter followers and differential amplifiers. JFETs and MOSFETs are also introduced. The performance of amplifiers is considered based on the frequency response. Exposure to the basics of operational amplifiers is introduced as preparation for optional further course work in op-amps. The course concludes with a treatment of oscillators and power supplies.

## ET310 CIRCUIT ANALYSIS <br> 4 CREDITS

PREREQUISITES: ET115 WITH A "C" OR BETTER AND MA312 WITH A "C" OR BETTER
This course addresses advanced circuit theory, providing a strong foundation in engineering analysis. Topics covered include network theorems, time-domain circuit analysis using differential equations and the sinusoidal steady-state. More advanced techniques for circuit analysis using Laplace transforms and the Fourier series and transforms are also covered.

## ET332 ANALOG INTEGRATED CIRCUITS (LAB INCLUDED) 4 CREDITS

## PREREQUISITES: ET222 WITH A "C" OR BETTER AND MA302

This in-depth course provides a thorough understanding of a variety of op-amps and integrated circuits and their applications. The analysis and design of a wide variety of circuits involving operational amplifiers and linear integrated circuits. Topics include op-amp data sheets, frequency response of an op-amp, active filters and oscillators and IC applications. A software circuit simulation tool is used to assist in the analysis and design of a wide variety of circuits involving operational amplifiers and linear integrated circuits.

## ET352 ELECTRONIC COMMUNICATION PRINCIPLES AND SYSTEMS (LAB INCLUDED)

## PREREQUISITES: ET222 AND MA302

This course is an introduction to the basic principles underlying the analysis and design of communication systems. Topics include modulation techniques, receivers and transmitters, digital communications, and telephone and wireless communications.

ET372 INSTRUMENTATION AND MEASUREMENT
(LAB INCLUDED)

## 4 CREDITS

PREREQUISITES: ET222 WITH A "C" OR BETTER, CT212 WITH A "C" OR BETTER AND PH221 WITH A "C" OR BETTER
This course focuses on interfacing electronic systems to the environment and mechanical systems through a thorough introduction to pneumatic and electrical sensors and actuators, their specifications and their designation in electrical drawings. Data acquisition systems are studied along with analog and digital signal conditioning, filtering and analog to digital conversion. The basic process control system and the various types of controllers, including programmable logic controllers, are introduced.

ET382 SIGNALS AND SYSTEMS THEORY (LAB INCLUDED) 4 CREDITS
PREREQUISITES: ET310 WITH A "C" OR BETTER, PH221 WITH A "C" OR BETTER, AND EITHER CS263 OR CS265
This course covers the theory and problem-solving skills required for the analysis of linear systems. Real-world applications and actual data provide concrete problems that reinforce intuition and critical thinking. Both continuous and discrete-time signals and systems are covered. Topics include Fourier analysis, convolution, filters and applications, modulation, sampling, signal reconstruction, Laplace transform, z-transform and linear feedback systems. Software simulations are used to explore mathematical concepts introduced through theoretical frameworks.

ET410 TECHNICAL PROJECT MANAGEMENT
3 CREDITS PREREQUISITES: APPROVAL OF THE DEAN (ONLY AVAILABLE TO BS COMPUTER ENGINEERING TECHNOLOGY AND ELECTRONICS ENGINEERING TECHNOLOGY STUDENTS.)

This course is an introduction to the management of engineering projects. The design review process is presented as well as techniques for determination of requirements. Topics also include the product development life cycle, scheduling techniques and continuous improvement. In teams, students develop a proposal for the ET450 capstone project. The safety module must be passed in order to pass this course.

ET420 PROGRAMMABLE LOGIC CONTROLLERS 4 CREDITS PREREQUISITES: CT212 AND ET222
This course serves as an introduction to programmable logic controllers (PLCs), with a focus on employing ladder logic programming in industrial automation and control systems. Topics covered include PLC operation, wiring diagrams, programming, timers and counters, math instructions, safety and comparison of different types of industrial control systems.

## PREREQUISITES: ET410 WITH A "C" OR BETTER, COMPLETION OF DEGREE REQUIREMENTS

This course is a continuation of the project management course ET410. The approved project proposal is executed through the design, building, testing and presentation stages.

## ET485 ELECTRICAL POWER SYSTEMS ANALYSIS (LAB INCLUDED) <br> 4 CREDITS

## PREREQUISITES: ET310

This course addresses the tools required to design simple residential and commercial electrical systems. Such tools range from basic mathematics for electrical systems to the methods for selection of common electrical components, including conductors, transformers and grounding and protection systems. The design of common electrical systems and solutions to typical problems encountered in electrical design are covered.

## ET495 CONTROL SYSTEMS (LAB INCLUDED) <br> 4 CREDITS

## PREREQUISITES: ET382

This course presents a control engineering methodology that, while based on mathematical fundamentals, stresses physical system modeling and practical control system designs with realistic system specifications. Both frequency-and time-domain methods are used to model, analyze and design controllers for different system applications. Recognizing the importance of computer-aided design and analysis, MATLAB is used throughout.

## ETH301 BUSINESS AND SOCIETY

3 CREDITS

## PREREQUISITES: NONE

This intermediate course is designed to provide the student with a basic understanding of business and how it relates to society as a whole. The major topics include the corporation in society, the business and the social environment, business and the ethical environment, business and government in a global society, the corporation and the natural environment, business and technological change. A systems-thinking approach is central to the course, wherein business, government and society are so closely intertwined that an action that affects one will inevitably affect the others. The corporation's responsibilities to primary and secondary stakeholders, both economic and ethical, are studied in light of various social issues.

ETH352 FUNDAMENTALS AND ETHICS OF FINANCIAL
PLANNING
3 CREDITS
PREREQUISITES: NONE
This course will provide a basic introduction to the ethical and professional considerations in the field of financial planning. The financial planning process will be evaluated along with business objectives, regulatory framework and evolution of the profession. Technical aspects such as time value of money calculations will also be covered. Although a specific sequence is not required, the course is generally taken as the first of seven courses necessary to sit for the Certified Financial Planner" exam.

ETH560 BUSINESS ETHICS
3 CREDITS
PREREQUISITES: NONE
This course examines ethics and values in multiple contexts. It begins with an exploration of individual values and the integration of mind, body and soul. The perspective then broadens to include corporate ethics and the role of moral leadership in business. The course concludes with an examination of ethical dilemmas created by an expanding global economy.

## ETH599 SPECIAL TOPICS IN BUSINESS ETHICS <br> 3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## FIN210 PERSONAL FINANCE

3 CREDITS

## PREREQUISITES: NONE

This introductory course provides the student with a basic understanding of personal financial planning. The course is designed to help students understand how to plan for a successful financial future for themselves and their families. The course offers a comprehensive treatment of financial planning to help students understand the complexities of today's financial world and evaluate their financial options through a formal decision-making approach.

FIN307 PRINCIPLES OF FINANCE I
3 CREDITS

## PREREQUISITES: MA215

This intermediate course examines the role of the financial manager in the overall management and control of a firm. Stress is placed on the use of analytical models for improving the decision-making process. Both the short-term management of working capital and the long-term planning of capital structure and investment strategy are covered. Topics include financial ratio analysis, the time value of money, valuation of stocks and bonds, free cash flows, capital budgeting and the cost of capital.

FIN310 PROCUREMENT PRICING ANALYSIS
3 CREDITS

## PREREQUISITES: LAW220 AND BUS303

This is a comprehensive course designed to convey a thorough understanding of the price evaluation process. The topics range from understanding the cost and price environment to documenting the award decision. The student will gain knowledge in the competitive and financial environment related to price proposals by learning the techniques of cost and price analysis, life-cycle costing, return on investment and cost-benefit analysis

FIN340 INSURANCE PLANNING
3 CREDITS PREREQUISITES: NONE
This course will provide a basic introduction to the field of insurance as well as the place of various insurance products within the financial planning process. Students will examine the professional, ethical, regulatory and technical aspects of a number of insurance products and place the knowledge in a relevant financial planning context through various course requirements including a sample plan. Although students with other objectives may also benefit from the course, students frequently take this course as one of the seven Prerequisites requirements for those who wish to sit for the Certified Financial Planner" exam.
*Textbook materials change periodically due to the nature of this course. Students need to be prepared to purchase new materials.

## FIN350 INVESTMENT PLANNING

3 CREDITS

## PREREQUISITES: NONE

Investment Planning will expose the student to security analysis and portfolio management, with a focus on investments within the context of comprehensive financial planning. Concepts of risk and reward, investment selection criteria, client objectives and current views in economics such as behavioral finance and efficient market hypothesis will be addressed. Although potentially useful for students with other objectives, the course is one of seven Prerequisites classes required to sit for the Certified Financial Planner" exam.
*Textbook materials change periodically due to the nature of this course. Students need to be prepared to purchase new materials.

## FIN355 INCOME TAX PLANNING

3 CREDITS

## PREREQUISITES: NONE

This course introduces students to the basic principles and laws of income taxation for individuals, employees and business owners. Topics include income tax calculations for individuals and businesses, compliance and accounting methods, taxation of trusts and estates, basis, depreciation, sale of assets, alternative minimum tax, charitable contributions and tax management.

FIN356 PRINCIPLES OF FINANCE II

## PREREQUISITES: FIN307

This intermediate course is the continuation of Principles of Finance I. The course examines the role of the financial manager in the overall management and control of a firm. Stress is placed on the use of analytical models for improving the decision-making process. Both the short-term management of working capital and the long-term planning of capital structure and investment strategy are covered. International issues are emphasized. Topics include leverage, working capital management, hedging and value creation by merger, valuation of an acquisition and the theory of optimal capital structure.

## FIN360 RETIREMENT PLANNING

3 CREDITS

## PREREQUISITES: NONE

This course is designed to provide students with knowledge of both public and private retirement plans. The public plans include Social Security, while the private plans include defined benefit and defined contribution plans and their regulatory provisions. The specifics of the various plans are analyzed as well as non-qualified deferred compensation plans. Finally, issues that individuals face in retirement, such as life-style choices, are discussed.

FIN361 ESTATE PLANNING I
3 CREDITS
PREREQUISITES: ETH352, FIN340, FIN350, FIN355 AND FIN360 This course provides an introduction to Estate Planning. The focus of this course is on purpose, documentation and process required to create an estate plan that is consistent with the client's goals and objectives. The course is designed to give students a practical understanding of the Federal Estate and Gift tax code. It covers topics such as property titing, the probate process, forecasting the estate settlement cost and gifting strategies. Students will be exposed to the financial and non-financial aspects of the planning process that takes place before the actual wealth and asset distribution discussed in Estate Planning II. The course also emphasizes legal, tax and liquidity issues that a CFP professional needs to address with the client in order to create an effective estate plan.

FIN366 ESTATE PLANNING II
3 CREDITS
PREREQUISITES: FIN361
At the completion of Estate Planning module II students are expected have a good understanding of the Estate, Gift and Generation Skipping tax consequences of property transfers and how to structure them.

FIN399 SPECIAL TOPICS IN FINANCE
3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## FIN499 FINANCIAL PLANNING CAPSTONE

3 CREDITS
PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
This course integrates the academic coursework contained in the six core areas of the financial planning process with actual practice management, This course is the Capstone for the financial planning concentration by introducing students to the skills and tools needed for developing a comprehensive financial plan for a client. The purpose of the course is to require the financial planning student to demonstrate the ability to integrate and apply knowledge of financial planning topics. The case-study class structure differs from the traditional lecture class structure in that students must take a more active role in the learning process. Students will complete many segmented financial planning cases related to fundamentals, insurance, investing, taxation, retirement planning and employee benefits and estate planning topics covered in the individual core courses. Students will develop both basic and complex comprehensive financial plans by following the CFP Board's six-step financial planning process. Students will complete individual and group work and will participate in the presentation of a comprehensive financial plan to the class.

## FIN526 FINANCE

3 CREDITS

## PREREQUISITES: NONE

This introduction to corporate financial management and investments provides the framework, concepts and tools for analyzing financial decisions by applying the fundamental principles of modern financial theory. Major topics include the time value of money, the economic and financial environment, an overview of financial statement analysis, the essentials of risk analysis and the valuation process, and capital budgeting.

## FIN599 SPECIAL TOPICS IN FINANCE

3 CREDITS PREREQUISITES: APPROVAL OF THE DEAN
This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

GP210 AMERICAN GOVERNMENT I
3 CREDITS

## PREREQUISITES: NONE

This course provides an introduction to American government and politics. Topics include the concept of a constitutional democracy, federalism, amendment rights and equal rights under the law. Also covered are political culture, political ideology, interest groups, lobbying, and political campaigns and elections.

GP215 AMERICAN GOVERNMENT II
3 CREDITS

## PREREQUISITES: NONE

This course is a continuation of American Government I. Topics include the effect of the media on politics and the branches of government. Also covered are the federal bureaucracy and domestic and foreign policymaking.

GP310 CONTEMPORARY POLITICAL ISSUES
3 CREDITS

## PREREQUISITES: NONE

This course is a broad study of America's formal and informal political institutions and policies. The material is designed to introduce various contemporary political issues, with both sides of the debate being presented. Students should expect to participate in lively and thoughtful discussions about vital issues and gain from the experience of learning about opposing views.

GP336 TERRORISM AND ASYMMETRICAL WARFARE 3 CREDITS PREREQUISITES: NONE
This course provides a political examination of terrorism and asymmetrical warfare. It considers how terrorism and asymmetrical warfare fits within various theoretical models of using of violence in order to achieve political goals in both interstate and intrastate contexts. This course considers theoretical foundations and political components of resolving issues of terrorism and asymmetrical warfare.

## GP350 INTERNATIONAL RELATIONS

3 CREDITS

## PREREQUISITES: NONE

This course introduces foundational theories of international relations, which will be examined in light of contemporary headlines and news stories. Case studies of key moments in U.S. history pertaining to international relations will be explored.

## GS102 INTRODUCTION TO LIFE SCIENCE

3 CREDITS

## PREREQUISITES: NONE

This course provides a broad overview of biological processes. Topics include the anatomy of the cell, cell division, species diversity and species classification. This course relates the subject matter to everyday occurrences.

## PREREQUISITES: NONE

This course provides a broad overview of scientific physical processes. Topics included are: units and measures, motion, energy, momentum, atoms and molecules, inorganic chemistry, geology and astronomy. This course attempts to relate the subject matter to everyday occurrences.

GS104 INTRODUCTION TO ENVIRONMENTAL SCIENCE 3 CREDITS PREREQUISITES: NONE
This course provides an up-to-date, introductory view of essential themes in environmental science. Students are provided with numerous opportunities to practice scientific thinking in an active learning environment.

## GU100 STUDENT SUCCESS

1 CREDITS

## PREREQUISITES: NONE

## ONLY FOR STUDENTS ADMITTED PRIOR TO JANUARY 2018

This course covers the fundamentals of navigating within Grantham University's online learning environment. This course is designed to assist students to meet the challenges of higher education. It introduces them to various strategies for learning and other skills that are often overlooked when planning for college. Students will conduct self-assessments to become familiar with the styles of learning that best suit them as they become proficient in time management, reading skills, writing techniques, memory abilities and test-taking strategies.

## GU101 STUDENT SUCCESS

3 CREDITS

## PREREQUISITES: NONE FOR STUDENTS ADMITTED AFTER JANUARY 2018

This course provides students with the foundation of knowledge and skills needed for today's online college environment. Students will explore their own preparedness for online learning through examination and analysis of their own skills, traits, and behaviors. In addition, students will acclimate to the online college environment through specifically-designed activities which provide opportunities to acquire necessary skills, behaviors, and understandings which are essential for academic success.

## GU199 SPECIAL TOPIC

1 CREDIT

## PREREQUISITES: APPROVAL OF THE DEAN

Recognizing that our world is constantly changing, students are introduced to a current situation that affects them, regardless of their respective majors, careers or personal interests. In this interdisciplinary course, students will expand their research, writing and discussion skills using the special topic as a context.

GU299 GENERAL EDUCATION CAPSTONE
NOTE: SEE EACH PROGRAM FOR SPECIFIC PREREQUISITES. IN PARALEGAL STUDIES, GU299 MUST BE TAKEN IN THE LAST TERM OF THE PROGRAM.
GU299 is the capstone course for Grantham University's general education program, and it serves a dual purpose. First, GU299 helps students' bridge the gap between the broad-based learning they experience throughout their general education courses and the discipline-specific learning they will engage in as they move closer toward degree completion. Secondly, by highlighting the specific skills and knowledge they attained through their general studies and working with them to incorporate those skills and that knowledge within their specific academic areas, students will achieve a greater awareness of how knowledge is intertwined, and better recognize how information drawn from one experience can be applied directly toward another, leading them to become more actively engaged, socially aware citizens of the various communities to which they belong.

## GU399 SPECIAL TOPIC

1 CREDIT

## PREREQUISITES: APPROVAL OF THE DEAN

Recognizing that our world is constantly changing, students are provided the opportunity to delve more deeply into a current situation that reflects their major, their career or their personal interests. In this interdisciplinary course, students will explore the topic extensively, discuss findings with peers, and further develop research and writing skills using the special topic as a context.

## GU500 GRADUATE STUDENT SUCCESS

1 CREDIT

## PREREQUISITES: NONE

This course is designed to help students learn and improve skills and strategies that are essential to academic success at a graduate level. Through activities, application and reflection, the material covered in this course should support and assist students in achieving their graduate-level degree. Students should develop confidence in their ability to succeed as a graduate student.

## HRM340 HUMAN RESOURCE MANAGEMENT

## PREREQUISITES: LAW220

This course provides students with a comprehensive review of the concepts and techniques associated with strategic human resource management in an emerging global context. Key issues examined are the legal, ethical and regulatory nature of the business environment. Also studied are the specific technical areas of job evaluation, recruitment and selection, compensation and benefits, training and development, performance appraisal and employee relations. Of particular importance is the examination of such areas as technology, international staffing and global competition.

HRM355 LABOR RELATIONS
3 CREDITS

## PREREQUISITES: LAW220

This course examines the historical and legal basis for labor relations and collective bargaining in the United States. The growth and evolution of labor law due to court decisions, NLRB rulings, and changes in the environment of union and management relations are covered, as well as analyses of the implications of changing labor laws in the workplace. Topics include estimation of wages and benefits, computerized costing, negotiating techniques, contract enforcement, grievances and arbitration.

## HRM370 EMPLOYMENT LAW

3 CREDITS

## PREREQUISITES: LAW220

This course provides the student with a basic understanding of law that affects business in the area of employment, including employment relationship and procedure, employment discrimination and government regulation of employment. New developments affecting the legal environment of employment are presented from all three sources of law: statutes, regulations and case law. The student will gain a thorough understanding of employment law that governs business and how new developments affect employment law.

## HRM399 SPECIAL TOPICS IN

human resources management
3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## HRM451 COMPENSATION

3 CREDITS

## PREREQUISITES: HRM340

This course integrates the concepts and topics related to the field of compensation to organizations. The course covers topics such as skill and performance competency analysis, compensation strategies, benchmarking job types, structuring pay merits, forms of pay, performance appraisals, determining benefit structures and Government and Legal issues in compensation. This course is designed to allow practical application of compensation in organizations through analyzing asset variations and the employee performance/recompense relationship.

HRM476 DEVELOPING HUMAN RESOURCES

## PREREQUISITES: HRM340

This course presents the opportunity to develop targeted skills using human resource systems as a management tool. Students develop expertise in creating and implementing hiring, training and reward systems. This framework includes viewing human resources as a way to enhance employee retention, development, career advancement and performance management.

## HRM499 INTEGRATIVE EXPERIENCE IN <br> hUMAN RESOURCE MANAGEMENT <br> 3 CREDITS

## PREREQUISITES: COMPLETION OF CONCENTRATION REQUIREMENTS

This advanced course is designed to provide students with a comprehensive review of human resource management within the total business enterprise. The curriculum builds on previous courses to offer insights and analytic tools that a general human resource manager needs to plan and implement successful business policies and strategies. Through the use of exercises, case study analysis, and problem solving, students demonstrate their understanding of functional disciplines within human resources and apply fundamental theories to practical scenarios. Students learn strategy formulation, implementation, evaluation concepts and techniques, and apply their cumulative knowledge through a course project.

## HRM599 SPECIAL TOPICS IN

HUMAN RESOURCES MANAGEMENT
3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

HRM620 STRATEGIC HUMAN RESOURCE MANAGEMENT 3 CREDITS

## PREREQUISITES: NONE

This course focuses on the human resource functions within an organization including recruitment, management and providing direction for the people who work in the organization. By effectively managing a workforce through human resources, students examine how organizational success is achieved. Students design recruitment, management and strategic HR system approaches for performance improvement.

HRM651 PERFORMANCE ANALYSIS
3 CREDITS
PREREQUISITES: NONE
This course applies one or more performance tools to investigate the reasons for performance deterioration. A four-step process will be used for implementing a performance analysis system. Skills are built in systematically identifying opportunity types, building analysis strategies, gathering data and reporting analysis results. By understanding the application of a structured model for performance analysis, the practice of investigation of performance deterioration emerges.

## HRM652 EVALUATING RESULTS AND BENEFITS <br> 3 CREDITS

PREREQUISITES: NONE
This course assesses the measuring activity when gauging performance improvement. Students plan an assessment activity, track the changes over time and evaluate the results, the opportunities for improvements and benefits of the outcomes. This comprehensive approach to evaluation offers students skills as efficient consultants who can leverage data in to a decision-making process.

## HRM653 KNOWLEDGE, LEARNING AND ENTERPRISE SYSTEMS

3 CREDITS

## PREREQUISITES: NONE

This course analyzes the impact of computers and technology on organizational performance improvement. Students review large-scale, integrated application-software packages that use the computational, data storage and data transmission power of modern information technology to support processes, information flows, reporting and data analytics within and between complex organizations to understand the relationship of enterprise system to human performance.

## HRM661 HUMAN RESOURCE STRATEGIES

3 CREDITS

## PREREQUISITES: NONE

This course examines HR's evolving role as an important element of strategic management and as a source of competitive advantage. Course topics include diversity and effective management, change and performance management, teams and team effectiveness, and the roles and responsibilities of HR professionals, managers and employees.

RRM662 LABOR RELATIONS AND MANAGEMENT

## PREREQUISITES: NONE

This course introduces students to the traditional approach to studying U.S. labor relations in an uncritical exploration of how the existing labor processes work, how unions are organized, how contracts are negotiated and how grievances are resolved. Labor relations processes and work rules are simply a means to more fundamental ends or objectives. Further, students examine the goals or objectives of work rules to discover what motivates contemporary U.S. labor relations processes and evaluates whether these processes remain effective in the 21st Century. To achieve these goals, this course will analyze the existing processes - such as organizing, bargaining and contract administration, as well as the major pressures on these processes - employee involvement, workplace flexibility and globalization.

## HRM671 LEARNING THEORIES AND TECHNOLOGY 3 CREDITS

## PREREQUISITES: NONE

This course compares and contrasts theories of how technology is used to help individuals learn effectively to enhance performance improvement. Additionally, the foundation of this course is studying learning theories and using technology to create problem-based training and development opportunities for individuals, teams and organizations. Students explore the influence of technical integration into learning, specifically training and development for the aim of improving organizational performance.

## HRM699 CAPSTONE PERFORMANCE PROJECT <br> 3 CREDITS

PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
This course synthesizes and articulates comprehensive problem-solving abilities as performance improvement experts. Students customize a project, execute it and write the results in a final project.

## HS101 WORLD HISTORY: ANCIENT TO RENAISSANCE 3 CREDITS

## PREREQUISITES: NONE

This course in world civilization covers the history of mankind from antiquity to the sixteenth and seventeenth centuries. It provides a thorough coverage of the unique heritage of Asian, African, Islamic, Western and American civilizations, while highlighting the role of the world's great religious and philosophical traditions.

HS102 WORLD HISTORY: REFORMATION TO PRESENT 3 CREDITS

## PREREQUISITES: NONE

This course explores the interaction and interdependence of the nations and peoples of the world. People with different cultural heritage and religious beliefs are drawn daily into close contact with one another. All people face political, religious and economic relationships from a global perspective. Diverse civilizations of the world will be examined looking for similarities, as well as differences; inferences will be drawn about how the current civilization benefited from our ancestral pasts.

## HS201 U.S. HISTORY: PRE-COLUMBUS TO CIVIL WAR 3 CREDITS

## PREREQUISITES: NONE

This course focuses on the characteristics of societies existing in the Americas prior to 1861. European exploration and colonization of the New World will be examined as impacting Europe, Africa and the young United States. The emergence of political, religious, economic and social institutions is discussed. Specific causes of the American Revolution are examined, as well as the resulting impact on politics, the U.S. economy and society.

## HS202 U.S. HISTORY: POST CIVIL WAR TO PRESENT 3 CREDITS

 PREREQUISITES: NONEThis course provides an overview of the history of the United States and its effects on American society from Reconstruction following the Civil War to post-9/11. Topic include major themes in American history and the successes and failures of various reconstruction plans. The causes of war will be investigated as will the social and economic developments that took place after each major conflict.

## HSN310 SCHOLARLY WRITING FOR HEALTHCARE PROFESSIONS

## 3 CREDITS

## PREREQUIITES: NONE

Scholarly Writing for Healthcare Professions is designed to combine the elements of evidence from research and critical thinking into an organized format that demonstrates scholarly academic writing. This course focuses on the skills necessary to develop professional writing that supports ideas and infers relationships. Students progressively expand their capability to produce clear, substantive written communication at the baccalaureate level of education, both in regard to classroom assignments and more globally in their chosen healthcare profession.

HS315 LEADERSHIP LESSONS FROM GREAT
COMMANDERS
3 CREDITS
PREREQUISITES: NONE
The purpose of this course is to refine critical and creative thinking skills regarding organizational and operational leadership by exploring some of the most fascinating military leaders in history in light of classic and modern theoretical frameworks of leadership. Emphasis is placed on the strategic and cultural context of the time and place; the pursued objective, and even the quality of the adversary.

HSN501 HEALTHCARE SYSTEMS
3 CREDITS
PREREQUISITES: NONE
Students examine healthcare systems and their effects on the health of populations. The purpose of this course is to bring the student up-to-date on significant developments that have occurred in the American healthcare system. Students explore the widespread penetration of managed care with its service management and cost control strategies. Topics include systems/ theory thinking, case management, health policy, the interrelatedness of elements within healthcare systems, and strategies to influence systems.

HSN509 CLINICAL AND ADMINISTRATIVE SYSTEMS 3 CREDITS PREREQUISITES: NONE
Students examine the foundations of clinical information collection, processing, recording and use to support decision-making in healthcare environments. The importance of patient information privacy, compliance with regulatory standards, safety and data integrity is prominent throughout the course. Topics covered include types of health care information systems for specific healthcare settings, system selection, implementation process, system security and data standards. In addition, students will explore strategic planning and management implications associated with information technology in healthcare management.

HSN521 MODERN ORGANIZATIONS AND HEALTHCARE 3 CREDITS PREREQUISITES: NONE
This course exposes students to an in-depth discussion of both the theories and practical applications of healthcare management. In addition to the primary management functions of planning, organizing and controlling, specialized topics like communication, ethical responsibilities, process management and leadership are discussed. Students also investigate alternative management and leadership styles that can be utilized as effective models and approaches for managing change, resources, time and performance.

## HSN536 CONCEPTS IN HEALTHCARE INFORMATICS 3 CREDITS

## PREREQUISITES: NONE

This course explores the development and utilization of healthcare informatics as it relates to the administration of healthcare agencies and institutions. Students will appraise the theoretical underpinnings of healthcare informatics. A comprehensive overview of healthcare practices will be examined. Acquisition of clinical and financial information, processing, analysis and reporting, as well as informatics trends and issues will also be explored.

## HSN548 INFORMATION SECURITY AND PRIVACY IN healthcare environments <br> 3 CREDITS

## PREREQUISITES: NONE

The course will address information security and privacy in healthcare environments, by discussing existing practices as well as recent research. Topics will include security and access control with respect to medical records (EPR, PHR), securing communication standards (HL7, DICOM), recent attacks on patient monitoring systems, security architectures for portable patient records, break the glass systems, privacy, anonymity and medical identity theft. Lessons are based on recent research papers in the information security and healthcare communities.

## HU260 STRATEGIES FOR DECISION MAKING

3 CREDITS PREREQUISITES: NONE
This course examines critical thinking and the analysis of arguments in terms of premises, reasons, and conclusions. Course topics include obstacles to critical thinking, diagramming arguments, belief and doubt, logical fallacies, inductive reasoning, deductive reasoning, inferences, and judging scientific theories.

## HU310 PRINCIPLES OF LEADERSHIP

3 CREDITS

## PREREQUISITES: NONE

This course provides a foundation for understanding and applying research findings on leadership, focusing on classical leadership theories.

## HU410 IDEAS THAT CHANGED THE WORLD

3 CREDITS

## PREREQUISITES: NONE

Over the millennia, individuals with extraordinary ingenuity and creativity have generated ideas and inventions that have dramatically changed the way in which humans live and interact with the natural world. In this course, a selected sample of game-changing ideas will be explored in light of the historical and cultural contexts that sparked their creation. Concepts such as human rights, heliocentrism, free market economics, relativity, the unconscious, and others may be explored.

ID490 INTERDISCIPLINARY CAPSTONE

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

This capstone course is designed for the Bachelor of Arts in Strategic Communications degree program. Emphasis is placed on the integration of knowledge and skills developed throughout the program, culminating in a demonstration of mastery of the University's core professional competencies (critical thinking, communication, data aptitude, personal/social responsibility, career management, distributed collaboration).

INT399 SPECIAL TOPICS IN INTERNATIONAL BUSINESS 3 CREDITS PREREQUISITES: APPROVAL OF THE DEAN
This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## INT401 INTERNATIONAL BUSINESS

3 CREDITS

## PREREQUISITES: NONE

This advanced course explores the unpredictable forces of foreign business environments and the role of multinational corporations in worldwide economic development with emphasis on complexities confronting U.S. firms operating in international market, covering trade and foreign investment; theories of international trade, economic development and international investment; and governmental and private international agencies, which affects international business.

INT405 MULTINATIONAL MANAGEMENT
3 CREDITS

## PREREQUISITES: NONE

This advanced course introduces multinational management. The course is designed to familiarize students with the dynamic, interrelated challenges and opportunities of operating an international business. It addresses issues of world trade, international investment, world financial markets and business policy and strategy. It provides the student with conceptual frameworks and theoretical explanations applicable to the daily challenges of a practicing manager faced with cultural differences, global marketing, multinational finance and accounting, and taxation.

INT460 GLOBAL LOGISTICS MANAGEMENT

## PREREQUISITES: NONE

International carrier operations and sourcing strategies for import, export, and distribution of materials and finished goods are examined. The course covers facility location and off shoring of operations. It evaluates stakeholder roles in supply chain management, as well as how countries have engaged the private sector in providing the logistics function to support their public sector supply chains.

## INT599 SPECIAL TOPICS IN INTERNATIONAL BUSINESS 3 CREDITS

 PREREQUISITES: APPROVAL OF THE DEANThis course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## IS104 DIGITAL GRAPHICS FUNDAMENTALS <br> 3 CREDITS

## PREREQUISITES: NONE

This course explores the various applications for digital image manipulation, specifically graphics for the web and interface development. Topics include the application of tools and techniques used in image manipulation processes, including the creation of fonts, image repair, filters and compression best practices for web and multimedia assets. This course further explores the fundamentals of visual design that can be applied to various professions where images are used.

## IS211 INTRODUCTION TO INFORMATION

 SYSTEMS SECURITY3 CREDITS

## PREREQUISITES: NONE

This course provides a broad overview of the principles, policies and technologies for securing computer and information systems. Topics include a survey of computer system vulnerabilities, cryptographic techniques, access control policies and mechanisms, qualitative and quantitative risk assessment and management, and the implications of security technology in the realm of risk management. Designing and implementing computer security policies and standards, formulating contingency plans and analyzing system security architectures, as well as compliance and ethics are examined.

## IS216 COMPUTER NETWORKS

3 CREDITS

## NOTE: COURSE FORMERLY KNOWN AS CS216 PREREQUISITES: NONE (STUDENTS MAY NOT OBTAIN CREDIT FOR BOTH CS216 AND IS216)

This course covers fundamental, vendor-independent networking concepts. The course is aligned with the CompTIA Network+ certification exam. Various tools are used to analyze networks.

IS220 CLOUD COMPUTING
3 CREDITS

## PREREQUISITES: NONE

This course provides students with a comprehensive exploration of cloud computing. After examining the evolution of cloud computing, the three primary cloud computing models of Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (laaS) are studied. Benefits of cloud computing to businesses in regards to data storage, security, web applications, collaboration and mobile development are also considered. The course culminates in the design and development of cloudbased solutions.

## IS231 E-COMMERCE

3 CREDITS
PREREQUISITES: NONE
This course covers current electronic commerce strategies and technologies associated with the internet, the web, social networks and mobile devices. Key concepts, opportunities and applications of e-commerce are presented, providing an in-depth overview of the field of e-commerce.

## IS242 MANAGEMENT INFORMATION SYSTEMS

3 CREDITS

## PREREQUISITES: NONE

This course covers the principles of managing information systems in the context of an enterprise. Topics include coverage of information technology in management, information systems in decision-making, planning of information systems, systems development, controls and security measures, and electronic commerce.

## IS301 WEB DESIGN |

## PREREQUISITES: NONE

## (CREDIT CANNOT BE OBTAINED FOR BOTH CS197 AND IS301)

The course shows how to use Hypertext Markup Language (HTML), Extensible HTML (XHTML) and Cascading Style Sheets (CSS) to create a website. "Best practices" in website and web page design and creation are used.

## IS306 WEB DESIGN II

4 CREDITS

## PREREQUISITES: IS301 OR CS197

Students gain skills in interactive techniques that combine XHTML with CSS and JavaScript. Also emphasized is XML document creation. The course focuses on skill building for advanced web design.

## IS311 SECURITY OPERATIONS

3 CREDITS

## PREREQUISITES: NONE

This course covers the principles and practices of secure operation and management of information systems. Principles and practices of analysis and monitoring of systems security are also addressed.

NOTE: COURSE FORMERLY KNOWN AS CS316
PREREQUISITES: CS216 OR IS216
(CREDIT CANNOT BE OBTAINED FOR BOTH CS316 AND IS316)
This course provides a comprehensive, hands-on look at TCP/
IP. Coverage includes the latest TCP/IP stack, as well as SMTP and IPv6. Practical skills are learned with hands-on projects using various tools.

## IS320 DATABASE APPLICATIONS

3 CREDITS
NOTE: COURSE FORMERLY KNOWN AS IS259 PREREQUISITES: NONE (CREDIT CANNOT OBTAIN CREDIT FOR BOTH IS259 AND IS320)
This course presents the fundamental concepts of database systems. The course covers the relational model, structured query language (SQL), data modeling, database design and database administration.

## IS336 SYSTEMS ANALYSIS AND DESIGN

3 CREDITS

## PREREQUISITES: CS265 OR IS242

 (CREDIT CANNOT OBTAIN CREDIT FOR BOTH CS336 AND IS336)This course introduces the concepts, tools and techniques used in the analysis, design and deployment of information systems which support business requirements. Topics include requirements determination, data and process modeling, various development methodologies, project management, data and user interface design, security, implementation and maintenance, and documentation.

## IS351 INFORMATION SYSTEMS PROJECT MANAGEMENT 3 CREDITS

## PREREQUISITES: NONE

This course covers the technical and managerial aspects of project management as identified by the Project Management Body of Knowledge (PMBOK). Emphasis is placed on defining project management and its relationship to other business disciplines and the development of information systems.

## IS355 RISK MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This course provides a comprehensive review of industry approaches, practices and standards on how to handle risks to organizations' business-critical assets. Topics include identifying and analyzing threats, qualitative versus quantitative risk management, standards and processes to mitigate risk, risk control and risk policy. Through a practical approach, this course explores key topics that enable students to uncover and remediate potential infractions

IS360 DISASTER RECOVERY
3 CREDITS

## PREREQUISITES: NONE

This course provides a comprehensive overview of disaster recovery and countermeasures for networks and businesses. Assess risks in the enterprise, determine critical business components, develop an enterprise disaster recovery system, and develop disaster policies, procedures, departmental roles and communication processes for enterprise network. It will provide a foundation in disaster recovery principles, including preparation of a disaster recovery plan, assessment of risks in the enterprise, development of policies and procedures, and understanding of the roles and relationships of various members of an organization, implementation of the plan and recovering from a disaster. Learn how to create a secure network by putting policies and procedures in place and how to restore a network in the event of a disaster. Produce a disaster recovery document of procedures and policies to implement training, testing and rehearsal of a disaster recovery.

## IS370 SERVER SIDE WEB DEVELOPMENT

4 CREDITS
NOTE: COURSE FORMERLY KNOWN AS IS212 PREREQUISITES: IS259 OR IS320 AND EITHER CS197 WITH A "C" OR BETTER OR IS301 WITH A "C" OR BETTER (CREDIT CANNOT OBTAIN CREDIT FOR BOTH IS212 AND IS370.)
This course covers how to build a feature-rich, data-driven interactive website. This is done on a Microsoft platform with an emphasis on using ASP.NET.

## IS376 ADVANCED DATABASE SYSTEMS

3 CREDITS

## PREREQUISITES: NONE

This course provides a thorough and practical foundation for the design, implementation and management of database systems using a combination of theory and practice. These concepts are applied to the design and development of client/server database applications.

## IS391 SPECIAL TOPICS IN INFORMATION SYSTEMS 1 CREDIT

## PREREQUISITES: NONE

In this course, the student selects a significant topic in information systems that is not available through other program offerings, researches the topic and writes a paper on it.

## IS411 NETWORK SECURITY

3 CREDITS
PREREQUISITES: CS216 WITH A "C" OR BETTER OR IS216 WITH A "C" OR BETTER
This course introduces the techniques, methodologies and tools used in building and maintaining secure networks. Lab exercises address assessing protocol, network and code vulnerabilities. The course is aligned with the CompTIA Security+ certification examination.

IS431 ACCESS CONTROL SYSTEMS
3 CREDITS

## PREREQUISITES: IS411 WITH A "C" OR BETTER

This course covers the fundamentals of selectively restricting access to information system resources. A variety of tools are used in practical tasks to determine authorization of resources.

## IS440 HUMAN DECISION AND SECURITY ENGINEERING 3 CREDITS

 PREREQUIITES: NONEProviding an exploration of the human aspects of cybersecurity, this course will educate students on human motivation and interaction, how security controls may be bypassed by a person's intentional or unintentional acts, and methods for reducing the cyber risks associated with people. Topics include human behavior and interaction, motivation and influence, and social engineering. Emphasis is on the human element of cyber incidents in relation to protecting information and technology assets.

## IS450 SECURITY TRENDS AND LEGAL ISSUES 3 CREDITS

## PREREQUISITES: NONE

This course examines the legal environment pertinent to security professionals. Topics include the role of government, relevant civil and criminal law, constitutional rights and privacy issues, intellectual property and compliance. In addition, current trends in cybersecurity are explored.

## IS461 CRYPTOGRAPHY

3 CREDITS

## PREREQUISITES: IS211 WITH A "C" OR BETTER

This course explores the ways in which cryptography can be used to protect communications traffic and sensitive data. Course topics include symmetric vs. asymmetric (public-key) ciphers; hash algorithms; message authentication codes; mathematical underpinnings of cryptography; cryptanalysis; public-key infrastructure; and implementation trade offs. Students gain handson experience in state-of-the-art technologies through completion of weekly lab exercises. The primary focus of the course is on building critical-thinking and problem-solving skills.

## IS471 COMPUTER FORENSICS

3 CREDITS

## PREREQUISITES: NONE

This course introduces the methods and tools used for collecting and preserving electronic digital evidence for the computer forensic process. Topics include the forensic examination, crime categories, analysis, laws governing forensics and report writing.

IS475 ETHICAL HACKING

## PREREQUISITES: IS216

This course introduces hacking techniques employed by penetration testers and malicious hackers, and shows how to apply those skills in an ethical manner. A laboratory environment provides practical hands-on experiences in vulnerability scanning, exploits testing and hacking. The application of ethical hacking techniques to the development of defensive strategies for network security is also explored.

## IS481 DATABASE SECURITY

3 CREDITS

## PREREQUISITES: IS320

This course covers strategies and tactics for securing databases. It introduces the tools necessary to implement database security and auditing in order to protect data. Topics include basic data protection methods, secure database design, secure architectures and secure transaction processing and auditing. Vulnerabilities and countermeasures are also covered.

## IS498 SENIOR RESEARCH PROJECT

3 CREDITS

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS. TO be taken in Last semester

This capstone course requires demonstration of the knowledge and skills gained throughout the degree program by completing a major research project.

## IS499 SECURITY CAPSTONE

3 CREDITS
PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS. TO BE TAKEN IN LAST SEMESTER

This course provides an integrative experience in the cyber security program through a review and integration of the major security domains. Building on coursework in the program, current trends and a comprehensive view of the field are used to provide a framework for the assessment, interpretation and evaluation of security scenarios. A broad review of the materials that were presented within the program will be covered through hands-on experiences.

A term-long project is a final deliverable of the course.

## IS505 MANAGING IN AN AGE OF <br> INFORMATION TECHNOLOGY CHANGE

3 CREDITS

## PREREQUISITES: NONE

This course sets the stage for Grantham's Master of Science degree program by addressing the need for organizations to respond efficiently to technological changes. Students examine management techniques for fostering a corporate culture that facilitates innovation. The course also discusses the dynamics of growth and change and their impact on the success of a technology-intensive business.

IS515 MANAGEMENT OF INFORMATION SYSTEMS 3 CREDITS

## PREREQUISITES: NONE

In this course, students gain valuable insight into the planning, organizing and controlling of user services, as well as the management of the information systems development process. The course also examines organizational learning curves, dealing with vendors, budgeting, accounting, management reporting and legal considerations of information systems.

## IS516 DATA MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This course examines the development and administration of relational databases through the stages of the database application life cycle. Advanced topics in database administration, recent trends in database technologies and the roles of administrators are covered.

## IS525 INFORMATION SYSTEMS STRATEGIC PLANNING 3 CREDITS

## PREREQUISITES: NONE

Information systems are an integral part of corporate operations. This course examines guidelines for developing an information systems plan, selecting systems projects, assessing current systems and planning future systems expansion that supports organizational growth.

## IS526 DATA COMMUNICATIONS AND NETWORKING 3 CREDITS PREREQUISITES: NONE <br> This course combines the fundamental concepts of data communications and networking with practical applications. It presents the technical and managerial issues important to data communications in a modern business environment.

## IS535 TELECOMMUNICATIONS

## 3 CREDITS

## PREREQUISITES: NONE

This course provides a brief history of telecommunications, a look at the field's structure and regulation, information on networks and telecommunications services, the basics of traffic engineering and an introduction to primary data communications systems. The underlying principles and functions of telecommunications management are also introduced.

## IS545 EMERGING TECHNOLOGIES

3 CREDITS

## PREREQUISITES: NONE

Through this course, students explore state-of-the-art and emerging technologies in information processing. The class includes a survey of recent advances in software development, hardware and computer networking strategies.

IS566 DECISION SUPPORT AND INTELLIGENT SYSTEMS 3 CREDITS

## PREREQUISITES: NONE

This course introduces the methodologies, issues and technologies behind management support systems. Systems covered include Decision Support Systems, Executive Information Systems, Expert Systems and other types of management support systems. Students focus on how these systems are used to support the decision-making process within an organization.

## IS576 DATA WAREHOUSING

3 CREDITS

## PREREQUISITES: NONE

This course covers how data warehouses are used to capture, analyze and provide output that managers can use in their decision-making process. In addition, the course provides an overview of concepts and covers planning and requirements, architecture and infrastructure, data design, and deployment and maintenance.

## IS599 INFORMATION MANAGEMENT \&

TECHNOLOGY CAPSTONE
3 CREDITS

## PREREQUISITES: TO BE TAKEN IN LAST SEMESTER

This capstone course requires demonstration of the knowledge and skills gained throughout the degree program through the design and implementation of a software program or computer-related system to solve a real-world problem. The project requires project definition, requirements determination, design, implementation, test and documentation of the system.

## IS649 INFORMATION TECHNOLOGY PROJECT MANAGEMENT <br> 3 CREDITS

PREREQUISITES: PRJ515
In today's fast-paced and dynamic environment, innovative information technology and system development projects are critical to many companies' success. The emphasis on such projects creates greater demand from senior management to deliver quality information technology projects on time, within budget and which add functionality and value to their customers and clients. IT Project Management will teach the project manager how to integrate sound project management principles in the information technology project's development profile in order to assure every aspect of the project is under control and delivers the technical objectives. This course will also cover the IT project's life cycle from initiation through closeout and address all the components of project management as they relate to IT projects, based on the Project Management Body of Knowledge (PMBOK) as defined by the Project Management Institute (PMI).

## COURSE DESCRIPTIONS

## PREREQUISITES: NONE

This course provides an overview of business communication technologies, from basic components and subsystems to whole networks. Highlights include areas such as TCP/IP and the internet, wireless networks, high-speed LANs, Wide Area Networks (WANs), network security and issues concerning network management. This course enables students to make informed decisions about technologies comprising the data communications field. The purpose of this course is to present the concepts of information communications in a way relating specifically to the business environment and to the concerns of business management and staff. An important theme throughout this course is the essential role of standards, which are addressed in terms of groupings shaping the marketplace and defining the choices available to the decision-maker.

## IS675 SYSTEMS ANALYSIS AND DESIGN

3 CREDITS

## PREREQUISITES: NONE

This course reviews efficient processes for information systems analysis and development. It also covers state-of-the-art techniques for information systems specifications and design. Other topics covered include real-time structured analysis and design, and object-oriented analysis and design.

## IS696 NETWORK SYSTEMS DESIGN <br> 3 CREDITS

PREREQUISITES: NONE
This course provides an overview of management principles, practices and technologies for managing networks, systems, applications and services. Highlights include the design of networks such as LAN/WAN, ATM, wireless, voice, video and data. This course enables students to make informed decisions in order to configure modern operating systems and devices for networking.

LAW210 CONTRACT ADMINISTRATION

## PREREQUISITES: NONE

This course will provide learning opportunities for negotiation and administration of supply contracts. (This course is analogous to the Defense Acquisition University's Contracting 290.) Course theory will focus on the interpretation and implementation of the Federal Acquisition Regulations (FAR), and will cover all phases of the acquisition life cycle starting with acquisition strategy planning and market research to ending with contract closeout. The phases to be particularly examined will be those that encompass negotiation between the government and the contractor such as negotiating a contract modification, resolving protests and settling a contract termination. Students will work on case studies to simulate negotiating and administering contracts in a supply environment. Research, analysis, communication and critical thinking skills will be utilized by the student to solve complex contracting problems. The breadth of material may permit students to also apply the course concepts to commercial contracting.

## LAW220 BUSINESS LAW I

3 CREDITS

## PREREQUISITES: NONE

This course is designed to provide the student with a basic understanding of the law that affects business operations, including the topics of torts, contracts, commercial paper and sales. New developments that affect the legal environment of business are presented from all three sources of law: statutes, regulations and case law. The student will gain a thorough understanding of law that governs business and will gain an understanding of how new developments in technology affect business law.

## LAW265 BUSINESS LAW II

3 CREDITS

## PREREQUISITES: LAW220

This course provides students with an understanding of the law affecting business operations, including the topics of debtorcreditor relationships, business organizations, government regulation, property and its protection, and the international legal environment. New developments on those topics are presented from three sources of law: statutes, regulations and case law.

LAW325 PATENTS, COPYRIGHTS AND TRADEMARKS 3 CREDITS PREREQUISITES: LAW220
This course provides an introduction to our legal system and teaches the essentials of patents, copyrights, trademarks and trade secrets. Topics include definitions of technical/legal terms, an explanation of the legal terminology, the full text of key laws

## LAW399 SPECIAL TOPICS IN BUSINESS LAW

3 CREDITS

## PREREQUIIITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## LD501 LEADERSHIP STYLES AND DEVELOPMENT 3 CREDITS

## PREREQUISITES: NONE

This course is designed to provide a basic introduction to leadership by focusing on what it means to be a good leader. Emphasis is on the practice of leadership. The course will examine topics such as: the nature of leadership, recognizing leadership traits, developing leadership skills, creating a vision, setting the tone, listening to out-group members, handling conflict, overcoming obstacles and addressing ethics in leadership. Attention will be given to understanding and improving one's own leadership performance.

## LD510 GRIT, PERFORMANCE AND STAYING POWER 3 CREDITS

## PREREQUISITES: NONE

This course offers powerful yet practical advice for students to harness personal excellence. Grounded in research, this course is based on a simple yet revolutionary principle of learning to lead one's self first in order to more effectively lead others. This inclusive approach to self-motivation and self-influence equips students with the strategies and tips they need to build a strong foundation in the study of management and leadership, as well as enhancing their personal effectiveness.

## LD520 CRITICAL COMMUNICATION AND LEADERSHIP CREDITS

## PREREQUISITES: NONE

Effective leadership requires effective communication skills. In this course, we will explore the transformational power of words and practice delivering messages with credibility and conviction. Additionally, we will examine the dynamics of conversation - how people jockey for power or manipulate others through rhetorical devices. We will learn how to interpret nonverbal communication as well as monitor our own nonverbals, so that we can align our message with our behaviors.

LD530 LEADERSHIP THEORIES AND STRATEGIES 4 CREDITS

## PREREQUISITES: NONE

This course provides an in-depth review of the major theories and models of leadership as they function within an organization. A historical review of leadership theory will be combined with contemporary issues in leadership practice. Students will analyze individual models of leadership with an emphasis on the application of these models to organizational situations, including in their own workplace. Students will evaluate their leadership style through various self-assessments providing the framework for self-awareness and evaluation. Students culminate their assessment of each model by designing a leadership action plan for a contemporary social issue.

## LD540 EFFECTIVE COACHING

## PREREQUISITES: NONE

Effective leaders seek to enhance their teams through formal and informal coaching activities. This course teaches you practices you can use immediately to foster employee commitment and help employees gain the skills necessary to sustain and grow any type of organization. Topics covered in this course include: the attributes of a good coach, powerful listening, asking good questions, mentoring and creative solutions through coaching.

LD550 CROSS-CULTURAL COMMUNICATION AND LEADERSHIP

3 CREDITS

## PREREQUISITES: NONE

This course presents students with challenging cross-cultural situations that develop for different reasons and from different backgrounds. This course provides a look for practical work solutions and ways to integrate culture into social change and civic engagement. This course helps students master the skills necessary to connect globally and grasp the role of cultural nuances, behaviors, attitudes and emotions in a harmonious and equitable global environment. Topics include civic and political engagement, social action, relationships, consumption and production of media, global workplace, cross-cultural adjustment and competence, and other practical issues.

## LD560 ETHICS IN LEADERSHIP

3 CREDITS

## PREREQUISITES: NONE

This course examines the unique ethical challenges faced by leaders with an emphasis on building ethical competency. Topics include virtue ethics, evil, forgiveness, moral theories, moral reasoning, ethical decision-making, ethical influence, transformational leadership, servant leadership, ethical group problem solving, ethical organizational climate, ethical diversity and ethical crisis leadership.

## PREREQUISITES: NONE

Human and organizational learning are intertwined. Improving their performance means learning new ways to work. For many people, learning theory and practice has been embedded in the training function of most organizations; however, organizational learning may best be described through change and innovation. This course considers the issues of human and organizational learning that changes performance.

## LD580 LEADERSHIP STRATEGIES FOR CHANGE 3 CREDITS

PREREQUISITES: NONE
This course is designed to expose students to a broad spectrum of leadership issues relative to the strategic importance of leading organizational change, including the dynamics of leadership, successfully implementing change and the impacts of change affecting today's and tomorrow's organizational leadership. This course provides a practical, real-world understanding of several dimensions of leadership in relation to change. Topics include the importance of leadership, how successful leadership can result in a more effective organization and how leaders can identify and overcome resistance to change.

## LD599 LEADERSHIP CAPSTONE

PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
The Leadership Capstone course is intended to be concluding and integrative experience of the leadership coursework. It is an opportunity for students to integrate concepts learned throughout the program into a leadership portfolio that showcases their leadership abilities, personal reflections, accomplishments, skills, activities and effects on individuals and environments. Topics include an application of leadership theories and incorporates leadership development with people, structures, culture and tasks. (including those relating to the internet), as well as descriptions of the different protections offered by patents, copyrights and trademarks - and how they can affect individuals.

## LOG310 CONTINUOUS IMPROVEMENT TOOLS

 AND TECHNIQUES
## 3 CREDITS

## PREREQUISITES: NONE

This course examines continuous improvement tools and techniques used in problem solving. Topics include lean management techniques, TQM and JIT. Basic statistical methods will also be reviewed along with acceptance sampling and experimental design. Student will also be able to understand the basic concepts of reliability.

LOG320 LOGISTICS MANAGEMENT

## PREREQUISITES: NONE

This course provides an overview of the field of logistics including its nature, scope and process, including logistics management functions and the interrelationships among strategic support and operational logistics. Students examine the logistics functions of business involved in the movement and storage of supplies, work-in-progress, and finished goods. Additionally, it explores the trade-offs between cost and service and the purchase and supply of raw materials.

## LOG399 SPECIAL TOPICS IN LOGISTICS

3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## LOG430 SUPPLY CHAIN MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This course focuses on effective supply chain management strategies for companies that operate globally with an emphasis on how to plan and integrate supply chain components into a coordinated system to deliver value. Students are exposed to concepts, models and case studies important in supply chain planning with an emphasis on key market trade-offs and phenomena. The course introduces and utilizes key tactics, such as fulfillment strategies, process thinking, product development, supply chain design, process mapping, cost management, outsourcing, role shifting, inventory placement, integrated planning and collaboration and information sharing.

## LOG435 TRANSPORTATION MANAGEMENT

## PREREQUISITES: NONE

This course provides an overview of the transportation industry to include providers, users and government agencies. In addition, this course examines contemporary public policy issues along with managerial strategies in transportation. Additional focus will be given to micro and macroeconomic issues in the transportation industry.

LOG456 EMERGING TRENDS IN SUPPLY CHAIN AND LOGISTICS MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This course covers supply chain and logistics management theories. The course will provide the student with an understanding of how the two are interconnected. It will also examine global transportation options, performance measurements, the impact of technology, and current and future challenges in supply changes and logistics management. In addition, focus will be given on collaboration and success strategies related to supply chain and logistics management.

## LOG499 INTEGRATIVE EXPERIENCE IN LOGISTICS AND transportation management 3 CREDITS

## PREREQUISITES: COMPLETION OF ALL COURSES IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT CONCENTRATION

This capstone course is an integrative course in which students synthesize their coursework and demonstrate how operations management acts as a strategic player in an organization.

## LOG599 SPECIAL TOPICS IN LOGISTICS

3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

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## MA100 QUANTITATIVE REASONING

3 CREDITS

## PREREQUISITES: NONE

This course provides the fundamentals of data aptitude. Through this exploration of quantitative reasoning, emphasis will be placed on how to interpret graphs, charts, and pictorial representations of data, along with an understanding of the principles underlying statistics and financial information.

## MA101 CONSUMER MATH

3 CREDITS

## PREREQUISITES: NONE

This course provides instruction in the mathematical operations associated with the retail, banking and accounting industries. Topics include: decimals, fractions and percentages; bank services; interest payment; purchase orders and invoices; and selling prices and mark-ups. This course can be used as a math elective for degree programs.

MA104 FUNDAMENTALS OF ALGEBRA
3 CREDITS

## PREREQUISITES: NONE

This course is designed to prepare students for MA105 College Algebra. Topics covered include number systems, order of operations, mathematical properties and symbols, linear equations, quadratic equations.

## MA105 COLLEGE ALGEBRA

3 CREDITS

## PREREQUISITES: NONE

This course is an introduction to the fundamental concepts of algebra. Topics include equations, polynomial and rational functions and graphing and exponential and logarithmic functions. A new textbook may be required in order to ensure needed electronic codes are valid.

## MA111 COLLEGE TRIGONOMETRY

3 CREDITS

## PREREQUISITES: MA105

This course develops additional math skills beyond Algebra. Topic includes trigonometric functions, identities and equations, matrices and determinants, systems of equations, sequences, series and probabilities.

## MA141 PRECALCULUS

3 CREDITS

## PREREQUISITES: MA105

This course further develops the skills acquired in algebra and trigonometry and prepares students for calculus. Topics include factorization, powers and exponents, radicals, quadratic equations, inequalities and absolute value, progressions, graphing and an introduction to limits and basic trigonometry.

## MA170 FINITE MATHEMATICS

3 CREDITS
PREREQUISITES: MA105
The course covers a range of topics in linear mathematics including linear equations, matrices and linear programming. The course also introduces probability and statistics. Next, the course combines the ideas of linear mathematics, probability and statistics and applies them to real-world problems of finance.

## MA215 BUSINESS STATISTICS

3 CREDITS

## PREREQUISITES: MA105

This course applies descriptive and inferential statistics to solve business problems. Student perform statistical analysis of samples, compute the measures of location and dispersion, and perform linear and multiple regression and correlation analysis. Other topics include constructing a hypothesis, performing one-way and two-way analysis of variance, and making decisions under risk and uncertainty. NOTE: Credit may not be awarded for both MA215 and MA230.

MA230 MATHEMATICAL STATISTICS
3 CREDITS

## PREREQUISITES: NONE

This course presents methods in making analytical decisions using statistics. The course focuses on the characteristics of numerical and categorical data, methods of presentation, and descriptive statistics. The course also introduces students to basic methods of sampling and of making inferences using one or two independent samples. NOTE: Credit may not be awarded for both MA215 and MA230.

## MA302 CALCULUS I

4 CREDITS

## PREREQUISITES: MA141 WITH A "C" OR BETTER

This course provides an introduction to calculus. Topics include limits, derivatives, concavity, applications of the derivative, integration, applications of integrations, the Fundamental Theorem of Calculus, and integrating using parts and substitutions.

## MA312 CALCULUS II

4 CREDITS

## PREREQUISITES: MA302 WITH A "C" OR BETTER

This advanced calculus course on integration, differential equations, parametric equations, polar coordinates, conic sections, dot and cross products, quadratic surfaces, partial derivatives, double and triple integrals, and vector calculus.

## MA315 DISCRETE MATH

3 CREDITS

## PREREQUISITES: MA141 WITH A "C" OR BETTER

This course is designed for computer science and engineering students. Five major themes are interwoven throughout the course: mathematical reasoning, combinatorial analysis, discrete structures, algorithmic thinking and applications and modeling. The course is specifically tailored to address the practical applications of discrete mathematics to problems of computer science and engineering.

## MGT150 PRINCIPLES OF BUSINESS MANAGEMENT 3 CREDITS

## PREREQUISITES: NONE

This course is an introductory course that provides students with a practical and concrete explanation of the concepts and techniques they will need as managers in today's new organizations. The sequence of topics follows the familiar pattern of planning, organizing, leading and controlling. Throughout the course, the manager's role in leading and accommodating change is emphasized. The course also introduces the student to the issues of managing global businesses, especially the ways in which managers need to develop a global perspective in order to be successful. Issues in strategy, diversity and entrepreneurship are covered extensively.

MGT320 RETAIL MANAGEMENT

## PREREQUISITES: MKG131

This intermediate course introduces students to aspects of retailing, such as strategic planning and the overall retailing activities and control mechanisms. The retail strategies of a broad range of retail institutions are analyzed. The student is then shown how to identify and understand target customers, choose a retail location and manage a business. The merchandise management and pricing aspects of the retail strategy mix is presented.

MGT335 INTRODUCTION TO OPERATIONS MANAGEMENT 3 CREDITS PREREQUISITES: MA215
This course is an introduction to operations management that strikes a balance between both the managerial issues and quantitative techniques of operations. There is an increased emphasis on information technology and the effect of the internet and e-business on operations management. Important changes taking place in operations, such as supply chains, e-business and information technology are integrated with more traditional topics in operations such as strategy, quality and competitiveness. Topics include the strategic importance of operations, designing the operating system, managing the supply chain and ensuring quality.

## MGT399 SPECIAL TOPICS IN MANAGEMENT

3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

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MGT430 INTRODUCTION TO QUALITY MANAGEMENT 3 CREDITS

## PREREQUISITES: MA215

This course presents a broad overview of the quality management system. The total quality concept as an approach to doing business began to gain wide acceptance in the late 1980s. The evolution and methodologies for managing the quality system in manufacturing changed the way business was conducted. This course provides an overview of the transformation, the tools used and how the system has evolved.

## MGT431 PERFORMANCE MANAGEMENT

3 CREDITS
PREREQUISITES: NONE
This course reviews the purpose of performance management as the approach of systems thinking into the process of work improvement in organizations. This course examines the systems approach in measuring human performance and its alignment with organizational objectives. This approach is from the process of using metrics, removing barriers and studying the end results of the business.
The course also explores some of the systems in transferring the approach of employee involvement into successful organizations.

## PREREQUISITES: NONE

This course is an overview of training and development as a process designed to assist an individual to learn new skills, knowledge or attitudes. As a result, these individuals make a change or transformation that improves or enhances their performance. These improvements ensure that people and organizations are able to do things better, faster, easier and with higher quality and a better return on investment.

## MGT456 QUALITY MANAGEMENT

3 CREDITS

## PREREQUISITES: MA215 OR MA230

This course is an analysis of quality management as a statistical base of quality control. Students will be shown applications of these tools design: the implementation of a quality management system will be demonstrated. The course will likewise address the underpinnings of quality theory and quality philosophy through basic mathematical equations of quality control, and develop methods for applying these tools to design, manufacturing and inspection procedures. By examining the means used by quality managers, students unveil how members of the organization perform in their tasks in such a way that promotes quality in its processes and ensures continuous improvement in its performance.

## MGT461 LEADERSHIP IN ORGANIZATIONS

3 CREDITS

## PREREQUISITES: NONE

This course presents leadership as a way of acting that involves the influence of people to inspire change toward a mutually desired outcome. Technological advancements and globalization have created a business environment where rapid and constant change is the norm. This course uncovers how effective leaders embrace the inevitability of constant change and diversity, and use their interpersonal skills to promote change, communicate vision, provide a sense of direction and inspire employees.

## MGT468 ORGANIZATIONAL BEHAVIOR

3 CREDITS

## PREREQUISITES: NONE

This course introduces students to concepts and principles of organizational behavior. Students investigate the impact that individuals, groups and structures have on behavior within organizations, for applying such knowledge toward improving an organization's effectiveness. Topics addressed include motivation, leadership, communications, group structure and process, attitude and values, and the change process.

MGT500 MANAGEMENT
3 CREDITS

## PREREQUISITES: NONE

This course provides a solid foundation for facing the challenges of a rapidly changing and highly competitive business environment. This course introduces the fundamental management functions of planning, decision-making, organizing, leading and controlling, as well as the tools and techniques of managing people, processes, projects and the work environment. Students explore current issues in management and gain insights into how successful organizations operate.

## MGT501 INTRODUCTION TO ORGANIZATIONAL AND hUMAN PERFORMANCE <br> 3 CREDITS

PREREQUISITES: NONE
This course surveys the field of performance improvement by examining foundational concepts, theory and terminology. Students study theories and practices while exploring emerging directions of Human Performance Technology (HPT) that connect to their immediate reality.

## MGT514 PRINCIPLES OF HUMAN

 PERFORMANCE TECHNOLOGY3 CREDITS

## PREREQUISITES: NONE

This course investigates the history, theories and application of knowledge of Human Performance Technology (HPT). Students apply human performance improvement principles to other disciplines including but not limited to total quality management, process improvement, behavioral psychology, instructional systems design, organizational development and human resource management. Students also practice assessing alignment and performance gaps, creating process flows and identifying improvement opportunities within organizations.

## MGT515 MEASUREMENT AND ASSESSMENT STRATEGIES 3 CREDITS

## PREREQUISITES: NONE

This course uses instruments that set performance goals and targets, and monitor progress. Assessment strategies assure that goals are being accomplished and that appropriate interventions are implemented. Students apply measurement strategies to assess the progress and completion of organizational goals.

## MGT517 ORGANIZATIONAL BEHAVIOR

3 CREDITS

## PREREQUISITES: NONE

This advanced course discusses how businesses run on hardware, software and human capital more than ever before. This course focuses on the people in the organization and how they work and behave in the work environment. It examines the behavior of individuals, the dynamics of teamwork and the processes of small groups, decision-making, problem solving, conflict management and ways to eliminate barriers to effective communications within the workplace.

## MGT541 CUSTOMER RELATIONSHIP MANAGEMENT 3 CREDITS

## PREREQUISITES: NONE

This course allows students to generate systems of customer relationship management that promote effective, long term client relationships by delivering value to targeted organizational markets. Students will learn that depending upon assessment of value in the marketplace provides a means of gaining profitability. The management of customer needs including data capture, storage and analysis are central to building effective customer management. Students focus on helping customers maximize profits through efficient data management systems.

## MGT547 LEARNING AND PERFORMANCE

PREREQUISITES: NONE
This course reviews the learning and development functions, processes, models, theories and theorists by examining how individual and organizational learning are interdependent. Students learn how to excel in seeing systems, collaborating across boundaries and move easily from solving problems to creating desired futures by understanding the role of motivation in the learning process, which affects the individual and organizational performance.

MGT551 BUSINESS PERFORMANCE MANAGEMENT 3 CREDITS PREREQUISITES: NONE
This course translates business performance management topics related to organizational development and performance management in a business intelligence context. This course focuses on how to drive business strategy throughout the organization through performance objectives, organization structures and management processes, as well as how to deal with managing the performance of teams and individuals toward the achievement of performance objectives.

## MGT553 PERFORMANCE CONSULTING, PERSUASIVE COMMUNICATION AND INFLUENCE PROCESS <br> 3 CREDITS

 PREREQUISITES: NONEThis course examines the role of performance consulting and creating a communication style in which effective consulting may occur. This course applies the history and knowledge of a process in which a client and a consultant partner to achieve the strategic outcomes of the organization. By focusing on a persuasive approach and the student's influence, emphasis is placed on the building of relationships and generating positive strategic organizational outcomes.

MGT570 STRATEGIC MANAGEMENT
3 CREDITS

## PREREQUISITES: NONE

This strategic management course is designed to help students effectively guide an organization toward a profitable and dynamic future. This course provides students with a formal method of defining the organization's purpose and aligning the entire business to achieve corporate goals. It also examines emerging technologies in information processing as an important element of strategic planning.

## MGT599 SPECIAL TOPICS IN MANAGEMENT <br> 3 CREDITS

 PREREQUISITES: APPROVAL OF THE DEANThis course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## MGT621 BALANCED SCORECARDS AND PERFORMANCE DASHBOARDS <br> 3 CREDITS

## PREREQUISITES: NONE

This course creates business intelligence tools such as balanced scorecards, performance prisms and dashboards as tools to use in the organizational decision making process. Content in this course focuses on the advantages of each data tool and the best implementation options moving toward performance improvement. Students learn to match information needs with the most appropriate data presentation.

## MGT642 STRATEGIC MANAGEMENT OF TECHNOLOGY and innovation

## PREREQUISITES: NONE

This course focuses on the strategic management of technology and innovation as a way to increase the productivity of organizations. Leveraging technology in a rapidly changing global environment is a key to successful organizational management. Students develop methods to use in staying current in emerging trends and riding those trends to improve profitability within an organization.

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

In this course, students from a variety of graduate studies are brought together. Although students will each be working on separate projects, depending on their previous coursework, they will come together in the discussions to share ideas from various perspectives. This capstone project requires that students apply the reasoning, decision-making, analytical and authorship skills previously learned in the curriculum to the work environment. The project is completed individually; students are encouraged to select work-related projects that are of particular interest and will result in professional growth and benefit the organization.

## MIL416 THE HISTORY OF WAR CRIMES

3 CREDITS
PREREQUISITES: HS101 AND HS102
This course studies the history of War Crimes and associated phenomenon, such as genocide, through the study of several cases from the early-modern and modern historical eras. Factors such as racism, available resources, break-downs in command and control, and other causes will be examined in each case study in order to develop the several causes for wartime atrocity. Students will study each event in depth, as well as develop their own topic for further research beginning in the first week and culminating in a final research paper.

## MKG131 FOUNDATIONS OF MARKETING

3 CREDITS

## PREREQUISITES: NONE

This course on the principles of marketing introduces the nature and fundamentals of the marketing activity in modern businesses. The broad view of marketing that is presented builds on the integration of marketing with the entire enterprise, reinforced by theories and concepts as well as practices and applications. Topics include an analysis of the economic factors influencing buyer behavior, marketing research, market segmentation, development of marketing programs (new product, price, advertising and distribution decisions) and international marketing. The course also covers new marketing technologies that are revolutionizing the way companies bring value to their customers.

## MKG315 CONSUMER BEHAVIOR

3 CREDITS
PREREQUISITES: MKG131
This course provides the student with a comprehensive theoretical and practical base of knowledge regarding the forces that shape the attitudes and behaviors of consumers of products and services. Subjects covered include consumerism in American society, learning theories, motivation, personality theories, persuasive communication and the consumer decision-making process.

MKg360 MARKETING COMMUNICATIONS
3 CREDITS

## PREREQUISITES: MKG131

This course provides students with a baseline understanding of marketing communication strategies. Starting with the theoretical background to marketing communications, the course moves to the mechanics of producing marketing materials, describing the various techniques marketers have for telling their stories. By taking the concept of marketing as a launching point, students examine the layers of a sound marketing implementation plan by looking at several communication strategies. Initial topics include communication and miscommunication in the marketing world. The course is practical examination of real-life marketing communication tactics.

## MKG399 SPECIAL TOPICS IN MARKETING

3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

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## MKG450 MARKETING ANALYSIS

3 CREDITS
PREREQUISITES: MA215
This course provides students with an advanced, managerial approach to marketing strategies, exposing students to major decisions that marketing managers may face in their effort to balance an organization's objects and resources against the needs and opportunities in the global market. Initial topics include an in-depth view of strategic marketing strategies and the national and international marketing environment. Building upon this foundational knowledge, the course also explores marketing in the internet age, the ethics of marketing from a social perspective, the global marketplace and relationship marketing.

## MKG460 PUBLIC RELATIONS

3 CREDITS

## PREREQUISITES: NONE

This course provides students with an in-depth analysis of public relations practices. The course aims to demonstrate the critical need for effective public relations communication in the 21st Century by placing emphasis on the principles, processes and practices that lead to building positive relationships in a 24/7 communications environment. Starting with an understanding of how communications research, theory and public opinion can be applied to strategic public relations planning and creation of believable and persuasive messages, the course moves through a series of "Speaking of Ethics" features that bring to life the daily dilemmas that confront professional public relations practitioners.

MKG475 INTERNATIONAL MARKETING
3 CREDITS PREREQUISITES: MKG131
This course scrutinizes marketing practices in the international environment. Based on previous knowledge of marketing and international business, learners will examine the decisions that marketers make when expanding and developing foreign markets. The course adopts familiarity with marketing management and utilizes this as a base to develop perceptions and understanding of international marketing. It will communicate the various social, political, economic and legal scopes of the world to the market. Exceptional emphasis is placed on the impact of cultural values and political systems on how business processes are conducted, in what way business transactions occur, and how to develop international marketing strategies.

MKG499 INTEGRATIVE EXPERIENCE IN MARKETING 3 CREDITS PREREQUISITES: COMPLETION OF ALL MARKETING CONCENTRATION COURSES
This marketing course requires integration of all fields of business. It will offer students broad awareness of various environmental influences to make marketing decisions. Thus, the main purpose of this course is to integrate the learning achieved in individual business courses taken to earn a business degree. The knowledge acquired in finance, consumer behavior, communication, accounting, management and marketing courses will be utilized to make sound marketing decisions. As companies have become more customer-focused and market-driven, marketing concepts and planning have developed into a most important managerial activity. An emphasis is placed on discovering and developing a set of unique competencies for a company that, through strategic differentiation, leads to sustainable competitive advantage in the marketplace. Great opportunity will be given to students to develop and practice creative problem-solving and data driven decisionmaking talents to meet the requirements of the complex global marketing environment. Thus, company analysis will be achieved to cover such as internal/external analysis, customer analysis, competitor analysis, market/submarket analysis and competitive strategy appraisal.

## MKG530 MARKETING MANAGEMENT

3 CREDITS

## PREREQUISITES: NONE

This course reviews marketing management within the broader context of an organization's strategies and operations. Students explore how marketing adds value by working to support organizational strategy. Topics covered include the 4 Ps (product, price, place and promotion), different types of markets, marketing research, market segmentation and differentiation, global aspects of marketing and the implementation and control of marketing plans. Students discover the benefits of market research and analysis, and develop effective marketing strategies through segmentation, targeting and positioning.

MKG599 SPECIAL TOPICS IN MARKETING
3 CREDITS PREREQUISITES: APPROVAL OF THE DEAN
This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

NUR302 PATHOPHYSIOLOGY*
3 CREDITS

## PREREQUISITES: NONE

This course builds on the basic knowledge of anatomy and physiology to identify the disruptions in normal body functioning. The student will analyze objective and subjective data from common health issues occurring in diverse populations. Factors impacting on the disruption in health patterns will be discussed. Integrated into the discussion of each health issue are the assessment findings, diagnostic testing measures and interventions including pharmacological therapy.

## NUR304 NURSING ETHICS*

3 CREDITS

## PREREQUIITTES: NONE

This course provides an overview of healthcare ethics and the nurse's role in ethical decision making as it impacts on delivery of care. The nurse must understand that their own values, views of society, life experiences and clinical expertise influence the ethical decision making process. An understanding of the trends, theories and models of ethical decision making, as well as an understanding of the established principles upon which ethical decisions are made, is necessary to deliver safe, efficient, quality care that takes into consideration the global perspective of cultural norms of populations and communities. Patient advocacy is addressed as part of the nurse's role in ethical issues. This course provides the basic principles behind the model for ethical decision making and explores ethical issues confronting nursing practice in the following arenas: relationships, technology, patient selfdetermination, health policy, economics, social policy, gender, and transcultural and spiritual aspects.

## NUR306 PHARMACOLOGY*

3 CREDITS

## PREREQUISITES: NONE

This course establishes the foundation principles upon which nursing management of drug therapy is based. An overview of core drug knowledge and variables in drug administration is provided. A body system/drug classification approach is used to investigate the pharmacotherapeutics, pharmacokinetics and pharmacodynamics of drugs. From knowledge gained in this course, the nurse can provide safe, effective, quality care regarding administration of medications to diverse populations.

NUR402 TRANSITION TO PROFESSIONAL NURSING* 3 CREDITS

## PREREQUISITES: NONE

This course explores the traditional and less traditional roles of the professional registered nurse in addition to implications for future practice. The course addresses the added complexities that technological advances bring to the health care delivery systems, and includes topics such as critical thinking, socioeconomic issues, patient self-determination, cultural diversity, research and evidence-based practices and ethical issues in healthcare. This course also includes Clinical Practice Experience hours to be completed at a clinical site with a diversity emphasis.

## NUR405 HEALTH ASSESSMENT FOR PROFESSIONAL NURSING* <br> 3 CREDITS

## PREREQUISITES: NONE

This course builds on the practical knowledge many RNs possess due to employment in healthcare agencies. The course provides a holistic approach to health assessment for the adult client with adaptations across the life span. Theories and competencies are needed to elicit a thorough and accurate assessment of the client under various health and wellness conditions. The student will apply concepts of health assessment focusing on a general systems approach and will complete 45 hours of practice experience (PE). Using a simulated patient encounter for clinical learning, students will conduct a general health assessment and formulate an individualized care plan.

## NUR410 THEORETICAL CONCEPTS OF RESEARCH IN NURSING* <br> 3 CREDITS

## PREREQUISITES: NONE

This course introduces the student to components of the research process with application to the theory and practice of professional nursing. Emphasis is on evidence-based practice using the research process. Students will be introduced to several research methods with an emphasis on the use of these methods in solving patient care problems. Critiquing skills will be developed to assist the student in becoming an active consumer of research and a participant on the research team.

NUR415 NURSING INFORMATICS*

## PREREQUISITES: NONE

Nursing Informatics will provide an overview of the basic concepts of nursing and healthcare informatics as well as their relevance to nursing practice. Course activities are designed to synthesize current nursing informatics applications and analyze the impact of nursing informatics on practice. The student will gain knowledge of the current state of the regulations, accreditation and major issues in research and evidence-based practice. The course includes clarification of the concepts of nursing, technology, and information management and comprises underpinnings of nursing informatics, the practice of nursing informatics, and current challenges in nursing and healthcare informatics.

NUR417 NURSING LEADERSHIP AND MANAGEMENT* 3 CREDITS PREREQUISITES: NONE
This course prepares the RN-BSN student for experiences in a leadership and management arena. Students will use a variety of learning methodologies to develop a foundation for decisionmaking, problem-solving and critical thinking skills. A continuation of the legal and ethical concepts, as well as advocacy roles will be discussed throughout this course. This course includes practice experience (PE) totaling 22.5 hours.

## NUR427 POPULATION HEALTH IN THE <br> GLOBAL COMMUNITY* <br> 3 CREDITS

## PREREQUISITES: NONE

This course will introduce the principles of population health and epidemiology in individuals and family case studies, as well as disaster scenarios. Students will discuss disease prevention in the context of emerging global diseases within the constraints of personal and national financial resources. This course includes practice experience (PE) totaling 22.5 hours. Students will conduct a virtual community health assessment and develop a plan for intervention for a specific community health need that reflects a global health issue. A teaching project reflecting a current health issue will be developed for potential implementation in a community.

NUR441 CASE MANAGEMENT CONCEPTS*
3 CREDITS

## PREREQUISITES: NONE

This course offers the student a means to explore professional nursing practice that focuses on innovative, integrated nursing case management models within the context of the current managed care delivery system. Cost-effective strategies and appropriate levels of care across the continuum of care will be examined in relation to current healthcare economics.

## NUR499 RN-BSN CAPSTONE PROJECT*

3 CREDITS

## PREREQUISITES: NONE

The Capstone course in the RN-BSN program focuses on the synthesis of knowledge from past and current learning experiences to promote professional evidence-based practice that emphasizes principles of lifelong learning. Collaboration with other healthcare providers to improve evidence-based outcomes of clients, families and the community is emphasized. The learning of these concepts is embedded in Programmatic Outcomes for each course. The culmination of the RN-BSN program involves showcasing how these Programmatic Outcomes have been met with the creation and presentation of an ePortfolio.

## NUR506 FOUNDATIONS OF ADVANCED PRACTICE NURSING* <br> 3 CREDITS

## PREREQUISITES: NONE

This course concentrates on theories and concepts related to Advance Practice Nursing: the roles, the essential knowledge, behavioral motivation and decision-making techniques of the APN. Application of various aspects of advance practice nursing will be explored, including evidence-based practice (EBP) and research with 22.5 hours of applied practice learning experience (APLE) conducted in regard to these principles when providing nursing care to clients, families and the community.

## NUR513 DIVERSE POPULATIONS AND HEALTHCARE* 3 CREDITS

## PREREQUISITES: NONE

This course provides an introduction to and exploration of concepts and theories relevant to healthcare for diverse populations with 22.5 hours of applied practice learning experience (APLE) embedded for the application of the concepts and theories to a population's healthcare needs. Diversity is examined relative to family and social organizations, roles and expectations, and communication patterns and the value/beliefs underlying healthillness behaviors between western and non-western cultures.

NUR514 PROJECT AND CHANGE MANAGEMENT
3 CREDITS

## PREREQUISITES: NONE

This nursing informatics course examines the knowledge sets, skills, tools and techniques of managing informatics projects, with an emphasis on how project management contributes to the strategic goals of the organization. Topics include strategic management process as it relates to information technology; project prioritization and planning; evaluating project risk; resource scheduling, and project teams and partner management issues. Additionally, some of the most common change management challenges and best practices related to change in informatics will be explored.

## NUR516 NURSING RESEARCH AND EVIDENCE-BASED PRACTICE* <br> 3 CREDITS

## PREREQUISITES: NONE

The focus of this course is examining the research process and its importance in guiding and supporting evidence-based and advanced nursing practice. A review of research methodologies and terminology to include; identifying a problem, developing research questions, exploring the literature review process and examining the methodology of conducting research. Building content throughout this course, the first three chapters of the Capstone Project will be developed. Applied practice learning experiences (PE) are included in the course.

NUR526 HUMAN RESOURCES AND NURSING MANAGEMENT*

3 CREDITS
PREREQUISITES: NONE
This course addresses the application of behavioral sciences to management. An overview of managing the modern organization and the structure of industrial and non-industrial organizations is explored. The course emphasizes the relationship of the organization and administrative theories to the current healthcare delivery system.

NUR532 LEADERSHIP IN HEALTHCARE MANAGEMENT* 3 CREDITS

## PREREQUISITES: NONE

This leadership course focuses on organizational systems leadership, knowledge and skills critical to the role development of master's prepared nurses. Content includes communication, conflict resolution, collaboration and negotiation, leadership and team functioning to maximize success in the establishment of safe, effective patient-centered care in complex environments. Emphasis is on the synthesis of skills, knowledge and attitudes to coordinate holistic, evidence-based care in healthcare organizations.

## NUR533 CURRICULUM DESIGN AND

LEARNING OUTCOMES*
3 CREDITS

## PREREQUISITES: NONE

This course introduces students to the development of curriculum by defining curriculum and examining an evidence-informed, context-relevant, unified design. Faculty development, curriculum planning, implementation, accreditation and curriculum evaluation are examined. In addition, a review of distant delivery of nursing education is discussed.

## NUR535 CONCEPTS OF DISTANCE EDUCATION*

3 CREDITS

## PREREQUISITES: NONE

This course focuses on the unique professional roles of the academic nurse educator, and various concepts of distance learning. Topics related to curriculum development, institutional resources, student readiness, multimedia technology and strategies for effective teaching will be explored. Contemporary issues such as classroom diversity, critical thinking, social media and faculty-student engagement will be covered.

## NUR538 ASSESSMENT AND TEACHING TO DIVERSE LEARNING STYLES* <br> 3 CREDITS

## PREREQUISITES: NONE

This course explores the teaching and learning styles, cultural perspectives, and economic and political vulnerabilities related to a variety of populations. Traditional and non-traditional theories and instructional methods in both the clinical and didactic setting will be examined. The emerging theories in technology and distance educational programs will be evaluated.

## NUR539 ORGANIZATIONAL DYNAMICS OF HIGHER EDUCATION* <br> 3 CREDITS

## PREREQUISITES: NONE

This course focuses on the structure and organization of higher educational institutions and the regulations and accreditation standards that guide the work of academic leadership. The student will examine the accreditation process and the development of the self-study document in relation to the establishment of best practice learning standards and the process of program improvement. The course will explore the relationship of organizational culture to academic performance. Topics will include the tools for assessment of the educational institution.

NUR540 ESSENTIALS OF NURSING INFORMATICS* 3 CREDITS

## PREREQUISITES: NONE

This course explores the essential concepts related to the development and utilization of nursing informatics in healthcare institutions. Students will explore the theoretical underpinnings of the specialty of nursing informatics and the impact of informatics on the healthcare environment. A comprehensive overview of the role of the nursing informatics is examined, in addition to analyzing clinical and financial information, and processing and reporting acquired data. Nursing informatics trends and issues are also explored.

NUR542 CONCEPTS OF CASE MANAGEMENT*
3 CREDITS
PREREQUISITES: NONE
This course examines the evolution of the case manager concepts for the inception through current practice models. The role and process of the case manager as an advanced nurse practitioner will be emphasized. Included will be the analysis of the interdisciplinary team and the function of the nurse in a variety of clinical settings. This specialty emphasis area is based upon the Case Management Society of American Core Curriculum for Case Management. The courses within this specialty are designed to provide the student with the essential competencies of the advanced practice professional, with emphasis on quality of care.

## NUR545 LIFE CARE PLANNING*

3 CREDITS

## PREREQUISITES: NONE

This course introduces students to case management concepts, principles of practice, psychosocial aspects, healthcare management and delivery, healthcare reimbursement and rehabilitation. It uses the Case Managers Scope of Practice criteria to assist in developing a Life Care Plan for a patient. Included will be patients with congenital complications, chronic illnesses and complex injuries throughout the life span. Precertification exams will be employed to assist in preparation for Certification as a Case Manager.

## COURSE DESCRIPTIONS

## NUR546 HEALTHCARE STRATEGIC MANAGEMENT AND PLANNING* <br> 3 CREDITS

## PREREQUISITES: NONE

This course is focused on the business of healthcare for nurse leaders and managers. Planning for strategic challenges encountered by nursing leaders in healthcare will be explored. The course stresses the dynamic nature of issues as related to rapidly evolving healthcare delivery. Areas to be examined include organizational structure, strategic planning, operations, care delivery and evaluation of healthcare agencies. In addition, budgeting and the management of information and technology will be addressed.

## NUR547 CASE MANAGEMENT AND EVIDENCED-BASED PRACTICE* <br> 3 CREDITS

## PREREQUISITES: NONE

The process of evidence-based patient care is the central theme of this course. The role of the case manager as client advocate and the incorporation of evidence-based care into the management of patient care cases are examined. The course will provide the student with the essential competencies of the advanced practice nurse professional with a particular emphasis on total quality management (TQM). The role of the nurse in expanding the content of evidence-based practice guidelines will be defined in the parameters of case management.

## NUR552 LEGAL AND ETHICAL ISSUES OF ADVANCED PRACTICE NURSING* <br> 3 CREDITS

PREREQUISITES: NONE
This course presents the moral, ethical and legal aspects facing the advanced practice nurse in their daily professional work with an emphasis on the ethical practices and decision-making processes faced by all nursing. The 22.5 hours of applied practice learning experiences (APLE) focuses on the basic tenets of these practices and the practical application of professional nursing principles as they are examined throughout this course and continue throughout the nursing program.

NUR601 MANAGEMENT AND ORGANIZATIONAL LEADERSHIP
RESEARCH SEMINAR*
3 CREDITS

## PREREQUISITES: NONE

The MSN Research Seminar for the Graduate Nurse Leader/ Administrator emphasizes the emerging trends and roles in Nursing Leadership and Management in healthcare and world health systems. Issues related to strategic planning, coordination of care to improve healthcare outcomes, development and maintenance of health care environments, promoting innovation and change, adherence to regulatory standards, and developing/ evaluating transformational leadership models will be reviewed throughout the course. The culmination of this course will result in the finalization of Chapters 1, 2, and 3 and a draft of Chapter 4 of your Capstone Project. Capstone projects are designed to encourage you to think critically, solve challenging problems, and develop skills such as oral and written communication, research, planning large projects, and goal setting to achieve the outcomes in a timely manner. The Capstone project will provide you an opportunity to demonstrate mastery of both a specific topic and the relationship of this topic to the broader scope of your roles as a Nurse Leader/Administrator.

## NUR602 MANAGEMENT AND ORGANIZATIONAL LEADERSHIP RESEARCH PRACTICUM* <br> 3 CREDITS

## PREREQUISITES: NONE

The Management \& Organizational Leadership Practicum is the final course in the MSN program. This practicum requires demonstration of the knowledge and skills acquired in prior courses as they relate to Advance Practice Nursing, as well as the specialty of Management and Leadership. During this course, the Capstone project that was completed during the Research Seminar will be finalized and issues related to patient-centered care, evidence-based practice, diversity, critical thinking, collaboration and teamwork, and professionalism will be demonstrated. Program Outcomes and specialty track role specific competencies will be showcased within the five chapters of the capstone paper, during the Oral Capstone Presentation, and through the reflection of these in the Program Outcome Identification Table. 64 hours of direct Practicum Experience are completed under the guidance of a preceptor and 26 hours of indirect practice experience are embedded in the course. Practicum Experience is evidence-based, reflects contemporary practice and nationally established patient health and safety goals, and is designed to verify early mastery of new levels of advance practice.

## COURSE DESCRIPTIONS

NUR603 NURSING EDUCATION RESEARCH SEMINAR* 3 CREDITS

## PREREQUISITES: NONE

The MSN Research Seminar for the Graduate Nurse Educator emphasizes the emerging trends and roles in nursing education in both the academic and healthcare environments. Issues related to governance, academic freedom, communication, diversity, and ethics will be reviewed throughout the course. The culmination of this course will result in the finalization of chapters 1,2 , and 3 and a draft of chapter 4 of your Capstone Project. Capstone projects are designed to encourage you to think critically, solve challenging problems, and develop skills such as oral and written communication, research, planning large projects, and goal setting to achieve the outcomes in a timely manner. The Capstone project will provide you an opportunity to demonstrate mastery of both a specific topic and the relationship of this topic to the broader scope of your roles as an Academic Nurse Educator.

## NUR604 NURSING EDUCATION PRACTICUM* <br> 3 CREDITS

## PREREQUISITES: NONE

The Nursing Education Practicum is the final course in the MSN program. This practicum requires demonstration of the knowledge and skills acquired in prior courses as they relate to Advance Practice Nursing as well as the specialty of Nursing Education. During this course, the Capstone project that was completed during the Research Seminar will be finalized and issues related to patient-centered care, evidence-based practice, diversity, critical thinking, collaboration and teamwork, and professionalism will be demonstrated. Program Outcomes and specialty track role specific competencies will be showcased within the five chapters of the capstone paper, during the Oral Capstone Presentation, and through the reflection of these in the Program Outcome Identification Table. 64 hours of direct Practicum Experience are completed under the guidance of a preceptor and 26 hours of indirect practice experience are embedded in the course. Practicum Experience is evidence-based, reflects contemporary practice and nationally established patient health and safety goals, and is designed to verify early mastery of new levels of advance practice.

NUR605 CASE MANAGEMENT RESEARCH SEMINAR* 3 CREDITS

## PREREQUISITES: NONE

The MSN Research Seminar for the Graduate Nurse Case Manager emphasizes the emerging trends and roles in Case Management in healthcare and the world health systems. Issues related to the identification of problems, determination of outcomes, coordination of resources, special population advocacy, and facilitation of inter-professional care case management coordination will be reviewed throughout the course. The culmination of this course will result in the finalization of chapters 1 , 2, and 3 and a draft of chapter 4 of your Capstone Project. Capstone projects are designed to encourage you to think critically, solve challenging problems, and develop skills such as oral and written communication, research, planning large projects, and goal setting to achieve the outcomes in a timely manner. The Capstone project will provide you an opportunity to demonstrate mastery of both a specific topic and the relation of this topic to the broader scope of your role as a Case Manager.

NUR606 CASE MANAGEMENT PRACTICUM*
3 CREDITS

## PREREQUISITES: NONE

The Case Management Practicum is the final course in the MSN program. This practicum requires demonstration of the knowledge and skills acquired in prior courses as they relate to Advance Practice Nursing as well as the specialty of Case Management. During this course, the Capstone project that was completed during the Research Seminar will be finalized and issues related to patient-centered care, evidence-based practice, diversity, critical thinking, collaboration and teamwork, and professionalism will be demonstrated. Program Outcomes and specialty track role specific competencies will be showcased within the five chapters of the capstone paper, during the Oral Capstone Presentation, and through the reflection of these in the Program Outcome Identification Table. 64 hours of direct Practicum Experience are completed under the guidance of a preceptor and 26 hours of indirect practice experience are embedded in the course. Practicum Experience is evidence-based, reflects contemporary practice and nationally established patient health and safety goals, and is designed to verify early mastery of new levels of advance practice.

## COURSE DESCRIPTIONS

## NUR607 NURSING INFORMATICS RESEARCH SEMINAR* 3CREDITS

## PREREQUISITES: NONE

The MSN Research Seminar for the Graduate Nurse Informaticist emphasizes the emerging trends and roles in nursing informatics in the healthcare environment. Issues related to plans for evaluating, contracting and implementing new technologies, evaluating and improving current technologies in healthcare, as well as QI, safety, and security related to information technology will be reviewed throughout the course. The culmination of this course will result in the finalization of chapters 1,2 , and 3 and a draft of chapter 4 of your Capstone Project. Capstone projects are designed to encourage you to think critically, solve challenging problems, and develop skills such as oral and written communication, research, planning large projects, and goal setting to achieve the outcomes in a timely manner. The capstone project will provide you an opportunity to demonstrate mastery of both a specific topic and the relationship of this topic to the broader scope of your roles as a Nursing Informaticist.

## NUR608 NURSING INFORMATICS PRACTICUM*

3 CREDITS

## PREREQUISITES: NONE

The Nursing Informatics Practicum is the final course in the MSN program. This practicum requires demonstration of the knowledge and skills acquired in prior courses as they relate to Advance Practice Nursing as well as the specialty of Nursing Informatics. During this course, the Capstone project that was completed during the Research Seminar will be finalized and issues related to patient-centered care, evidence-based practice, diversity, critical thinking, collaboration and teamwork, and professionalism will be demonstrated. Program Outcomes and specialty track role specific competencies will be showcased within the five chapters of the capstone paper, during the Oral Capstone Presentation, and through the reflection of these in the Program Outcome Identification Table. 64 hours of direct Practicum Experience are completed under the guidance of a preceptor and 26 hours of indirect practice experience are embedded in the course. Practicum Experience is evidence-based, reflects contemporary practice and nationally established patient health and safety goals, and is designed to verify early mastery of new levels of advance practice.

## PA3O1 INTRODUCTION TO PUBLIC ADMINISTRATION 3 CREDITS

 PREREQUISITES: NONEThis course is broad-ranging and provides a combination of theory and practice. The course purpose is to promote a superior understanding of government and its relationship with the society it governs, as well as to encourage public policies that are more responsive to social needs. Additional topic include managerial practices attuned to effectiveness, efficiency and human requirements of the citizenry.

PH220 PHYSICS I
4 CREDITS

## PREREQUISITES: MA141 WITH A "C" OR BETTER

This course covers a range of topics, concepts and theories in general physics including kinematics and dynamics in 1D and 2D motion, forces and Newton's laws of motion, work and energy, impulse and momentum, rotational kinematics and dynamics, simple and harmonic motion, fluid dynamics, and temperature and heat. This course is intended for students majoring in information systems, software engineering technology, computer science, computer engineering technology and electronics engineering technology.

## PH221 PHYSICS II

4 CREDITS
PREREQUISITES: PH220
This course continues Physics I topics, concepts and theories in general physics. Topics include waves and sound, electric forces and electric fields, electric potential energy and the electric potential, electric circuits, magnetic forces and magnetic fields, electromagnetic induction, alternating current (ac) circuits. The course also introduces the student to applied physics and applies this knowledge to real-world problems.

## PL201 INTRODUCTION TO PHILOSOPHY

3 CREDITS

## PREREQUISITES: NONE

This course emphasizes content coverage and development of critical reasoning skills. It pays attention to the personal and practical relevance of philosophy by focusing on its experiential, therapeutic and social applications. Topics include the definition of philosophy, philosophical argument, epistemology and metaphysics, ethics and moral decision making, and political philosophy.

## PL301 PRACTICAL PHILOSOPHY

3 CREDITS

## PREREQUISITES: NONE

This course uses a multidisciplinary approach to explore original essays combined with classical and contemporary readings from philosophy, science and literature. Both structure and content emphasize the relevance of philosophy to other disciplines. Topics include the meaning of life, existentialism, ethics, social and political philosophy, and the philosophy of science, metaphysics and the existence of God.

## PL401 PHILOSOPHY OF SCIENCE AND TECHNOLOGY 3CREDITS

## PREREQUISITES: NONE

This course provides an introduction to philosophy and its relationship to technology. Interactive activities encourage the student to think critically, analytically and creatively and challenge one to develop new ideas and map solutions to current technological and sociological issues. Topics include ethics and technology, history of technology, energy, ecology, population, health and technology, technology and the Third World, and technology of the future.

## PLS101 INTRODUCTION TO PARALEGAL STUDIES

3 CREDITS
PREREQUISITES: NONE
The course gives the student a thorough introduction to the legal system in general, specific areas of the law, and the paralegal's integral role as a member of the legal team. The student will gain a comprehensive understanding of the laws in our society, the importance of ethical and professional responsibility and the skills needed to thrive in a legal environment. Students learn how professionals work in each area of the law and how each skill directly translates on the job. Paralegal students learn about the substantive areas of the law, and how to excel as a professional in each area.

## PLS103 INTRODUCTION TO LAW

3 CREDITS

## PREREQUISITES: NONE

Students will examine a variety of sources of law, explore relevant legal principles, and build their legal vocabulary. This course addresses the long-standing legal principles that created the foundation of the American legal system. Through a detailed course of study, students review the structure and systems composing the judicial branch of the U.S. system of government.

## PLS105 LAW OFFICE MANAGEMENT AND TECHNOLOGY 3 CREDITS

PREREQUISITES: PLS101
This course assists students in developing a practical knowledge of the legal industry, including technical considerations and law office operations and management. Students examine how law firms and types of legal offices conduct business differently from other industries. Students gain an inventory of the functions and procedures common to a law office environment and the essential skills utilized throughout a legal career.

PLS107 LEGAL ETHICS
3 CREDITS

## PREREQUISITES: PLS103

In this course, students explore concepts related to professional legal ethics and responsibility. Students apply standards of care for legal professionals in areas such as professional care, confidentiality, work products and privilege. Students examine major principles that affect how the practice of law is regulated and develop analytical skills in recognizing and responding to case study scenarios.

## PLS201 LEGAL RESEARCH AND WRITING I <br> 3 CREDITS

PREREQUISITES: PLS101 OR PLS103, PLS201 MUST BE PASSED WITH A "C" OR BETTER
This course provides students with fundamental and essential legal research and writing skills necessary for all legal professionals. Emphasis is given to resources of law both primary and secondary, and an introductory explanation of legal reasoning and analysis. This course emphasizes writing client opinion letters, pleadings, contracts, office memos, memoranda of law and appellate briefs.

## PLS203 CIVIL LITIGATION

3 CREDITS

## PREREQUISITES: PLS201 WITH A "C" OR BETTER

This course teaches the paralegal student proper methods and procedures that must be followed in a legal practice. Emphasis is placed on trial and litigation practices through the study of procedures directly relevant to a paralegal professional. Students examine pre-trial and trial procedures, as well as motions and other aspects they will likely encounter in their career. The primary focus is on general litigation practices with some examination into substantive areas such as personal injury, real estate, employment and intellectual property law.

## PLS205 TORTS

3 CREDITS
PREREQUISITES: PLS203
Students study academic principles of tort and personal injury law and practical skills necessary for the paralegal. Topics covered include fundamental tort law, personal injury law concepts and realworld, practical skills using annotated cases that examine current topics in the field of tort and personal injury litigation.

## PLS207 CONTRACT LAW

## PREREQUISITES: PLS203

This course explores the six steps of contract law: 1) body of law application to the transaction; 2) contract formation, offer and acceptance; 3) freedom to contract, including infancy, illegality, duress and unconscionability; 4) plaintiff allegation of defendant breach; 5) defendant responses to allegation of breach; and 6) plaintiff remedies for defendant breach of contract. Updated cases and examples are used to reinforce the theories addressed within the content of the course.

## PRJ450 PROJECT MANAGEMENT

3 CREDITS

## PREREQUISITES: MA170 OR MA215 OR MA230

This advanced course identifies the components of modern project management and shows how they relate to the basic phases of a project, starting with conceptual design and advanced development and continuing through detailed design, production and termination. Topics covered include project organization and structure; project planning and control; human behavior in the project setting; and project management information systems. The course places stress on integrative concepts rather than isolated methodologies. It relies on simple models to convey ideas and avoids detailed mathematical formulations, though some of the more important mathematical programming models are presented.

## PRJ515 PROJECT MANAGEMENT ESSENTIALS 3 CREDITS

## PREREQUISITES: NONE

This course completes the topics presented in the Project Management Institute's Project Management Body of Knowledge and includes project cost, quality, procurement and risk management. Students are provided with opportunities to apply these concepts using real-life exercises, examples and software tools.

PRJ636 PROJECT MANAGEMENT ORGANIZATION FRAMEWORK AND RISK

3 CREDITS

## PREREQUISITES: PRJ515

This course furthers the fundamental concepts of scope, time management and human resource planning and project communications as presented in the Project Management Institute's Project Management Body of Knowledge. Emphasizing both theory and practical application, students are provided with an opportunity to apply these concepts using real-life exercises, examples and software tools.

## PRJ656 PROJECT MANAGEMENT INTEGRATION FRAMEWORK

## PREREQUISITES: PRJ636

This course introduces students to the fundamental elements of effective project management. It provides students with the opportunity to apply these elements using exercises and examples based on real-time projects. The required tools and techniques used to plan, measure and control projects, and the methods used to organize and manage projects are discussed.

PRJ691 CAPSTONE PROJECT-BUSINESS INTELLIGENCE 3 CREDITS

## PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS

This course applies the knowledge and skills acquired in courses to the student's work environment. This project is completed individually; students are encouraged to select work-related projects that are of particular interest and will result in professional growth and benefit the organization.

PRJ695 PROJECT MANAGEMENT CAPSTONE
3 CREDITS PREREQUISITES: COMPLETION OF DEGREE REQUIREMENTS
This capstone course requires students to demonstrate an understanding and application of material explored during the Project Management programs in both the Mark Skousen School of Business and College of Engineering and Computer Science. Additionally, this course will prepare students for the Project Management Institute's (PMI) Project Management Professional (PMP) certification examination. Preparation includes utilization of study guides and practice exams.

PS101 FUNDAMENTALS OF PSYCHOLOGY
3 CREDITS

## PREREQUISITES: NONE

This course presents an introductory overview of psychology. The course includes topics such as the history of psychology, nature vs. nurture, biological psychology, sensation, perceptions, developmental theories, classical conditioning, operant conditioning, memory, cognition, personality, health, and social psychology.

## PS360 ABNORMAL PSYCHOLOGY

## PREREQUISITES: NONE

The course is designed to provide an exploration of the biological, environmental and cultural issues surrounding adjustment disorders, mood disorders, suicide, schizophrenia and delusional disorders.

## PS380 PSYCHOLOGY AND THE LAW

## PREREQUISITES: NONE

Psychology and the law will provide a broad overview of the interplay between behavioral science and the legal system. In appearance, the two disciplines are vastly different; however, the legal system has an immense influence on our everyday psychology. The purpose of this course is to examine the legal system through the use of psychological concepts, methods, and research results.

## RCH399 SPECIAL TOPICS IN BUSINESS RESEARCH 3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business. Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

RCH480 ADVANCED BUSINESS RESEARCH
3 CREDITS

## PREREQUISITES: NONE

The course introduces the student to the techniques and principles of the applied research process most frequently used by business scholars within the industry. Students will learn different research methods, identify and investigate a business problem, use the findings to create solutions to the problem and present their own conclusions based on the findings. Topics of interest include definition of the research problem, formulation of research question and hypotheses, sampling, data collection, data analysis, research design and interpretation of the data. Furthermore, students are expected to critique and analyze business literature pertinent to their topic.

## RCH520 QUANTITATIVE ANALYSIS

3 CREDITS

## PREREQUISITES: NONE

This Quantitative Analysis course addresses managerial decision analysis using quantitative tools. Topics include a general framework for decision analysis, decision tables and trees, forecasting, inventory control, linear programming, transportation and assignment, networks, project time management, waiting lines (queuing) and simulation. After the course, the student should be able to use a broad array of powerful analytical tools to make business decisions.

## RCH599 SPECIAL TOPICS IN BUSINESS RESEARCH 3 CREDITS

## PREREQUISITES: APPROVAL OF THE DEAN

This course is open only by arrangement with the Dean of the Mark Skousen School of Business Courses in this area will address a current or timely topic or those that are foreseen to be one-time offerings. Special topics course offerings can vary from term to term. Students can propose a special topics course in this area.

## SO101 INTRODUCTION TO SOCIOLOGY I

3 CREDITS
PREREQUISITES: NONE
This course offers a global perspective to understand self, as well as presenting the most current research in the field of sociology. Topics explored include social diversity while critically examining the issues and challenges facing society. Additional areas covered are the theoretical and empirical foundations of sociology, the major themes of sociological research and the techniques employed.

S0303 RACE RELATIONS AND THE AMERICAN
EXPERIENCE
3 CREDITS

## PREREQUISITES: NONE

A historical and current look at immigration and race relations in the United States. Students will study the constructs of ethnicity and the American experience as viewed through the experiences of various social groups. The course culminates with a broad view of ethnicity in other societies and countries around the world.

## SO310 CULTURES IN CONFLICT

3 CREDITS

## PREREQUISITES: NONE

This course is designed for students who seek an understanding of causes and effects for strategically important conflicts in the world today. The course fosters discussion and dialogue pertaining to the complexity of cultural and social conflicts which have deep, varied, and often conflicting roots.

## S0330 SOCIAL PROBLEMS

3 CREDITS

## PREREQUISITES: NONE

This course gives students the opportunity to examine current social problems using the sociological perspective and sociological theory. Students will identify and consider the cultural and structural aspects of current social problems, examining and analyzing them with a focus on their causes, development and proposed solutions. Students will assess current research and will be given the opportunity to propose alternative solutions to contemporary social problems.

## SO351 TECHNOLOGY AND SOCIETY

## PREREQUISITES: NONE

Students examine the broad implications of technological applications within society in terms of overall connections and communication with others, career and personal interactions, political, and health care implications. Topics covered include technological progress within society, issues associated with privacy and ethical concerns through technological advancements, positive and negative impacts of technology in maintaining cultural norms and traditions, and technology in the workplace.

SS106 GEOGRAPHY
3 CREDITS

## PREREQUISITES: NONE

This course introduces the concepts and tools in geography and the major subfields of geography, including physical geography, population geography, cultural geography, political geography, economic geography, urban geography and regional geography. In addition, it affords an overview of the major world regions.


[^0]:    Please refer to your individual degree program for General Education course requirements.

[^1]:    *Failed or Withdrawn courses must be immediately repeated

[^2]:    CS165 ADVANCED MICROCOMPUTER APPLICATIONS 4 CREDITS PREREQUISITES: CS105
    This is a course using the Microsoft Office Suite. The applications covered are Word, Excel, Access and PowerPoint.

