**INFORMATION SYSTEMS (ISMG)**

**ISMG 2050 - Introduction to Business Problem Solving (3 Credits)**
Focuses on the technology and problem solving skills necessary for students to succeed both at school and in the business world. Focuses on business decision making using spreadsheets, database and web tools. Students solve problems in statistics, accounting, finance, marketing, management and information systems. The objective is to provide problem solving methods necessary for students to succeed in the business community. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy Business graduation and prerequisites for other business courses. Max hours: 3 Credits.
Grading Basis: Letter Grade

**ISMG 2075 - Introduction to Microsoft Access (1 Credit)**
Introduction to Microsoft Access prepares students to use data bases to analyze data and solve real-life business problems. It challenges students to use critical thinking and analysis to find efficient and effective solutions to real-life business situations. Students will use databases to solve problems in accounting, finance, and information systems. Prereq: Computer Competency. Max hours: 1 Credit.
Grading Basis: Letter Grade

**ISMG 2800 - Designing for the Web (3 Credits)**
Students examine how the Web is evolving to support a variety of business needs. The course covers the design and usability principals necessary for improving online interactions via traditional websites as well as using technologies promoting collaboration and information sharing (e.g. social networks, blogs, wikis, forms). Topics include: the principles of web page and web site design; hypertext markup language, cascading style sheets, streaming video, online collaboration technologies; client and server scripting; and the process of testing and publishing web sites. Coreq: ISMG 2050. As a corequisite, ISMG 2050 can be taken concurrently or completed prior. If completed prior, must earn a C- or higher. Restriction: Restricted to undergraduate Business majors at a sophomore standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq or Coreq: ISMG 2050. If completed prior, must earn a C- or higher.
Restriction: Restricted to undergraduate Business majors at a sophomore standing or higher.
Typically Offered: Spring.

**ISMG 3000 - Technology In Business (3 Credits)**
Covers the role of information technology in business organizations. It exposes students to innovative and interesting technologies and illustrates how those technologies are changing the way businesses operate. It highlights the importance of IT in organizations, including the relationship between technology & competitiveness, the alignment of business and IT strategy, the development and management of an effective IT infrastructure and the use of IT strategy, the development and management of an effective IT infrastructure and the use of IT-enabled organizational processes. Topics include: coping with information intensity, web sites, social networks and blogs; business intelligence at each level of management; IT based reports and data; collaboration and the impact of technology on organizational interaction; the use of IT for controlling and enhancing business processes; security, privacy & disaster recovery; and emerging technologies. Note: Business core course therefore a grade of a "C" or better must be earned to satisfy graduation requirements. Restriction: Restricted to undergraduate students at a junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Restriction: Restricted to undergraduate students at a junior standing or higher
Typically Offered: Fall, Spring.

**ISMG 3300 - Social Media in Business (3 Credits)**
This course focuses on the fundamentals and practical skills of social media marketing. Topics include social interactions, social media metrics, social media ads, content marketing, viral and influencer marketing, the use of social media in marketing research, managing consumers via social media, as well as other trends in social media marketing. Students engage in hands on applications including the creation and management of real brands’ social media marketing activities. Cross-listed with MKTG 3300. Prereq: MKTG 3000 with a grade of C or higher.
Restriction: Restricted to undergraduate Business majors at a junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq: MKTG 3000 with a grade of C or higher Restriction: Restricted to undergraduate Business majors at a junior standing or higher.
Typically Offered: Fall, Spring.

**ISMG 3500 - Enterprise Data and Content Management (3 Credits)**
The success of today's business often hinges on the ability to turn mountains of data into critical information to make right decisions quickly and efficiently. This course introduces students to data, content and multimedia management using current enterprise data management tools. Topics include: Oracle SQL for relational database and for multimedia content; Oracle forms and reports, XML, and content management.
Prereq: ISMG 2050 with a grade of C- or higher or department approved equivalent transfer credit (may need 1-credit ISMG 2075 as supplement).
Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
D-BU ISMG 2050 C+BUSNU+Junior
Typically Offered: Fall.
ISMG 3600 - System Strategy, Architecture and Design (3 Credits)
This course is designed to provide the understanding of current concepts related to information systems development in an organizational context. It emphasizes the interactive nature of the analysis and design process. Topics include: requirements analysis, model based analysis and design; evaluating outsourcing, COTS and other systems acquisition options; and quality, six-sigma, and ethics in design. New concepts such as agile modeling and extreme programming are covered. Prereq: ISMG 2050 with a grade of C- or higher or department approved equivalent transfer credit (may need 1-credit ISMG 2075 as supplement). Coreq: ISMG 3500. As a corequisite, ISMG 3500 can be taken concurrently or completed prior. If completed prior, must earn a D- or higher. Restriction: Restricted to undergraduate Business majors at a junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq: ISMG 2050 or equivalent with a grade of ‘C’ or higher. Coreq: ISMG 3500. Restriction: Restricted to undergraduate Business majors at a junior standing or higher.
Typically Offered: Spring.

ISMG 3939 - Internship (1-3 Credits)
Supervised experiences involving the application of concepts and skills in an employment situation. To enroll in an internship, students must work with the Experiential Learning Center on campus and have a 2.40 GPA or higher. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Repeatable. Max Hours: 9 Credits.
Grading Basis: Pass/Fail Only
Repeatable. Max Credits: 9.
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4028 - Travel Study Topics (3 Credits)
Join your classmates in an international travel study course to understand the business operations of another culture. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Repeatable. Max Hours: 9 Credits.
Grading Basis: Letter Grade
Repeatable. Max Credits: 9.
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4200 - Building Business Applications (3 Credits)
Examine how software platforms for mobile business applications are designed and implemented. Usability, logic, and platform selection issues are highlighted through the development of simple mobile business systems. Includes programming concepts, interface design; storing, retrieving, and manipulating information; real time decision making; platform selection, testing and deployment. Prereq: ISMG 2800 with a D- or higher. Coreq: ISMG 3500. As a corequisite, ISMG 3500 can be taken concurrently or completed prior. If completed prior, must earn a D- or higher. Restriction: Restricted to undergraduate Business majors at a junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq: ISMG 2800 Coreq: ISMG 3500 Restriction: Restricted to undergraduate Business majors at a junior standing or higher
Typically Offered: Fall.

ISMG 4200 - Information Security and Compliance (3 Credits)
This course covers information security threats and various mechanisms available to organizations to defend against information compromise. It offers thorough analysis of state, national, and international information security regulations with which businesses must comply, including the Sarbanes-Oxley, Gramm-Leach-Billey and Hippa Acts. The regulatory compliance analysis will include measures the organizations must and should perform to be in compliance. Coreq: ISMG 3000. As a corequisite, ISMG 3000 can be taken concurrently or completed prior. If completed prior, must earn a C or higher. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq or Coreq: ISMG 3000. As a prerequisite, a grade of C or higher is required. Restriction: Restricted to undergraduate Business majors with junior standing or higher
Typically Offered: Spring.

ISMG 4400 - Programming Fundamentals with Python (3 Credits)
This course is designed to provide a thorough introduction to Python and fundamental programming concepts like data structures, networked application program interfaces, files and databases. Principles of object-oriented programming and secure programming practices are demonstrated using programming constructs taken from the business domain. Students are required to design and create their own applications for data retrieval, processing, and visualization. Prereq: ISMG 2800 with a D- or higher. Co-req: ISMG 3500. As a corequisite, ISMG 3500 can be taken concurrently or completed prior. If completed prior, must earn a D- or higher. Restriction: Restricted to undergraduate Business majors at a junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq: ISMG 2800 Co-req: ISMG 3500 Restriction: Restricted to undergraduate Business majors at a junior standing or higher

ISMG 4450 - Web Development Immersive (12 Credits)
This course is designed to simulate what you'll experience in a real work environment, and covers the languages, frameworks, and computer science fundamentals essential to a career in web development. It will cover introduction to programming and Front End Development, Server Side Programming with Node, Front End frameworks and Single Page Applications, and Data Structures and Algorithms, as well as a capstone project. Restriction: Restricted to undergraduate Business majors at a junior standing or higher. Max hours: 12 Credits.
Grading Basis: Pass/Fail Only
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4450 - Building Business Applications (3 Credits)
Examine how software platforms for mobile business applications are designed and implemented. Usability, logic, and platform selection issues are highlighted through the development of simple mobile business systems. Includes programming concepts, interface design; storing, retrieving, and manipulating information; real time decision making; platform selection, testing and deployment. Prereq: ISMG 2800 with a D- or higher. Coreq: ISMG 3500. As a corequisite, ISMG 3500 can be taken concurrently or completed prior. If completed prior, must earn a D- or higher. Restriction: Restricted to undergraduate Business majors at a junior standing or higher. Max hours: 3 Credits.
Grading Basis: Letter Grade
Prereq: ISMG 2800 Coreq: ISMG 3500 Restriction: Restricted to undergraduate Business majors at a junior standing or higher
Typically Offered: Fall.
ISMG 4700 - Business Data Communications and Networking (3 Credits)
Provides an in-depth knowledge of data communications and networking requirements including: networking and telecommunications technologies, hardware, and software. Emphasis is upon the analysis and design of networking applications in organizations. Management of telecommunications networks, cost-benefit analysis, and evaluation of connectivity options are also covered. Students learn to evaluate, select, and implement different communication options within an organization. Topics include: network hardware and software; network configuration; network applications; distributed versus centralized systems; network architectures, topologies and protocols; network performance analysis; privacy, security, reliability; management of telecommunications, and communications standards. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits. Grading Basis: Letter Grade
Restriction: Restricted to undergraduate Business majors with junior standing or higher
Typically Offered: Spring.

ISMG 4750 - Business Intelligence and Financial Modeling (3 Credits)
This course will introduce students to the application of business intelligence in a corporate finance setting. Financial data intelligence is essential for effective decision making throughout the firm, in finance directly and in other functions supported by the finance department. Strategy setting, budgeting, and new product development are just a few decision areas where finance personnel play an active role. In this course, we learn how to apply business intelligence software tools to enable finance personnel to access and analyze corporate data in support of critical decision making across the enterprise. Students will also analyze data through the use of financial models built in Microsoft Excel. The development of complex financial models will provide students with valuable hands-on experience with a software tool used widely incorporate finance departments. Prereq: ISMG 2050 with a grade of 'C-' or higher, FNCE 3000 and ISMG 3000 (ACCT 4054 may substitute for ISMG 3000) all with a grade of 'C' or higher. Cross-listed with FNCE 4750 and ISMG 6820. Max hours: 3 Credits. Grading Basis: Letter Grade
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4760 - Customer Relationship Management (3 Credits)
This marketing-theory driven course examines customer relationship management (CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM architectures, topologies and protocols; network performance analysis; privacy, security, reliability; management of telecommunications, and communications standards. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits. Grading Basis: Letter Grade
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4780 - Accounting and Information Systems Processes and Controls (3 Credits)
The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Cross-listed with ACCT 4780, 6510 and ISMG 6510. Prereq: Completion of ACCT 2200, ACCT 2220 and ACCT4054 with a grade of 'C' or better. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits. Grading Basis: Letter Grade
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4785 - Ethics: A Formula for Success (3 Credits)
Students will learn how to spot and address red flags that foster unethical behavior in both publicly-traded and privately-held businesses. Governance and stakeholder management techniques that incentivize ethical behavior will be highlighted using examples of companies that are financially successful by “doing the right thing.” Principle-based ethics are emphasized, namely, integrity, trust, accountability, transparency, fairness, respect, viability, and compliance with the rule of law. Cross-listed with MGMT 3420, MGMT 6420, ISMG 6885. Restriction: Restricted to undergraduate Business majors with junior standing or higher. Max hours: 3 Credits. Grading Basis: Letter Grade
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4840 - Independent Study (1-8 Credits)
Restriction: Restricted to undergraduate Business majors with junior standing or higher. Repeatable. Max Hours: 8 Credits. Grading Basis: Letter Grade Repeatable. Max Credits: 8.
Restriction: Restricted to undergraduate Business majors with junior standing or higher

ISMG 4900 - Project Management and Practice (3 Credits)
Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: Students must be a junior status and have completed either 1. ISMG 3000 or ACCT 4054 and MGMT 3000 and MKTG 3000, OR 2. ISMG 3000 and ISMG 3500 and ISMG 3600. Restriction: Restricted to undergraduate students in the Business School. Max hours: 3 Credits. Grading Basis: Letter Grade
Restriction: Restricted to undergraduate students in the Business School.
ISMG 4950 - Special Topics (3 Credits)
Seldom offered. This course varies from offering to offering. Typically, it is a research-oriented course exploring new developments in information systems. Prerequisites vary according to topic. Restriction: Restricted to undergraduate Business majors with junior standing or higher.
Repeatable. Max Hours: 9 Credits.
Grading Basis: Letter Grade
Repeatable. Max Credits: 9.
Restriction: Restricted to undergraduate Business majors with junior standing or higher