Management Information Systems

Bachelor of Science (2 options)
- Bachelor of Science (p. 1)
  - Bachelor of Science with Health Care Informatics Concentration
    (https://catalog.uis.edu/undergraduate-students/cbam/mis/health-care-informatics)

Undergraduate Minor
Master of Science (https://catalog.uis.edu/graduate-students/cbam/mis/#masterstext)
Graduate Certificates (https://catalog.uis.edu/graduate-students/cbam/mis/#certificatetext) – 3

mis.uis.edu/
Email: MIS@uis.edu
Office Phone: (217) 206-6067
Office Location: UHB 4021

Departmental goals and objectives
The goal of the MIS department is to prepare students for challenging positions in everything from the application of information technology to solving business problems. Specific objectives of our MIS degree programs are to:

1. provide students with the analytical and practical frameworks and methodologies necessary to analyze, design, implement, and manage complex information systems in contemporary organizational structures;

2. provide knowledge of the principles necessary for understanding basic computer hardware and software systems to ensure the data quality, transmission, processing, and storage necessary to facilitate organizational decision making and general operations;

3. enable students to develop competencies in applying systems analysis and design strategies and techniques in realistic marketplace environments; and

4. provide a balance between technical and organizational knowledge for a variety of professional organizations.

In addition, upon completion of a Bachelor’s degree through the College of Business and Management, students will meet the following goals and objectives:

- demonstrate effective written communication skills.
- understand the use of information technologies in organizations.
- understand, interpret, and analyze quantitative problems and quantitatively presented information.

The Bachelor’s Degree
The bachelor’s degree provides students with both a foundation in business, and skills in management information systems, rather than a foundational focus on computer science. The skill set combination prepares students to provide solutions and achieve goals for companies, non-profit organizations, and government agencies. The B.S. in MIS degree program also equips students with expertise from a holistic business perspective, versus merely a micro-level or science perspective. Our focus on applications of the Internet and the World Wide Web will allow students to combine their knowledge of computing and organizations to bridge the gap between technical and business specialists. The B.S. in Management Information Systems may be earned online, blended, or through a combination of online and blended modes of delivery.

Advising
New students must contact the department for initial advising to plan a program of study that reflects their interests and satisfies degree requirements. Students are also required to access the Degree Audit Reporting System (DARS (https://eas.admin.uillinois.edu/eas/servlet/EasLogin?redirect=https://darsweb.admin.uillinois.edu:443/darwebstu UIS/servlet/EASDarsServlet)) throughout their college career to verify that degree requirements are being met.

Grading Policy
The Management Information Systems program has minimum grade requirements as noted in the degree requirements’ sections outlined below. For questions related to the grading policy, please contact your advisor.

Degree requirements
Foundation requirements

All majors in the College of Business and Management require foundation knowledge in accounting, economics, mathematics, and statistics. Students must earn a cumulative GPA of at least 2.0 across all foundation courses. UIS courses that satisfy the foundation knowledge requirements include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACC 211</td>
<td>Introduction to Financial Accounting</td>
<td>6</td>
</tr>
<tr>
<td>ACC 212</td>
<td>and Introduction to Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>ECO 213</td>
<td>Statistics for Business and Economics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 113</td>
<td>Business Calculus (or an equivalent)</td>
<td>4</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Introduction to Microeconomics</td>
<td>4-6</td>
</tr>
<tr>
<td>ECO 202</td>
<td>and Introduction to Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>or ECO 315</td>
<td>Economics for Administration</td>
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</tbody>
</table>

Total Hours 17-19

1 A minimum grade of C- is required in ALL foundation courses.

Course work equivalent to the above may be accepted upon approval by the student’s advisor.
The college core is required of all undergraduate College of Business and Management students. Students must earn a cumulative GPA of at least 2.0 across all college core courses.

MIS 352  Principles of Management Information Systems  3  
BUS 302  Principles of Financial Management  3  
BUS 312  Principles of Marketing  3  
BUS 322  Principles of Operations Management  3  
BUS 331  Business, Ethics, and Society  3  
MGT 310  Managing Organizational Behavior  3  
MGT 488  Strategic Management: The Capstone  3  

Total Hours  21  

A minimum grade of C- is required in all College Core courses EXCEPT MGT 488. A minimum grade of C (2.0) is required in MGT 488 (a grade of C- or lower will not be accepted).

Prerequisite: Completion of all college core courses and within 12 credit hours of graduation or during the student's last semester.

Major Requirements – MIS Core
To earn a Bachelor’s of Science in Management Information Systems a student must:

• Complete at least 54 semester hours from a four year baccalaureate-granting institution;

• Complete at least 48 semester hours of upper-division (300-400 level) course work;

• Complete at least one half of his or her business course work at UIS (college core and major); and

• Earn a cumulative grade point average of at least 2.0 across all courses required for the major.

All MIS undergraduate majors must complete 30 core credit hours to fulfill the degree requirements as follows:

CSC 225  Computer Programming Concepts I  3  
CSC 275  Computer Programming Concepts II  3  
MIS 371  Enterprise Architecture  3  
MIS 385  Data and Information Management  3  
MIS 395  Electronic Business Strategy, Architecture, and Design  3  
MIS 454  Systems Analysis and Design  3  
MIS 456  Networks and Telecommunications in Organizations  3  
MIS 458  IS Project Management  3  
MIS 468  Business Process Management  3  
MIS 469  IS Strategy Management and Acquisition  3  

Total Hours  30  

Other requirements include:

Engaged Citizenship Common Experience (ECCE)  10  

The Management Information Systems degree requires a minimum of three hours of internship course work consisting of an individualized field experience (IPL 300) or an individual project (IPL 301). Students are encouraged to complete six hours of internship. All six hours can be used to fulfill ECCE requirements. After consultation with their advisor, students may petition to waive the three hour requirement using the student petition form. A petition to substitute an alternative ECCE course will only be approved in exceptional cases.

Credit for Prior Learning (IPL 305) may not be used by College of Business and Management students to fulfill degree requirements.

Students must complete a minimum of 18 hours in Management Information Systems prefix courses (MIS) at the UIS College of Business and Management.

Degree Plan*

*Listed below is a SUGGESTED Degree Plan. For OFFICIAL program information, please refer to the catalog content above and consult your academic advisor.

Year 1
Fall  Hours
Freshman Seminar  1  3  
ENG 101  Rhetoric and College Writing  3  
COM 112  Oral Communication  3  
Humanities  1  
ECO 201  Introduction to Microeconomics  3  

Hours  15  

Spring  
Science without lab (Life or Physical)  1  3  
ENG 102  College Writing and Civic Engagement  3  
Visual/Performing Arts Humanities (Not IAI transferable)  1  3  
MAT 113  Business Calculus  4  
(Soc GenEd)  2  
ECO 202  Introduction to Macroeconomics  3  

Hours  16  

Year 2
Fall  
Comparative Societies (Humanities)  1  3  
ACC 211  Introduction to Financial Accounting  3  
ECO 213  Statistics for Business and Economics  3  
CSC 225  Computer Programming Concepts I  3  
Upper or Lower Division Elective or Minor course  6  3  

Hours  15  

Spring  
Science with lab (Life or Physical)  1  4  
ACC 212  Introduction to Managerial Accounting  3  
Social Science (PSY or SOC recommended)  3  
CSC 275  Computer Programming Concepts II  3  
MGT 310  Managing Organizational Behavior  3  

Hours  16
### Year 3
#### Fall
- **BUS 302**: Principles of Financial Management 3
- **BUS 312**: Principles of Marketing 3
- **BUS 322**: Principles of Operations Management 3
- **MIS 352**: Principles of Management Information Systems 3
- Upper or Lower Division Elective or Minor course (Health Care Informatics students: replace with MIS 325 - Health Care Informatics Programming) 3

**Hours**: 15

#### Spring
- **BUS 331**: Business, Ethics, and Society 3
- **MIS 371**: Enterprise Architecture 3
- **MIS 385**: Data and Information Management 3
- **MIS 395**: Electronic Business Strategy, Architecture, and Design 3

**Hours**: 15

### Year 4
#### Fall
- **IPL 300**: ECCE: Internship Applied Learning 2-12
- **MIS 454**: Systems Analysis and Design 3
- **MIS 456**: Networks and Telecommunications in Organizations 3
- **MIS 458**: IS Project Management 3

**Hours**: 11-21

#### Spring
- **ECCE**: U.S. Communities OR 300 or 400 level of Global Awareness (Health Care Informatics students: replace this with MIS 478 - Health Care Information Systems Security) 3
- **UNI 301**: ECCE: Speakers Series 1
- **MIS 468**: Business Process Management 3
- **MIS 469**: IS Strategy Management and Acquisition 3
- **MGT 488**: Strategic Management: The Capstone 3

**Hours**: 13

**Total Hours**: 116-126

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1. **General Education Requirements - 37-43 Hours**
2. **Foundation Course Requirements - 17-19 Hours** (Some courses fulfill Gen. Ed Req.):
   - A minimum grade of C- is required in ALL foundation courses. A cumulative GPA of at least 2.0 is required across all CBM Foundation courses.

### College Core Course work - 21 Hours
- A cumulative GPA of at least 2.0 is required across all college core courses.
- A minimum grade of C- is required in each core course except MGT 488 where a minimum grade of C (2.0) is required (a grade of C- or lower will not be accepted).
- MGT 488 must be taken during the student’s last semester. All other core classes are prerequisites to MGT 488.

### MIS Major Course work - 30 Hours
- Cumulative grade point average of at least 2.0 across all courses required for the major.

### ECCE Requirements - 10 Hours
- Along with Speaker series, students must fulfill their ECCE requirements by selecting courses from at least two of the three available ECCE categories including U.S. Communities, Global awareness and Engagement Experience.

### Upper Division Electives - 12 Hours
- Can be used towards a minor or study abroad and can be selected outside of major.

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**CBM strictly enforces prerequisites. Refer to the catalog for specific CBM and Program requirements.**

### Transferring in College Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
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<tr>
<td>BUS 302</td>
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</tr>
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<td>3</td>
</tr>
</tbody>
</table>

The following requirements must be met in order for transfer credit to fulfill an upper division college core course requirement:

- The course must be an upper division course.
- The course must have been completed within six years prior to admission.
- A grade of C (2.0) or better must be earned in each course requested for transfer. (grades of C- or lower will not be accepted).
- No more than three courses or nine hours of transfer credit may be used to fulfill CBM college core course work.
- MGT 488 Strategic Management: The Capstone must be completed at UIS.

### Online Degree

An online degree completion program is available in Management Information Systems (MIS). The online degree completion plan allows students to participate in a dynamic online learning community and complete their course work using the latest information technologies and educational resources via the worldwide web. The fully online delivery mode is designed for students who have an associate’s degree or at least 54 hours of completed college credit towards a bachelor’s degree.

### Undergraduate MIS Minor

To earn an undergraduate minor in Management Information Systems, students must complete a minimum of five courses totaling 15 credit hours, at least nine hours of which must be upper-division course
work taken at UIS. You must get at least a "C" grade in all 3 MIS courses (below), which make up the MIS minor. Prerequisites include proficiency in a spreadsheet and/or a database package or completion of CSC 317 Software Packages.

**Required Courses**

- **MIS 352** Principles of Management Information Systems 3
- **MIS 385** Data and Information Management 3
- **MIS 395** Electronic Business Strategy, Architecture, and Design 3

**Elective Courses**

Select at least two of the following: 6
- **ACC 211** Introduction to Financial Accounting
- **ACC 212** Introduction to Managerial Accounting
- **ECO 201** Introduction to Microeconomics
- **ECO 202** Introduction to Macroeconomics
- **ECO 315** Economics for Administration

**Total Hours** 15

**Courses**

**MIS 323. ECCE: Social Health Care Informatics. 3 Hours.**
This course will introduce students to key social research perspectives on the use of information technology in health care delivery systems. Students will discuss current issues in social health care informatics such as the impact of digital disparities, and the role of health information technology in improving health care for underserved or vulnerable U.S. communities. The course will also introduce students to methodologies for health care informatics research. This course fulfills an Engaged Citizenship Common Experience requirement at UIS in the area of U.S. Communities.

**MIS 325. Health Care Informatics Programming. 3 Hours.**
This course covers fundamental principles, concepts, and methods of computing, with emphasis on applications in the Health Care Informatics area. This course includes problem solving and programming techniques; fundamental algorithms and data structures; use of computers in solving health care delivery related problems; and an intro to software development environments in the health care area. Course Information: Prerequisite: CSC 275 or equivalent.

**MIS 352. Principles of Management Information Systems. 3 Hours.** (CBM core course) Introduces students to fundamental concepts in management information systems (MIS), the role of computers in MIS, and some details of how the computer functions. Topics include various types of information systems, use of information by management, and information systems applications. The students will also be exposed to the application of MIS technologies in the development of business solutions through end user computing and topics such as computer hardware and software, operating systems, and security. Course Information: Enrollment requires completion of at least 48 hours of college level coursework. Access to the Internet is required.

**MIS 370. Topics in Management Information Systems. 1-4 Hours.**
An advanced topic from the current literature of MIS. May be repeated for an indefinite number of hours, but particular topics must differ. Course Information: Access to the Internet is required.

**MIS 371. Enterprise Architecture. 3 Hours.**
This course explores the design, selection, implementation, and management of enterprise IT solutions. The focus is on applications, infrastructure, and their fit with the business. Students learn frameworks and strategies for infrastructure management, system administration, data/information architecture, content management, middleware, software selection, total cost of ownership calculation, and IT investment analysis. Access to the Internet is required. Course Information: Prerequisite: CSC 275 or equivalent.

**MIS 385. Data and Information Management. 3 Hours.**
This course provides students with an introduction to the core concepts in data and information management. Core skills of identifying organizational information requirements, conceptual data, modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database using an industrial-strength database using management system. Course Information: Prerequisite: MIS 352. Access to the Internet is required.

**MIS 395. Electronic Business Strategy, Architecture, and Design. 3 Hours.**
The course focuses on the linkage between organizational strategy and networked information technologies to implement a rich variety of business models in the national and global contexts connecting individuals, businesses, governments and other organizations to each other. The course provides an introduction to ebusiness strategy and the development and architecture of e-business solutions and their components. Course Information: Prerequisite: MIS 352. Access to the Internet is required.

**MIS 454. Systems Analysis and Design. 3 Hours.**
The course covers a systematic methodology for analyzing a business problem or opportunity, determining what role, if any, computer-based technologies can play in addressing the business need, articulating business requirements for the technology solution, specifying alternative approaches to acquiring the technology capabilities needed to address the business requirements, and specifying the requirements for the information systems solution in particular, in-house development, development from third party providers, or purchased commercial-off-the-shelf (COTS) packages. Alternative design, development, and implementation methodologies are discussed. Course Information: Prerequisite: MIS 352 and MIS 385. Access to the Internet is required.

**MIS 455. Human-Computer Interaction Design. 3 Hours.**
This course provides an introduction to the field of Human Computer Interaction (HCI), an interdisciplinary field that integrates cognitive psychology, design, information systems, and others. Examining the human factors associated with information systems. The course provides students with knowledge to understand the influence of usability in the acceptance of information systems. This course will examine concepts, guidelines, and principles of HCI.

**MIS 456. Networks and Telecommunications in Organizations. 3 Hours.**
This course 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 covered. Course Information: Prerequisite: MIS 352. Access to the Internet is required.
MIS 458. IS Project Management. 3 Hours.
This course discusses the processes, methods, techniques, and tools that organizations use to manage their information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course assumes that project management in the modern organization is a complex team-based activity where various types of technologies (including project management software, as well as software to support group collaboration) are an inherent part of the project management process. This course also acknowledges that project management involves both the use of resources from within the firm, as well as contracted from outside the organization. Course Information: Prerequisite: MIS 352 and BUS 322. Access to the Internet is required.

MIS 468. Business Process Management. 3 Hours.
Students will be introduced to key concepts and approaches to business process management and improvement. The focus of this course is both understanding and designing business processes. Students will learn how to identify, document, model, assess, and improve core business processes. Students will be introduced to design principles. The way in which information technology can be used to manage, transform, and improve business processes is discussed. Students will be exposed to challenges and approaches to organizational change, domestic and offshore outsourcing, and inter-organizational processes. Course Information: Prerequisite: MIS 352. Access to the Internet is required.

MIS 469. IS Strategy Management and Acquisition. 3 Hours.
This course explores the issues and approaches in managing the information systems function in organizations and how the IS function integrates/supports/enables various types of organizational capabilities. It takes a senior management perspective exploring the acquisition, development, and implementation of plans and policies to achieve efficient and effective information systems. The course addresses issues relating to defining the high-level IS infrastructure and the systems that support the operational, administrative, and strategic needs of the organization. Course Information: Prerequisite or co-requisite: All MIS required courses. Access to the Internet is required.

MIS 470. Advanced Topics in Management Information Systems. 1-3 Hours.
An advanced topic from the current literature of MIS. May be repeated for an indefinite number of hours, but particular topics must differ. Course Information: Access to the Internet is required.

MIS 478. Health Care Information Systems Security. 3 Hours.
This course covers technical and managerial security issues in generation, storage, and access of healthcare information. Technical issues include threats, vulnerabilities, and controls in healthcare information systems. Managerial issues include risk management, security planning, disaster recovery, legal and ethical issues, such as privacy and confidentiality of patient information. Course Information: Prerequisites: MIS 352.

MIS 499. Tutorial. 1-3 Hours.
Intended to supplement, not supplant, regular course offerings. Students interested in a tutorial must secure the consent of the faculty member concerned before registration and submit any required documentation to him or her. Course Information: Access to the Internet is required.

MIS 502. Technical Foundations of Information Systems. 3 Hours.
Introduces details of computer hardware and software technologies necessary for information systems professionals. Particular hardware architectures (CISC, RISC), operating systems fundamentals, and concepts of mobile application development will be described. Programming skills for mobile applications will be developed. Course Information: Prerequisite: Proficiency or coursework in a high level programming language such as Java, C++, Visual Basic, COBOL, C, Fortran, etc. Access to the Internet is required. Restricted to graduates.

MIS 513. Management Information Systems. 3 Hours.
Provides a foundation for understanding and analyzing information in organizations. Fundamental concepts of systems and information are covered. Topics include computer-based information systems, user requirements, and analysis and specification of systems requirements, life cycle, and security. Course Information: Open to non-majors. Access to the Internet is required.

MIS 523. Managerial Decision Support Systems. 3 Hours.
Covers a variety of related decision support systems topics. Gives participants a flexible definition of DSS technology and introduces some principles of DSS design and use. Equips students with fundamental concepts and techniques of expert systems. Special emphasis is placed on microcomputer-based decision support systems. Course Information: Prerequisite: BUS 322 or equivalent and MIS 513 or equivalent, and one semester of production operations management. MIS 513 can be taken concurrently with MIS 523. Access to the Internet is required.

MIS 525. Information Technology Management. 3 Hours.
Familiarity with a broad range of managerial as well as technical issues, technologies, and terminologies such as information systems high-level architecture and life cycle, information flow within organization, managerial decision making tools, data quality control and assurance, ethical and legal aspects of IS, and successful implementation of IS projects. Course Information: Core required course for MBA. Not accepted toward satisfaction of MIS program requirements. Prerequisites: Completion of or concurrent enrollment in ACC 311 or equivalent, and ECO 315 or equivalent, and BUS 501 (a prerequisite for MBA students only). Peoria Cohort students must complete ACC 311 or equivalent and ECO 315 or equivalent prior to enrolling in this course. Access to the Internet is required. Restricted to Graduate and Doctoral - Springfield and Graduate - Peoria.

MIS 542. Management of Database Systems. 3 Hours.
Database design theory and development techniques are covered where the main focus is on the relational databases. Topics discussed include data modeling theories (entity-relationship diagrams) and theory implementation in CASE tools, data definition language to create physical databases in commercially available RDBMS such as Oracle 9i, data manipulation language and Structured Query language (SQL) to manage data within the database, client/server, distributed and Internet databases architectures, form and report design using Microsoft Access database. The main goal is to train the students to assume roles such as database analyst/designer or administrator throughout their professional career. Course Information: Prerequisites: MIS 513 (may be taken concurrently). "Curricular Practical Training" available, but not required. Access to the Internet is required.
MIS 552. System Analysis And Design. 3 Hours.
The overall goal of this course is to introduce students to a wide range of theoretical as well as practical techniques and methodologies in the area of information systems analysis and design. The course will train the students to assume roles such as systems analyst and technical project management in their career. The three most important topics addressed in the course are Analysis, Design, and Implementation of information systems where Systems Development Life Cycle, various diagramming techniques, and decision analysis concepts are discussed and practiced. Course Information: Curricular Practical Training available, but not required. Prerequisites: MIS 513 (may be taken concurrently). Access to the Internet is required.

MIS 564. Data Communications and Networking. 3 Hours.
Telecommunications involve transmission of data, voice, image, and video over communication networks. This course covers the concepts, models, architectures, protocols, standards, and security for the design, implementation, and management of digital networks. Fundamental network concepts are introduced using a network model that divides data communications into multiple layers, such as application, network and transport, data link, and physical layer. Network technologies are covered in terms of different types of networks (i.e. local area networks (LAN), backbone networks, wide area networks (WAN), wireless networks, and the Internet). Network management and security are also emphasized. Course Information: Prerequisites: MIS 513 (may be taken concurrently).

MIS 567. Business Process Modeling and IT Governance. 3 Hours.
This course enables students to learn about the methodologies used to redesign optimal business processes and related information technologies used in support of process innovation. Students learn about the state-of-the-art techniques used in support of business process modeling, simulation, analysis, and redesign. These techniques, learned through hands-on practice with SAP systems and ARIS simulation, include: identifying best-practice process, workflow automation, simulation of the business processes, and design of strategic enterprise management systems for efficient and effective use of information technology in support of business operations. Moreover, in this course, students learn about the concepts, principles, and models of enterprise governance of Information Technology in support of business process change and management. Course Information: Prerequisites: MIS 513.

MIS 568. Business Process Management and Innovation. 3 Hours.
This course covers the following: a process-oriented view of the organization and its relationships with suppliers, customers, and competitors; processes as vehicles for achieving strategic objectives and transforming the organization; process analysis, design, implementation, control and monitoring; processes as a means of achieving compliance; impact on work; the role of enterprise resource planning, supply chain management, and customer relationship management systems; and the process continuum - from structured to unstructured processes. The role of Business Process Innovation will also be reviewed in terms of incremental improvements, process automation, and process redesign. Course Information: Prerequisites: MIS 567.

MIS 570. Topics in Management Information Systems. 3 Hours.
An advanced topic from the current literature of MIS. Course Information: May be repeated if topics vary. Access to the Internet is required.

MIS 573. Project and Change Management. 3 Hours.
Managing projects within an organizational context, including the processes related to initiating, planning, executing, controlling, reporting, and closing a project. Project integration, scope, time, cost, quality control, and risk management. Software size and cost estimation. Assigning work to programmer and other teams, monitoring progress and version control, managing the organizational change process. Identifying project champions, working with user teams, training, and documentation. The change management role of the IS specialist. The use of sourcing and external procurement; contracts and managing partner relationships. Students will be exposed to knowledge base needed for Project Management certification. Course Information: Prerequisite: BUS 322, or equivalent, or permission of instructor. “Curricular Practical Training” available, but not required. Access to the Internet is required.

MIS 583. Graduate Project And Seminar. 3 Hours.
Open to non-MIS majors. Access to Internet is required. Restricted to Doctoral - Springfield, Graduate - Springfield.

MIS 576. Data Warehousing. 3 Hours.
Data warehousing is an emerging technology within the IT industry. It provides an infrastructure to collect subject-oriented data for predefined strategic as well as tactical managerial decision making purposes such as planning, logistics and promotions. The main topics covered are dimensional modeling, Star and Snowflake scheme, data staging, logical and physical design and implementation, and query design. State-of-the-art database technologies are used to demonstrate and practice the concepts, methodologies, and techniques. Course Information: Prerequisite: MIS 542. “Curricular Practical Training” available, but not required. Access to the Internet is required.

MIS 577. MIS Design and Research Methods. 3 Hours.
The major objective of this course is to discuss fundamentals of MIS research and design science methodologies. The participants will learn how to conduct quantitative, qualitative, and design science research within the MIS context. Topics covered include methods for systematic literature review, gap identification, data collection and analysis, as well as interpretation and presentation of finding. After completing this course, participants should be able to conduct applied and/or theoretical MIS-related research. Course Information: Prerequisites: Introductory Statistics.

MIS 578. Information Security. 3 Hours.
This course will cover both technical and non-technical aspects of information security. The technical part will cover information security threats, vulnerabilities and controls. The technical materials focus on concepts and principles rather than design and implementation. The non-technical part will cover risk management, security planning and disaster recovery, legal, ethical and professional issues. Course Information: Prerequisite: MIS 564. This is an MIS graduate level elective course. Access to the Internet is required.

MIS 583. Graduate Project And Seminar. 3 Hours.
Closure experience involving an advanced problem or need in MIS; may or may not involve a practicum. Project topic must be approved in advance by the MIS Department Committee; written report and oral presentation required. Students are required to participate in a regularly scheduled seminar that covers the process of project design and methods in MIS. Access to the Internet is required. NOTE: If the project is not completed during the initial four-hour enrollment, students must register for MIS 586 for zero credit hours (one billable hour) in all subsequent semesters until the project is completed. Course Information: Prerequisite: 24 hours of 500 level coursework in MIS. “Curricular Practical Training” available, but not required. Access to the Internet is required.
**MIS 584. Capstone. 3 Hours.**
Covers current topics in MIS including issues related to areas of business environment, technology, globalization, politics, ethics, legal, regulatory, and demographic diversity. The role of MIS in those areas will be addressed. In each semester, these selected topics may not be the same depending on what topics are current and emerging. Assignments include paper critiques, group discussions, and a final paper or project. This course is primarily for MIS majors and should be taken in the last semester of the MIS degree program. NOTE: If this course is not completed during the initial enrollment, students must register for the course and re-take it again. Course Information: Prerequisites: Successful completion of at least 27 credit hours of 500-level coursework in MIS. "Curricular Practical Training" available, but not required. Access to the Internet is required.

**MIS 585. Thesis And Seminar. 6 Hours.**
Academic study of a student-selected topic in MIS that involves a survey of relevant literature and empirical analysis. Thesis topic must be approved in advance by the MIS Department Committee; written report and oral presentation required. Students are required to participate in a regularly scheduled seminar that covers the process of conducting research in the field of MIS and phases of the research process. NOTE: If the thesis is not completed during the initial six-hour enrollment, students must register for MIS 587 for zero credit hours (one billable hour) in all subsequent semesters until the thesis is completed. Course Information: Prerequisite: 24 hours of 500-level coursework in MIS. "Curricular Practical Training" available, but not required. Access to the Internet is required.

**MIS 586. Graduate Project and Seminar Continuing Enrollment. 0 Hours.**
Refer to NOTE in course description for MIS 583. Course Information: May be repeated.

**MIS 587. Thesis and Seminar Continuing Enrollment. 0 Hours.**
Refer to NOTE in course description for MIS 585. Course Information: May be repeated. Access to the Internet is required.

**MIS 599. Tutorial. 1-3 Hours.**
Intended to supplement, not supplant, regular course offerings. Students interested in a tutorial must secure the consent of the faculty member concerned before registration and submit any required documentation to him or her. Course Information: May be repeated to a maximum of 3 hours. Access to the Internet is required.