

# Department of Information System

## Graduate Level Courses(CIS)

- CIS 500**                      **Information Systems for Management**                      **4**  
Hardware, systems software, applications software, and telecommunication components and architecture of operational and management oriented information systems. Cases in managing the acquisition and use of custom developed and packaged systems.
- CIS 501**                      **Application Programming**                      **4**  
Prerequisite: CIS 100. Algorithm development for business applications using structured and object-oriented programming; planning, designing, coding, debugging, and documenting programs.
- CIS 502**                      **Analysis and Logical Design I: Data/Object Structures**                      **4**  
Prerequisite CIS 501. Introduction to data structures and to structured, relational, and object database management systems; designing and programming personal and production-oriented database system.
- CIS 503Z**                      **Analysis and Logical Design II: Methodology**                      **4**  
Prerequisite: CIS 501. Package and custom systems development life cycles; feasibility and requirements determination; process, data and object modeling, design and implementation; change management.
- CIS 504**                      **Information Systems**                      **4**  
Overview of computer, communication and software systems. Cases in: business applications of information technology, managing the acquisition and use of application systems, and working with the information systems organization.
- CIS 510**                      **IS/IT Architectures**                      **4**  
Prerequisite: Procedural language programming experience. Analysis of contemporary information technology architectures and environments, including: multi-tiered client/server architectures; enterprise, workgroup, and personal systems hardware and operating systems; and business systems planning and development tools.
- CIS 520**                      **Software Engineering**                      **4**  
Status and problems with methodologies and tools underlying specification estimation, justification, design, development, installation and maintenance of large business software and systems integration projects.
- CIS 527**                      **Seminar: Decision Support Systems**                      **4**  
Analysis, design, management, and use of tools needed to mine decision support data from data warehouses, the Web, and commercial information services.



management and to internal and external auditors.

**CIS 585                      Communication and Information Services                      4**

Prerequisite: CIS 504. Voice and data communication technologies that underlay the Internet; tools and strategies needed for e-commerce and information services.

**CIS 586                      Information Systems Project and Change Management                      4**

Organizational, behavioral and life-cycle aspects of the project planning, staffing, control, and implementation elements of technology based systems.

**CIS 590                      IS/IT Policy and Strategy                      4**

Prerequisite: CIS 504. Discussion of the strategic perspective for aligning organizational strategy, core competencies, and information systems and technology. Partnership roles of the CEO and CIO.

**CIS 598                      Graduate Directed Study                      1**

Investigation of an approved project leading to written report; project selected in conference with seminar professor, and arrangement made for regular meetings during quarter. May be repeated for credit.