Computer Information Systems Courses

**Courses**

**CIS 3301. Intro to Data Process & Prog.**  
Introduction to Data Processing and Programming: Introduction to the representation, storage, and manipulation of structured data types and file processing techniques. A structured programming language will be used to illustrate the application of these concepts.  
**Department:** Computer Information Systems  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours

**CIS 3325. Adv Microcomp Bus Applications.**  
Advanced Microcomputer Business Applications: The advanced use of popular application software including Excel, Access, and VBA in solving a variety of business problems. The course is designed to provide the students with advanced set of skills on the software and in decision making through the efficient management of information and problem solving. VBA is covered in a way of automating and improving the functionality within the Microsoft Office suite. A term project involves development of application in the student’s area of interest that links the power of database, spreadsheet and other such packages.  
**Department:** Computer Information Systems  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours  
**Major Restrictions:**  
Restricted to majors of ACCT, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM, POM

**CIS 3340. Org Impact-Information Tech.**  
Organizational Impact of Information Technology (3-0) This course integrates both computer concepts and information systems concepts, and provides a strong managerial emphasis. Impact of information technology as well as organizational, global, strategic, and end-user computing issues will be covered. Restricted to majors: ACCT, BSAD, CIS, ECON, FIN, MGMT, and MKT.  
**Department:** Computer Information Systems  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours

**CIS 3345. Management Information Systems.**  
Management Information Systems: This course integrates both computer concepts and information systems concepts, and provides a strong managerial emphasis focusing on the impact of technologies in different environments. The course provides the fundamentals of management of information systems including organizational, global and strategic issues.  
**Department:** Computer Information Systems  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours

**CIS 3350. Systems Analysis and Design.**  
Systems Analysis and Design: This course provides a methodical approach to Systems Analysis and Design. Topics include business cases, requirements modeling, data and process modeling, and development strategies, with focus on object modeling and project management. Students also learn about output and user interface design, data design, systems architecture, implementations, and systems operations, support, and security. Students are required to use CASE/OM tools to collectively analyze business situations and design computer-based Computer Information Systems solutions.  
**Department:** Computer Information Systems  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours
Business Analysis Tools This course will be an introduction to business intelligence and will include such topics as data warehousing, business performance management, data mining for business intelligence, text and web mining, business intelligence implementation integration and emerging trends, relevant statistical methods and applicable CASESs.

**Department:** Computer Information Systems

**3 Credit Hours**

**3 Total Contact Hours**
0 Lab Hours
3 Lecture Hours
0 Other Hours

**Major Restrictions:**
Restricted to majors of ACCT, BSAD, CIS, ECON, GENB, INBU, INFS, IS, MGMT, MKT, OSCM

Health Care Computer Information Systems Since the enactment of the Health Maintenance Organization Act of 1973, health care providers (HCPs) have been developing techniques to reduce the cost of providing health benefits and improve the quality of care. More recently, given the rapid advances in Computer Information Systems (IT), HCPs have attempted to further integrate IT into their day to day operations, as well their strategic plans. As a consequence, there is now a great demand for skilled individuals who can manage and integrate medical information systems in such applications as Medical Imaging, electronic data interchange, integrated delivery systems, computerized patient records, artificial intelligence and expert medical systems, decision support systems and internet based applications.

**Department:** Computer Information Systems

**3 Credit Hours**

**3 Total Contact Hours**
0 Lab Hours
3 Lecture Hours
0 Other Hours

**Major Restrictions:**
Restricted to majors of ACCT, BSAD, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM

CIS 4320. Advanced Programming.
Advanced Programming This course will use structured object-oriented programming algorithms for software development to solve real world business problems. Concepts to be covered include basic data structures, objects, classes, functions, encapsulation, arrays, and inheritance. The course will offer in-class hands-on instruction of programming techniques.

**Department:** Computer Information Systems

**3 Credit Hours**

**3 Total Contact Hours**
0 Lab Hours
3 Lecture Hours
0 Other Hours

**Major Restrictions:**
Restricted to majors of ACCT, BAMA, BSAD, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM

CIS 4325. Enterprise Process Mgmt & Cont.
Enterprise Process Management and Control Business professionals are frequently responsible for designing, implementing, supporting, and managing technology -based business processes in organizations. In order to accomplish those tasks, these professionals must understand the businesses processes that support an organization and how they are controlled. This course contributes to the student's understanding of how key businesses processes are managed, controlled and integrated in enterprise resource planning systems. SAP will be used to illustrate the concepts discussed in the class. Upon completion, the student will have a better understanding of Enterprise resources planning systems.

**Department:** Computer Information Systems

**3 Credit Hours**

**3 Total Contact Hours**
0 Lab Hours
3 Lecture Hours
0 Other Hours

**Major Restrictions:**
Restricted to majors of ACCT, BSAD, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM
Expert Systems and Decision Support Systems: A study of artificial Intelligence, expert systems, and the decision support systems concepts and technologies applied to cover development, implementation, and management of expert systems and decision support systems for business organizations. Tools such as languages, shells, and hardware for utilizing artificial intelligence in designing expert systems and decision support systems are covered.

Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of ACCT, BAMA, BSAD, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM

CIS 4365. Database Management.
Database Management: The course introduces students to issues related to database and database management systems (DBMS). Students gain technical backgrounds in planning, analysis, logical design, physical design, implementation, and maintenance of a database. Students are provided hands-on training in data base design, development, and implementation using a relational DBMS software. Emphasis is placed on the problems and issues of managing in a data base environment.

Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of ACCT, BAMA, BSAD, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM

CIS 4368. Advanced Database Management.
Advanced Database Management (3-0) This course is an extension of the first Database Management course with a focus on development of advanced, multi-user and distributed database applications using Report Builder or another SQL front-end package. The course emphasizes hands-on project work. Students will learn PL/SQL triggers and procedure builders, how to develop integrated database applications, and how to create Web applications. Prerequisites: CIS 3355 and CIS 4365.

Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Prerequisite(s): (CIS 3355 w/D or better) AND (CIS 4365 w/D or better)

Business Data Communications (3-0) An introduction to network components, transmission links, link control, protocols, network topologies, error detection and correction methods, network management and security, local area networks, wireless networks, TCP/IP internetworking, virtual private networks, networked applications, cloud computing, BYOD, use of the internet business.

Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of ACCT, BAMA, BSAD, CIS, ECON, FIN, GENB, INBU, INFS, IS, MGMT, MKT, OSCM
CIS 4375. Intro to Electronic Commerce.
Introduction to Electronic Commerce (3-0) This course will combine Electronic Commerce (e-commerce) business and technical state of the art topics and introduce students to these issues in order to facilitate their participation and involvement in the e-commerce area. Students will create working e-commerce web-sites.
Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Information Security Systems The course introduces students to the theory and practice of security, aspects of information systems security such as access control, hacks and attacks, systems and program intrusion detection, cryptography, networks and distributed systems security, worms and viruses, and internal secure applications. Students explore key security threats, solutions and legal issues, and implement network security tools in hands-on lab exercises. Upon completion, students will have an understanding of computer and network security issues.
Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Major Restrictions:
Restricted to majors of CIS, INFS, INSY, IS

CIS 4396. Internship in CIS.
Internship In Computer Information Systems: To be arranged with the prior approval of the instructor and the department chairman.
Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
0 Lecture Hours
3 Other Hours

Major Restrictions:
Restricted to majors of ACCT, BAMA, BSAD, CIS, ECON, FIN, GENB, INFS, IS, MGMT, MKT, OSCM

CIS 4398. Independent Study (CIS).
Independent Study in Computer Information Systems (0-0-3) The student studies a topic as a semester-long project. The project may be independent library research or a work-related task. The student must have the topic approved by the department chair and have a schedule to report progress with the instructor before work commences. Restricted to majors: ACCT, BSAD, CIS, ECON, FIN, MGMT and MKT. Prerequisite: CIS 3340.
Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
0 Lecture Hours
3 Other Hours

Major Restrictions:
Restricted to majors of ACCT, BAMA, BSAD, CIS, ECON, FIN, INFS, IS, MGMT, MKT

Prerequisite(s): (CIS 3340 w/D or better)

CIS 4399. Current Topics.
Current Topics in Computer Information Systems (3-0) The topics to be announced. This course may be repeated for credit as topics are changed.
Department: Computer Information Systems
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours