CIS Course Descriptions

CIS 1013 Introduction to Computer-Based Systems
3 credits: 3 hours lecture
An introduction to computers in business and scientific data processing. Overview of computer systems, computer languages, and data representation.

CIS 198V Special Topics
Variable Credit (1-3 hours)
Detailed study of one of the specialized areas of computer management, emphasizing basic knowledge and skills application.

CIS 1193 PC Hardware and Software Maintenance
3 credits: 3 hours lecture
Prerequisites: CIS 1013, CIS2223
An introduction to computer maintenance, emphasizing hardware and software management, system maintenance, and troubleshooting in the PC environment.

CIS 2203 Programming Logic and Design
3 credits: 3 hours lecture
Emphasis on fundamental problem solving, programming logic, and algorithm specifications using various modeling tools; coding of algorithms applicable to high level programming languages.

CIS 2223 Microcomputer Applications (ACTS CPSI1003 Introduction to Computers)
3 credits: 3 hours lecture
Prerequisite: Keyboarding ability recommended.
The study and use of microcomputer-based applications software to increase business and personal productivity. Realistic computing problems will be solved using sophisticated software packages including word processing, spreadsheets, database management systems, and graphics.

CIS 3103 Advanced Microcomputer Applications
3 credits: 3 hours lecture
Prerequisite: CIS 2223
The advanced study, use, and integration of microcomputer-based applications software to increase business and personal productivity.

CIS 3233 Business Database Management Systems
3 credits: 3 hours lecture
Prerequisites: General Education Mathematics, Grade of "C" or better in CIS 2223
Essentials of database design, creation and manipulation for business and accounting
applications using a microcomputer-based package. Emphasis on advanced queries, reports and macros.

CIS 3243 Introduction to Java Programming
3 credits: 3 hours lecture
Prerequisites: General Education Mathematics, Grade of "C" or better in CIS 2203
Introductory study of the Java Programming language, emphasizing assigned readings, individual research and hands-on programming of Object Oriented programs using Java classes and Swing components.

CIS 3423 COBOL
3 credits: 3 hours lecture
Prerequisites: Concurrent Enrollment in General Education Mathematics, Grade of "C" or better in CIS 2203
Techniques essential to problem-solving with the COBOL programming language. Practical application with emphasis on structured approach.

CIS 3433 Introduction to C# Programming
3 credits: 3 hours lecture
Prerequisites: General Education Mathematics, Grade of "C" or better in CIS 2203
Techniques essential to problem-solving with the C# programming language. Practical application with emphasis on structured approach.

CIS 3443 Object-Oriented Programming Languages
3 credits: 3 hours lecture
Prerequisites: Concurrent Enrollment in General Education Mathematics, Grade of "C" or better in CIS 2203
Provides the student with theory and application of information systems development utilizing object-oriented (OO) technology. Topics include: analysis, design, data modeling, database management systems, and programming.

CIS 3453 World Wide Web Programming
3 credits: 3 hours lecture
Techniques essential to the design and construction of World Wide Web documents using Web programming languages and Web construction applications.

CIS 3523 Structured System Analysis and Design
3 credits: 3 hours lecture
Prerequisite: CIS 3423 or CIS 3443
Application of skills and concepts developed in basic data processing course work to more advanced topics involving design, implementation, evaluation, and documentation of management information systems.

CIS 3553 Advanced COBOL
3 credits: 3 hours lecture
Prerequisite: Grade of "C" or better in CIS 3423
Emphasis on structured methodology of program design, development, testing, implementation, and documentation of business-oriented applications. Includes coverage of sequential and random access files and processing techniques, and development of programs and systems of programs for batch and interactive environments using COBOL programming language.

CIS 370V Computer Information Systems Practicum
Variable credit
Prerequisite: Completed 12 hours in Computer Information Systems or permission of unit head
NOTE: May be repeated for a total of 6 hours credit with approval of the unit head.
Introduction to research and specialized programming in computer information systems in the context of assisting with faculty research and programming projects.

CIS 399V Special Topics
Variable Credit (1-3 hours)
Detailed study of one of the specialized areas of computer information systems, emphasizing advanced knowledge and skills application.

CIS 4253 CIS Security
3 credits: 3 hours lecture
Prerequisites: Grade of "C" or better in CIS 3523
Detailed study of computer and network security, emphasizing practical hands-on exercises and projects to provide a basic understanding and proficiency in the use of network security tools and protocols.

CIS 4263 Ethics in Information Technology
3 credits: 3 hours lecture
Prerequisites: CIS 3523, or Permission of Instructor
Extensive and topical coverage of ethical issues associated with file sharing, infringement of intellectual property, security risks, Internet crime, identity theft, employee surveillance, privacy, and compliance.

CIS 4503 Business Data Communications
3 credits: 3 hours lecture
Prerequisite: CIS 3423 or CIS 3443
To provide a strong introduction to both communications and networking for the computer literate student, focusing on system software.

CIS 460V Internship in Computer Information Systems
Variable credit (1-3 hours)
Prerequisite: Advanced standing and permission of unit head and instructor.
Practical experience in computer programming and database management. Students work in a business setting which allows for application of computer systems knowledge and development of information systems skills.

CIS 4623 Database Management Systems
3 credits: 3 hours lecture
Prerequisites: CIS 3423, CIS 3443
Emphasis on file organization methods, file access methods, data structures for database processing and the process for database design and implementation. The study and use of Structured Query Language to develop database programs.

CIS 4633 Application Software Development Project
3 credits: 3 hours seminar
Prerequisites: CIS 3523, CIS 4623
System simulation techniques; their application to business systems using an appropriate simulation language; systems design and development; extensive use of computers.

CIS 4723 Seminar in Computer Information Systems
3 credits: 3 hours lecture
NOTE: May be repeated for a total of 9 hours credit with unit head's permission.
Detailed study of one of the specialized areas of computer information systems, emphasizing assigned readings and individual research.

CIS 479V Independent Study in Computer Information Systems
Variable credit
Consult the Independent Study Courses subheading in the Academic Regulations section of this catalog for prerequisites and description.

Graduate Level Courses

CIS 589V Special Topic in Computer Information Systems
Variable credit
Graduate level detailed study of one of the specialized areas of computer information systems, emphasizing advanced study and skills application.