COMPUTER INFO SYSTEMS (CIS)

CIS 100 - Computer and Digital Literacy (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Provides the student with an introduction to computers in society and digital literacy. Includes computer hardware and operating systems, word processing, spreadsheets, presentation software, networking, internet usage, communication and collaboration, computer safety and ethics. This course is not intended for computer information majors.
Typically offered: Fall, Spring, Summer

CIS 101 - Introduction to Computer Information Systems (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Provides students with an introduction to computer and information systems used in business environments. Includes computer hardware, operating systems, information systems, programming concepts, computer security and ethics, and trains students in the use of business software including word processing, spreadsheets, presentation software, database management software, networking and internet access methods. IAI BUS 902
Typically offered: Fall, Spring, Summer

CIS 106 - Computer Logic and Programming Technology (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Provides students with a comprehensive introduction to computer programming using a currently popular programming language. Includes program logic, program structure, subroutines/functions/methods, variables, conditions, loops, arrays, files/data access, and object-oriented programming. A variety of programs are created throughout the course. Prerequisite: Placement into college level mathematics.
Typically offered: Fall, Spring, Summer

CIS 137 - Computer Internship I (3 Credits)
1 lecture, 15 clinical/other, 16 total contact hours
Provides students with coordinated job experience in an information technology professional position such as computer networking or Web design. This course is repeatable up to a maximum of six credit hours. The one lecture hour per week will involve a seminar regarding technology issues. Prerequisite: Minimum of six credit hours of CIS courses with a GPA of 2.5 or better. Consent of program coordinator and internship instructor.
Typically offered: Fall, Spring

CIS 143 - Introduction to Database Systems (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Provides students with a comprehensive introduction to database concepts. Primary focus is on the relational model of database management and querying databases using Structured Query Language (SQL). Existing relational databases are examined and manipulated, and new relational databases are created. Prerequisite: CAS 160 or CIS 101 or WEB 110 with a grade of C or better, and placement into college-level mathematics without support.
Typically offered: Fall, Spring, Summer

CIS 206 - Applied Programming (4 Credits)
3 lecture, 2 lab, 5 total contact hours
Introduces application development and problem solving using a currently popular programming language. Includes variables, conditions, loops, functions, strings, lists, dictionaries, sets, error handling, classes, file data, Internet data, databases, and code documentation. Prerequisite: CIS 106 or CSC 121 with a grade of C or better.
Typically offered: Fall, Spring

CIS 211 - IT Project Management (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Provides students with a comprehensive introduction to Information Technology project management. Includes project selection, initiation, planning, execution, monitoring and closure. Students gain practical project management skills and competencies related to Information Technology project management. Activities are performed using a currently popular project management software package. Aligns to the CompTIA Project+ certification. Prerequisite: CAS 105, CAS 115 and CAS 125 with grades of C or better, OR CAS 160 or CIS 101 or WEB 110 or NET 105, with a grade of C or better; AND math placement into college-level math without support.
Typically offered: Fall, Spring

CIS 216 - Applied Object-Oriented Programming (4 Credits)
3 lecture, 2 lab, 5 total contact hours
Introduces object-oriented application development and problem solving using a currently popular programming language. Includes objects, classes, exception handling, unit testing, encapsulation, inheritance, polymorphism, data structures, data serialization, GUI applications, and web frameworks. Prerequisite: CIS 106 or CSC 121 with a grade of C or better.
Typically offered: Fall, Spring

CIS 220 - Topics in Computer Information Systems (1-6 Credits)
1 - 6 lecture, 1 - 6 total contact hours
Studies selected problems, computer software or computer languages. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information with pre-registration materials will be available each time the course is offered. This course may be repeated up to a maximum of six credit hours. Prerequisite: Consent of instructor.
Typically offered: Fall, Spring

CIS 226 - Programming for Cybersecurity (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Provides students with hands-on experience to build upon foundational programming skills to develop Python scripts and programs for modern security professionals to monitor, protect against, contain, respond to and recover from cyber attacks. Includes Python concepts used to facilitate cybersecurity initiatives. Prerequisite: CIS 106 or CSC 121 with a grade of C or better.
Typically offered: Fall, Spring

CIS 245 - Data Analysis (3 Credits)
2 lecture, 2 lab, 4 total contact hours
Introduces data analysis using current statistical computing and graphics software. Includes descriptive statistics, probability, sampling, regression and hypothesis testing of large data sets used to make data-informed decisions. Prerequisite: CIS 106 or CSC 121 with a grade of C or better.
Typically offered: Fall, Spring