

COMPUTER INFORMATION SYSTEMS (CIS)

CIS 1001 Introduction to Computers (3 Credits)

This is an introductory course in information technology concepts and software productivity tools intended for Computer Information Systems majors and other students interested in computers and Information Technology. Areas of instruction include computer concepts, current topics and trends in information technology, the role of computer systems in business problem solving, an introduction to the major career areas of Information Technology, and Microsoft Office skills that are important to all college students.

Previous: Legacy Equivalent(s): CSC*101, CIS*101

CIS 1002 Survey of Computing Applications (3 Credits)

This course will serve as a complete introduction to computers and computing and is suited for all students. There will be an in-depth view into computers and modern-day computing applications for students who can benefit from a rapid refresh of knowledge of the modern-day computing industry including an overview of leading advancements made in this space, discussions of current trends, an overview of various career and educational opportunities, and the exploration and relevancy of computing power across various industries. Latest computing concepts, fundamental functions and operations of the computer and the use and programming of newer computing devices will be covered. Covered topics include identification of hardware components, basic computer operations, security, and ethical issues, and the development and use of software applications. The course will survey computer information systems used for transaction processing, data analysis, and decision making. An introduction to programming concepts, the evolution of programming languages and related constructs will also be covered.

Previous: Legacy Equivalent(s): CSC* 102, CST* 114

CIS 1003 Computer Science Principles (3 Credits)

This course focuses on engaging students in activities that show how computing changes the world. By learning the central ideas of computer science and computational thinking, students will learn to be creative, collaborative, and innovative in developing technical solutions to problems. The course includes learning how to create mobile apps to solve those problems. The course includes learning how to create mobile apps to solve those problems, examining how computing has impacted society, and analyzing large data sets.

Previous: Legacy Equivalent(s): CSC*117

CIS 1103 Computer Ethics (3 Credits)

This course focuses on the study and practice of ethics in modern day computing and as it applies to the Internet. Issues discussed include privacy, speech and regulation of the Internet, security, intellectual property and codes of ethics and conduct. Students gain an understanding of the issues and concepts of moral reasoning, explore ethical theories and their impact on the computing field. The course also covers the relation between ethics and other theoretical and empirical inquiries and will enhance students ability to decipher, think, and articulate clearly while sharpening their general interpretive and analytical skills.

Previous: Legacy Equivalent(s): CSC*180

CIS 1104 Introduction to Operating Systems (3 Credits)

The objective of the course is to provide the student with an understanding of how an operating system works. Students will learn operating systems concepts, how to use Windows advanced features, and how the operating systems interact with hardware both locally and on a network. Topics covered will include troubleshooting and customizing Windows, how to set up a local network, security strategies, and an overview of the more popular operating systems on the market today.

Previous: Legacy Equivalent(s): CST* 120, CST* 210, CST* 266

CIS 1141 Introduction to Management Information Systems (3 Credits)

The course provides the background necessary for understanding the role of information systems in organizations and for using computer tools and technology in solving business problems. Topics include organizational and technical foundations of information systems, theory of design of information, database, and network systems, e-commerce and common business application systems, and information security management. Students will learn and use business productivity software to demonstrate their knowledge of selected topical concepts.

Prerequisites: eligibility for ENG 1010

Previous: Legacy Equivalent(s): CST*201

CIS 1142 Information Systems in Organizations (3 Credits)

The focus of this course is on how organizations use information systems for decision making. In particular, the course stresses the role of managers in the analysis, design, development, implementation, maintenance, and control of information systems as corporate resources. Ethics, privacy, and security are at the forefront of the modern age of computing in cyberspace. The challenges posed to organizations are growing exponentially as connectivity infiltrates all areas of life.

Previous: Legacy Equivalent(s): CSC*183

CIS 1143 Project Management (3 Credits)

This course introduces students to the theory and practice of managing projects. The student will be introduced to PMBOK (Project Management Body of Knowledge, from Project Management Institute). Students will learn how to initiate, plan, execute, control, and complete projects to meet organizational goals. Managing client expectations, developing a list of key milestones, assigning team responsibilities, tracking progress, and communicating progress are all topics examined. In addition to traditional project management tools such as PERT and GANTT charts, students will be introduced to project management software. Comprehensive cases and projects will be assigned and completed either individually or in collaboration with a student project team. This course will begin to prepare the student for the CompTIA Project+ exam as well as Project Management Institute CAPM® Exam, and for those with project management experience, the PMP ®Exam.

Additional fees may apply

Previous: Legacy Equivalent(s): CSC*252, CST*B205

CIS 1211 Database Design I (3 Credits)

This course is designed to provide students with a complete introduction to database concepts and the relational database model. The topics include database design and normalization, Database Design Language (DBDL), and Entity-Relationship (E-R) diagrams, Structured Query Language (SQL), and Database Administration. Students will apply the principles learned in this course to construct useful databases that meet the requirements of business professionals. This course does not require prior programming experience. Students may not also earn credit for CIS 1231 nor CSC 2235.

Previous: Legacy Equivalent(s): CSC*121, CSC*150, CSC*231, CSC*232, CSC*233, CSC*237, CSC*238, CSC*239

CIS 2120 Data Communication and Networking (3 Credits)

The course outlines interconnecting computers using communication networks. The seven-layer OSI Reference framework, physical layer standards, data link protocols, repeaters, bridges, routers, local area networks, wide area networks, and network configurations will be discussed.

Prerequisites: CIS 1104 OR CST 1111

CIS 2131 Fundamentals of Cloud Computing (3 Credits)

This course focuses on providing the student with knowledge of cloud computing and various related technologies in use today. Business across industries, regardless of scale, are utilizing cloud technologies for their operations. Knowledge development in this area is becoming increasingly important to enable strategic and operational plans that deploy applications and services on the cloud. After completing this course, students will achieve a fundamental understanding of this high-growth, rapidly changing branch of the computing industry. Students will be able to understand cloud segments and cloud deployment models, and able to identify key cloud companies.

Prerequisites: CIS 1001

CIS 2144 Systems Analysis and Design (3 Credits)

This course is an introduction to systems analysis and design concepts and techniques. This overview class focuses on the methods and principles of systems analysis and design utilizing a business perspective to explore the role, responsibilities, and mind-set of the systems analyst and systems project manager. Using a case study method, students will conduct system surveys, create feasibility studies, and design typical computer systems used in business and industry.

Prerequisites: Any Programming Language

Previous: Legacy Equivalent(s): CSC*250, CSC*255

CIS 2232 Designing and Deploying Cloud Applications (3 Credits)

This course focuses on providing the student with knowledge and experience with designing and deploying cloud applications. Business across industries, regardless of scale, are utilizing cloud technologies for their operations. Practical hands-on skill building in this area is becoming increasingly important for companies to better achieve their strategic and operational goals. After completing this course, students will achieve fundamental understanding of this high-growth, rapidly changing branch of the computing industry by creating and deploying cloud applications. Students will be able to use one the popular cloud environments (e.g., AWS, Google, Oracle) to achieve the objectives of the course.

Prerequisites: CIS 1001 AND (CIS 1211 OR CSC 2235) AND CIS 2131

CIS 2990 Capstone Research (3 Credits)

The goal of this capstone project is to provide students with experience in researching and solving industrial problems. Students work in groups and research problems given by local businesses, industry, and government (BIG). This course mimics an internship - students learn to interact in a business setting, manage deadlines, produce technical documents, and think critically to find solutions. By the end of the course, each group produces a solution to their problem and completes a written, oral (video), and poster/PowerPoint summary of their work.

Prerequisites: permission of instructor

Previous: Legacy Equivalent(s): CSC*273, CSA*290

CIS 2994 Coop Ed/Work Experience (3 Credits)

This course will give the student the opportunity to apply the concepts and skills acquired in their program of studies in an on-the-job experience at a designated business. Students will work at least 150 hours in their area of interest during the semester. The work environment will expose the students to a professional IT setting and challenge them to develop skills for employability. The emphasis of this course is on student learning, and they will maintain online blogs, attend career seminars, and complete textbook assignments as they reflect on their internship experience.

Prerequisites: permission of instructor

Previous: Legacy Equivalent(s): CSC*292, CSC*295, CSC*296

CIS 2998 Special Topics (1-6 Credits)

N/A

Previous: Legacy Equivalent(s): CIS* 298