COMPUTER INFORMATION SYSTEMS (CIS)

CIS120 Concepts of Computing 4 credits (4 lec hrs/wk)
This course introduces students to topics in critical areas of computer technology, information security, and productivity applications as they relate to the workplace. Subjects include hardware, networking, cyber security and privacy, social media, ethics, and cloud computing. Productivity applications are introduced through hands-on activities and projects using the Microsoft Office suite of applications including Word (text document), Excel (spreadsheets), Access (database), and PowerPoint (presentation) including examples of their use in everyday businesses.
This course may be taken 1 time for credit.
Course classification: LDC

CIS125DB Database Applications 3 credits (2 lec, 2 lec lab hrs/wk)
Prerequisite(s): (CIS120) or (CS160)
Databases are at the heart of commercial application development and their use extends to other environments where large amounts of data must be stored for efficient update, retrieval, and analysis. The purpose of this course is to provide a comprehensive introduction to the use of data management systems for applications. Topics covered include data models, query languages, transactions, data processing, and database as a service.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125DW Computer Applications: Dreamweaver 3 credits (3 lec hrs/wk)
This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Adobe Dreamweaver.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125IL Computer Applications: Illustrator 3 credits (3 lec hrs/wk)
This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Adobe Illustrator.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125MA Computer Applications: Maya 3 credits (3 lec hrs/wk)
This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Autodesk Maya.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125P Presentation Applications 1 credit (1 lec hrs/wk)
This course introduces intermediate to advanced features of presentation software for the efficient development of effective presentations. Using word processing skills and presentation theories, students will enhance their skills to develop professional looking and effective presentations complete with outline, speaker notes and audience handouts.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125PH Computer Applications: Photoshop 3 credits (3 lec hrs/wk)
This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Adobe Photoshop.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125S Spreadsheet Applications 3 credits (2 lec, 2 lec lab hrs/wk)
Introduces the basic features of Microsoft Excel and spreadsheet concepts to design and create accurate professional worksheets for use in business, industry, and academic environments. Includes entering data; creating formulas; professional formatting. Focuses on ways to ensure accuracy including proofreading techniques and critical thinking to determine what data to include and how to present it.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125VA Intro to Video & Audio Editing 3 credits
Introduces video and audio development software - Adobe Premiere Pro and Audition - with a focus on post-production practices in editing such as the effective application of corrective and creative effects for video and audio. Exploration in practices of purpose, critical thinking, technical skills, planning and implementation. Guidance in making innovative connections between visual and audio media for utilization in education, marketing and/or art practice.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125W Word Processing Applications Microsoft 3 credits (2 lec, 2 lec lab hrs/wk)
Computers are used to create the majority of our documents. It is impossible to avoid word-processing software in many areas of the business world. Managers, lawyers, clerks, reporters, and editors rely on this software to do their jobs. Whether you are an executive secretary or a website designer, you will need to know the ins and outs of electronic word processing. Microsoft Word is filled with features and tools designed to help you move smoothly through the task of creating professional-looking documents making your work easy.
This course may be taken 1 time for credit.
Course classification: CTE

CIS140U Intro to Operating Systems: Unix 4 credits (4 lec hrs/wk)
This course introduces the student to Unix/Linux operating systems and aides in preparing students for an industry-based certification such as Comp TIA's Linux+ exam. The course includes installation and administration of a linux operating system as well as management, troubleshooting, and optimizing techniques. Students will learn the fundamental Unix/Linux command set, file security, text editors, and scripting.
This course may be taken 1 time for credit.
Course classification: CTE

CIS145 Hardware Installation Support 4 credits (4 lec hrs/wk)
The course will cover computer hardware, associated peripherals, configuration, optimization, and repair. Customization and personalization of PC components are encouraged. Students will develop critical thinking and troubleshooting skills through an emphasis on hands-on experience in installing, maintaining, and troubleshooting computer hardware. Topics include mobile devices and virtualization.
This course may be taken 1 time for credit.
Course classification: CTE

CIS151 Network Essentials 4 credits (4 lec hrs/wk)
This course serves as an introduction to networking and Cisco networking technologies. Instruction includes, but is not limited to, networking, network terminology and protocols, network standards, local-area networks (LANs), wide-area networks (WANs), the Open System Interconnection (OSI) and TCP/IP models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. This is the first of a two-course sequence that prepares students for the CCENT (Cisco Certified Networking Technician) certification.
This course may be taken 1 time for credit.
Course classification: CTE

CIS152 Network Routing & Switching Config 4 credits (4 lec hrs/wk)
Prerequisite(s): (CIS151)
This is the second of a two-course sequence that prepares students for the CCENT (Cisco Certified Networking Technician) certification. This course covers dynamic and static routing, VLAN management, trunking and inter-VLAN routing, access control lists (ACLs), Dynamic Host Configuration Protocol (DCHP), and Network Address Translation (NAT) in IPv4 and IPv6 environments developed by the Cisco Networking Academy.
This course may be taken 1 time for credit.
Course classification: CTE

CIS153 Enterprise Networking/Automation 4 credits
Large enterprises depend heavily on the smooth operation of their network infrastructures. This course describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. It covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks. Emphasis is placed on the use of critical thinking skills and problem solving techniques to resolve networking problems.
This course may be taken 1 time for credit.
Course classification: CTE

CIS180 Internship: CIS 1-12 credits (3 lab hrs/wk/cr)
Prerequisite(s): Instructor consent
Practical on-site experience that will allow students to explore workplace environments and career options
This course may be taken 12 times for credit.
Course classification: LDC

CIS185 Introduction To Cyber Security 3 credits (2 lec, 3 lab hrs/wk)
Today's interconnected world makes everyone more susceptible to cyber-attacks. Whether you're attracted to the relativity new world of cybersecurity as a professional, or just interested in protecting yourself online and in social media, this introductory course is the answer. It explores cyber trends, threats—along with the broader topic of cybersecurity in a way that will matter to YOU. Learn how to protect your personal privacy online while gaining additional insight on the challenges companies, and governmental and educational institutions face today.
This course may be taken 1 time for credit.
Course classification: CTE

CIS188 Wireless Networking 3 credits (6 lec lab hrs/wk)
Prerequisite(s): (CIS151)
Fundamentals of wireless communication and embedded computing devices in the Internet of Things (IoT) landscape focusing on design, planning, implementation, operation, and troubleshooting of wireless networks. Topics include technologies in networking, cloud computing, programming, electronics, microcontrollers, and security through hands-on and discovery techniques.
This course may be taken 1 time for credit.
Course classification: CTE

CIS225 End User Support 4 credits (3 lec, 3 lab hrs/wk)
Effective end-user support is a key element in a successful business. Understanding needs, prioritizing demands, analyzing efficiency, managing expectations and clear communication are all part of the process. This course introduces the skills and abilities needed by IT professionals who support customers, clients, co-workers, and other categories of end users.
This course may be taken 1 time for credit.
Course classification: CTE

CIS279 Network Server Administration 4 credits (3 lec, 3 lab hrs/wk)
Students are introduced to the installation, storage, and virtualization functionalities available in Windows Server. Course covers content for the Windows Server and Network Infrastructure certification exams by focusing on necessary administrative responsibilities, such as implementing server images, planning and configuring storage solutions, and monitoring virtual machine installations.
This course may be taken 1 time for credit.
Course classification: CTE

CIS280 CWE: Computer Information Systems 1-12 credits (3 lab hrs/wk/cr)
Prerequisite(s): Instructor consent
The CIS internship is designed to complement a student's formal education with practical and meaningful IT-related work experience. It is a unique opportunity for students to clarify employment goals, develop a professional network, and learn about a particular industry. Participating businesses are expecting to receive high-quality work and active participation from the students they sponsor. Experience directly related to a student's CIS major makes the student more marketable when seeking for full-time positions after graduating.
This course may be taken 12 times for credit.
Course classification: LDC

CIS285 Cyber Security Essentials 4 credits (4 lec hrs/wk)
A single breach can have huge consequences for a company's ability to function, hurting the bottom line and causing disruption in the daily lives of millions of people. This is why the demand for security professionals continues to grow. Get onboard—and develop an understanding of cybercrime, security principles, technologies, and procedures used to defend networks. Then decide whether you want to pursue an entry-level networking or security role professionally. Recommended for students planning to study for the Cisco Networking and Security Certifications. Introduction to Cybersecurity or equivalent knowledge recommended.
This course may be taken 1 time for credit.
Course classification: CTE

CIS286 Cyber Security Operations I 4 credits (4 lec hrs/wk)
Prerequisite(s): (CIS140U and CIS152 and CIS285)
Uncovering cybercrime, cyber espionage and other threats to the integrity of networks is an exciting new area that spans all industries. Learn the skills to qualify for exciting and growing opportunities in security operation centers as an analyst or incident responder. And most importantly, help make the world a safer place. This two-part course focuses on how to monitor, detect and respond to cybersecurity threats. Plus, covers cryptography, host-based security analysis, security monitoring, computer forensics, attack methods and incident reporting and handling.
This course may be taken 1 time for credit.
Course classification: CTE

CIS287 Cyber Security Operations II 4 credits (3 lec, 3 lab hrs/wk)
Prerequisite(s): (CIS286)
Uncovering cybercrime, cyber espionage and other threats to the integrity of networks is an exciting new area that spans all industries. Learn the skills to qualify for exciting and growing opportunities in security operation centers as an analyst or incident responder. And most importantly, help make the world a safer place. This two-part course focuses on how to monitor, detect and respond to cybersecurity threats. Plus, covers cryptography, host-based security analysis, security monitoring, computer forensics, attack methods and incident reporting and handling.
This course may be taken 1 time for credit.
Course classification: CTE

CIS297 IT Professional Capstone 4 credits (3 lec, 3 lab hrs/wk)
Prerequisite(s): (CIS151 and CIS279)
This is an Associate Level Capstone Course for the Computer Information Systems concentration and should be taken in the student's last term. The course is an in-depth, student-centered experience which requires the integration and application of what they have learned into a single project. The project could relate to the development, implementation, and/or analysis of a practical, hands-on project that has an educational and/or administrative focus. The broad goal of the project is to bring improvement to the student's current professional sphere of influence, by addressing a problem or issue.
This course may be taken 1 time for credit.
Course classification: CTE

CIS90 Computer Basics 2 credits (2 lec hrs/wk)
This is a course in digital literacy and is intended for the novice user with little to no previous computer experience. Course content includes Microsoft Windows basic word processing, web browser/internet searches, computer file management, and email. Students will gain exposure to an online learning management system (LMS).
This course may be taken 1 time for credit.
Course classification: DEV