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 applications are introduced through hands-on activities and projects using the Microsoft Office suite of applications including Word (text documention), 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

CIS125DM Digital Media Applications 3 credits (2 lec, 2 lec lab hrs/wk)
Prerequisite(s): (CIS90)
Concepts-centered course encompasses beginning and intermediate concepts of multimedia applications, punctuated by hands-on projects. Utilizing current digital tools, course covers developing bit-mapped images, vector images, animation, sound, and video. Concepts include managing media, importing and exporting between applications, converting file types, controlling file sizes, and legal and ethical issues.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125DW Computer Applications: Dreamweaver 3 credits (3 lec hrs/wk)
Prerequisite(s): (CIS90)
This course covers HTML, CSS coding, and dynamic JavaScript to create interactive and flexible web pages. Students will utilize the Dreamweaver application to create a website, as well as learn about the concepts of web design.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125ID Computer Applications: Indesign 3 credits (3 lec hrs/wk)
Prerequisite(s): (CIS90)
Students learn to use paragraph and character styles, layout features, and panels that enable customized text and graphics. Course demonstrates how to build tables and prepare documents for delivery in print or on the Web. Students gain experience with advanced features like creating interactive documents using buttons, animations/transitions, movies, audio files, hyperlinks, and advanced page layouts.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125IL Computer Applications: Illustrator 3 credits (3 lec hrs/wk)
Prerequisite(s): (CIS90)
Illustrator is the industry standard tool for creating logos, maps, diagrams, vector illustrations. This course introduces students to a variety of different media including illustrations, package designs, leaflets and flyers, web graphics and animations. Students will create a logo, build a package, and create photorealistic illustrations.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125MA Computer Applications: Maya 3 credits (3 lec hrs/wk)
Prerequisite(s): (CIS90)
Autodesk Maya is an end-to-end application for visual effects artists and animators to design content for film, TV, games and advertising. This course offers 3D content creation for modeling, animation, texturing and rendering. Students will gain an understanding of the Maya toolset and learn how to create, edit, and refine polygon models.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125P Presentation Applications 1 credit (1 lec hrs/wk)
Prerequisite(s): (CIS90)
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)
Prerequisite(s): (CIS90)
This course offers beginning and intermediate level techniques and design principles related to digital photo manipulation. Students transform images, adjust and retouch images using hands on experience to add filters, layers and masking elements within an image.
This course may be taken 1 time for credit.
Course classification: CTE

CIS125S Spreadsheet Applications 3 credits (2 lec, 2 lec lab hrs/wk)
Prerequisite(s): (CIS90)
This course covers skills in developing Excel spreadsheets and setting up calculations and formulas. Students learn how to make changes to an existing worksheet, format new worksheets, graphs, charts, and advanced formulas. Intermediate and advanced skills are introduced such as the customization of entire workbooks, interactive elements like Pivot Tables/Charts and combining multiple worksheets to handle larger, more complex sets of data.
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)
Prerequisite(s): (CIS90)
Word is a feature-rich productivity application used regularly in business. This course offers students the opportunity to learn about the versatility of Word including document formatting, tables, graphics, templates, references, custom styles, merging, macros, versioning and proofing.
This course may be taken 1 time for credit.
Course classification: CTE

CIS135W Advanced Word Processing Desktop Publishing 3 credits (2 lec, 2 lec lab hrs/wk)
Prerequisite(s): (CIS125W)
This course uses Word and Publisher to focus on page layout and design rather than text composition and proofing. Using word processing skills and design/layout theories, students will learn how to develop professional-looking and effective publications.
This course may be taken 1 time for credit.
Course classification: CTE

CIS140M Introduction to Operating Systems: Microsoft 4 credits (4 lec hrs/wk)
This course introduces students to the Microsoft desktop operating system and prepares students for a Microsoft industry-based desktop certification. Topics include installation, management, and administration techniques as well as troubleshooting and optimization techniques using physical and virtual machine technology..
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

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

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

CIS235 Integrated Computer Projects 4 credits (4 lec hrs/wk)
Prerequisite(s): (CIS120 and CIS125W) or (CIS125S)
Integrated Computer Projects apply previous computer and business knowledge to create individual and group projects using software found in today's workplace. Use integrated software (i.e. MS Office) to learn skills such as linking and embedding, e-mail, Internet, FAX and scanners.
This course may be taken 1 time for credit.
Course classification: CTE

CIS245 Project Management 3 credits (3 lec hrs/wk)
This course covers project management life-cycle activities of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and success. Students evaluate the primary constraints of project management and learn about how to gain stakeholder support and manage change.
This course may be taken 1 time for credit.
Course classification: CTE

CIS250 Technology Entrepreneurship 3 credits (3 lec hrs/wk)
This course introduces students to entrepreneurial business aspects of the technology industry. Topics will include relevant business issues such as entrepreneurship, business planning, leadership, management, quality control, risk management, productivity, safety, and estimating.
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 Info 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

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