

# COMPUTER INFORMATION SYSTEMS (CIS)

---

## **CIS120 Concepts of Computing** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS90 )

Course provides information on computer basics, including hardware and software components, networking, applications and operating systems software, and social issues related to computing, technology, and the Internet. Course also provides instruction on common software applications including spreadsheet, database and presentations.

This course may be taken 1 time for credit.

Course classification: LDC

## **CIS120X Problem Solving for CIS Majors** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS90 )

This course will give students hands-on experience in a wide range of modern information technology. Several IT concepts will be introduced that will provide a basis for further study in Information Technology. Students will work on a number of projects that will give perspectives on areas of IT, including but not limited to, visual and/or robotic programming, social media, web design, networking, security, privacy and ethics. Students will leave the course with an understanding of the components of modern IT systems and the scope of knowledge needed to become an IT professional.

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): ( CIS90 )

Microsoft Access is extremely flexible database application that can be linked to data stored in other applications and databases. This course offers students an opportunity to create and modify databases, add fields to a table and assign data types. Students are given hands-on experience in customizing forms, importing data, grouping data, creating calculated fields, developing reports and sub-reports. Advanced features are introduced, which include but not limited to, macros, form command buttons, append and update queries.

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

## **CIS125FL Computer Applications Flash** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( CIS90 )

Flash is used to create animations, games and presentations viewed on computers and mobile devices. Students will create visuals for interactive animations, website interfaces and streaming online videos with usable controls.

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): ( CIS101 )

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

**CIS125PR Computer Applications: Premiere** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( CIS90 )

Premiere is an industry standard for video editing. This course will include the basics of gathering video, computer requirements, creating graphics in Photoshop, and starting a project in Premiere. More advanced features, including but not limited to, keying audio, fixing audio, fixing color, adding color effects, fixing shaky footage and creating moving end credits.

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

**CIS125TD Computer Applications: 3D Max** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( CIS90 )

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 software techniques.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125W Word Processing Applications** 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** 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 Intro to Oper System: Microsoft** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS90 )

This course introduces the student to the theory and operation of operating systems. It will include disk and file handling techniques, common utilities, security issues, minor hardware installation, maintenance and the use of the networks.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS140U Intro to Operating Systems: Unix** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS90 )

This course introduces the student to the Unix/Linux operating system. It provides experience using the command line to conduct file management, basic system administration and run applications. Students will learn the fundamental Unix/Linux command set, file security, editors, scripting, and C programming.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS145 Hardware Installation Support** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS90 )

This course covers the fundamentals of computer hardware, software and advanced concepts in security, networking, and the responsibilities of an IT professional. Topics include, but are not limited to, computer components, assemble a computer system, operating system installation, mobile devices, troubleshooting and diagnostic software.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS151 Network Essentials** 4 credits (4 lec hrs/wk)

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing, fundamentals of Internet concepts, media, and operations. Students gain experience in building simple LANs, basic configurations for routers and switches, and IP addressing schemes.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS152 Network Router Configuration** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS151 )

This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality, troubleshoot routers and switches to resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS180 Internship: CIS** 1-12 credits (3 lab hrs/wk/cr)

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: CTE

**CIS188 Wireless Networking** 3 credits (6 lec lab hrs/wk)

Prerequisite(s): ( CIS151 )

Fundamentals of Wireless LANs is an introductory course focusing on the design, planning, implementation, operation and troubleshooting of wireless networks. It covers a comprehensive overview of technologies, security and design best practices with particular emphasis on hands-on skills in wireless LAN setup and troubleshooting. This course offers a foundation for the Cisco Wireless LAN Support Specialist designation.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS225 End User Support** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( CIS120 and CIS145 ) or ( CIS120X and CIS145 ) or ( CIS145 and CS160 )

Course introduces professional and interpersonal skills needed by technicians who support and manage hardware and software information systems. Includes analyzing, troubleshooting and solving basic hardware and software problems, developing customer service skills and an ethics awareness, help desk operation, technical documentation and training. 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 and CIS125W ) or ( CIS125W )

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 0 times 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 Management I** 4 credits (3 lec, 3 lab hrs/wk)

Course introduces concepts of network management and applications, discussing implementation, administration, configuration and troubleshooting in a networked environment. LAN hands-on experience and lab exercises are provided. Hands-on provided in current network operating system. Course Prepares the student for the Microsoft Server 70-642 Network Infrastructure Configuration certification.

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

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: CTE

**CIS297 IT Professional Capstone** 4-0 credits (3 lec, 3 lab hrs/wk/cr)

This course addresses knowledge skills and dispositions useful to IT professionals. Students will explore and acquire job exploration skills effective interview skills and search skills to optimize job market opportunities. An integrated approach is used to combine project design components relative to job goals and capstone activities to assist in entering the job market with an array of job and technical analysis and design skills.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS90 Computer Basics** 2 credits (2 lec hrs/wk)

This is a basic course in computer literacy and is intended for the novice user. Students will become familiar with current terminology. Students will learn end-user skills in using a learning management system (LMS), file management using a PC operating system, word processing, e-mail, and Internet research.

This course may be taken 1 time for credit.

Course classification: DEV