CIS 4, Business Information Systems with Applications  
3 units
Transfer: UC*, CSU
• Prerequisite: None.
This is not a beginning computing course. It is recommended that students take CIS 1 prior to CIS 4. Ability to keyboard 25 words per minute is recommended. *No UC credit for CIS 1 or 4 if taken after CS 3.
This course introduces students to information systems and their role in business. Topics include information systems, database management systems, networking, e-commerce, ethics and security, computer systems, hardware systems, and application software (word processing, spreadsheet, database, and presentation graphics). In this course, students develop computer-based solutions to a variety of business problems.

CIS 9A, Technology Project Management I  
3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CS 3 or CIS 1.
This course covers the fundamentals of Project Management theory, implementation, and best practices. It is aimed at students who work mostly in the Technology sectors covering software and website development, and other areas of computer science or information systems. Students will learn the theory, as well as the use of Project Management software to plan, track and manage project resources. Topics covered include project life cycles, tasks, schedules, resources, and costs.
CIS 9A is the same course as CS 9A. Credit may be earned for one, not both.

CIS 9B, Technology Project Management II  
3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 9A or CS 9A.
This course covers advanced topics of Project Management theory and practice. Students will learn how to manage projects with changing tasks and schedules, and to adjust their resources and budgets. Also covered are leadership and communication skills. Students will complement the theory with case studies and the use of Project Management software.
CIS 9B is the same course as CS 9B. Credit may be earned for one, not both.

CIS 30, Microsoft Excel  
3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 4.
This course includes a detailed study of business applications using Microsoft Excel spreadsheet package. Topics include the commands, formats, and functions of Excel with emphasis on its use as a problem solving and financial analysis tool. Students will also learn to create macros, customize ribbons and tabs, and integrate Excel with other applications and the World Wide Web. Students will also have an introduction to writing Visual Basic code.
This course uses Microsoft Excel 2016 Professional.

CIS 32, Microsoft Access 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 4.
This course presents an introduction to relational database management systems using Microsoft Access. It is designed to familiarize the student with Microsoft Access and its application in the business world. Topics include: designing, maintaining and querying a database; creating forms, reports, and macros; and an introduction to writing Visual Basic code. Hands-on experience is provided in a microcomputer lab. This class covers the objectives necessary for the MOS certification in Access.
This course uses Microsoft Access 2016.

CIS 34, Advanced Excel with Visual Basic for Applications 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 30.
This course provides Excel users with the knowledge, skills and techniques needed to write macros using Visual Basic for Applications (VBA) within the Excel environment. The course helps users to automate repetitive tasks, customize Excel menus, buttons and screens, and create user friendly interface for input and output. The course covers basic programming techniques used in Visual Basic and VBA.
This course uses Microsoft Excel 2010.

CIS 35, QuickBooks 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 1 or 4 and Accounting 1 or 21.
Formerly same course as Accounting 35.
This course provides the student with a realistic approach to computerized, integrated accounting principles using QuickBooks software package. Students will work with the various components of an accounting system in an ongoing business, as well as set up an accounting system for a new company. Topics include the creation of a QuickBooks company, and the analysis of financial statements, reports and graphs. Students will gain experience in the creation and use of invoices, purchase orders, inventory, bank accounts, and payroll. In addition, students will be able to complete the entire accounting cycle including recording adjusting entries and making corrections on the transactions as needed. Hands-on experience is provided in a microcomputer lab.
This course uses Quickbooks Accountant 2017.

CIS 36C, Spreadsheet – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
This short introductory course in Excel spreadsheet software acquaints the student with basic features of the software including creating, editing, formatting, and printing of electronic worksheets. It is offered as a brief overview of the software.

CIS 36F, Introduction to Windows – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
This hands-on course covers the basic to intermediate features of the Microsoft Windows operating system—from personalizing your Windows environment to finding files and data. Students will learn how to organize files and search for information using Windows Explorer.
This course uses Windows 10.

CIS 36G, Introduction to Internet – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
• Skills Advisory: Working knowledge of Windows.
This hands-on course on the Internet provides students with the opportunity to learn basic and advanced features of the Internet. Topics include browsing, navigating, proper use of Favorites, effective searching for information, creating web pages and using e-mail. Students will learn about the development of the Internet, proper netiquette and social and ethical issues. Additional topics include finding and downloading graphics, freeware and shareware programs from the Internet.

CIS 36I, Microsoft Access – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
• Skills Advisory: Working knowledge of Windows.
This short introductory course in Access software acquaints the student with basic features of the software, including creating, retrieving, and printing electronic databases. It is offered as a brief overview of the software.

CIS 36J, Word Processing – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
• Skills Advisory: Working knowledge of Windows.
This short introductory course in word processing (Microsoft Word) acquaints the student with basic features of the software including creating, revising, storing, and printing documents. It is offered as a brief overview of the software.

CIS 36P, Microsoft PowerPoint – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
• Skills Advisory: Working knowledge of Windows.
This hands-on short course on presentation software teaches the use of Microsoft PowerPoint for business applications. Presentations, handouts, and speaker notes are designed, created, and formatted, using PowerPoint. Students will use graphics, templates, and objects to enhance presentations. Hands-on experience is provided in a microcomputer lab.
This course uses Microsoft PowerPoint 2016.

CIS 36T, Introduction to Turbo Tax – Short Course 1 unit
Transfer: CSU
• Prerequisite: None.
• Advisory: Accounting 15 or prior tax preparation experience.
This course will teach students how to prepare Federal income tax returns and California individual income tax returns using Turbo Tax software.

CIS 37, Microsoft Word 3 units
Transfer: CSU
• Prerequisite: None.
Course Descriptions

- **Skills Advisory: CIS 1 and ability to type 25 wpm.** Through the use of Microsoft Word software, skills are developed in creating, revising, formatting, storing, and printing a variety of business documents. Skills are developed from basic functions and editing tools through intermediate features such as AutoText, columns, custom tab settings, charts and graphs, graphics, envelopes, labels, and headers/footers. Emphasis is placed on professional quality production of documents. Students also learn to increase productivity through the use of automated features and multiple windows. Students develop problem-solving skills through the use of document revisions and trouble-shooting assignments. Additionally, students develop advanced skills in areas of interest ranging from legal applications to brochures and newsletters. Hands-on experience is provided in a microcomputer lab. This class covers the objectives necessary for the MOS and Expert certification in Word. This course uses Microsoft Word 2016.

**CIS 38, Microsoft PowerPoint** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 1.**

Through the use of Microsoft PowerPoint software, skills are developed in planning, creating, formatting, enhancing and delivering presentations for business applications. Topics include audience analysis, selection of presentation media, and the creation and presentation of slides, transparency, and posters. The use of animation, sound and other special effects, as well as Web publishing techniques, will also be covered. Hands-on experience is provided in a microcomputer lab. This class covers the objectives necessary for the MOS certification in PowerPoint. This course uses Microsoft PowerPoint 2016.

**CIS 39, MS Outlook – Comprehensive Course** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 1.**

Microsoft Outlook has become a primary means of office communication and task management. In this course the student will learn to effectively use all features of Outlook e-mail, calendar, contacts, tasks, and notes; create and manage Outlook folders; collaborate with others for scheduling meetings and resources; configure and customize Outlook; integrate Outlook with Microsoft Word Mail Merge and Collaboration features; and convert e-mail attachments to Adobe Acrobat format. Hands-on experience is provided in a microcomputer lab. This class covers the objectives necessary for the MOS certification in Outlook.

**CIS 40, InDesign** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 4, English 1 or Business 31.**

Digital publishers design and produce everything from newsletters and brochures to books and magazines for their clients and employers. In this class, students will develop the skills to integrate text and graphics to design high-quality business publication documents and layouts. Students will create and edit graphics, scan text and images and prepare projects for print or for the Web. This class covers the objectives necessary for the Adobe InDesign certification. This course uses Adobe InDesign CC.

**CIS 50, Internet, HTML, and Web Design** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 1.**

This hands-on course provides all the skills necessary to navigate, create and manage content on the World Wide Web. Students will become familiar with the Internet and its underlying technology and security. The course also covers the principles of Web page design, the use of graphics and other media files, and the creation of linked documents. Students will use both HTML and a Web authoring program to create and edit Web pages and will have the opportunity to put their Web sites online by publishing to a Web server.

**CIS 51, HTML5, CSS3, and Accessibility** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 50.**

HTML5 is the next generation HTML. This hands-on course will explore the differences between HTML5 and XHTML, validating pages to current Web standards and using Cascading Style Sheets (CSS) exclusively to control the look and feel of a site. Students will create and enhance Web pages with links, graphics, tables, and forms. Proper use of HTML5 and CSS3 can provide true separation of content, structure, and presentation in Web pages, making them structurally sound, easier to maintain, and more consistent with legal requirements for accessibility. Students should have a working knowledge of Windows.

**CIS 54, Web Development and Scripting** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 51 or CIS 59A or Graphic Design 66.**

This hands-on course introduces students to Web development using the newest features in client-side markup languages to create modern day visual front-ends. Following responsive Web design practices, students will learn how to make front-ends dynamically react to the user by using features such as floating windows, animations, carousels and sliders, nifty widgets, drop down menus, parallax scroll effects, single page applications and simple games. Students will also learn various client-side techniques for working with data, form data validation, and data collection using Web services, XML, and AJAX to process user input such as product orders. Technologies included in instruction are the current versions of HTML, CSS, JavaScript, JQuery, XML, JSON, and AJAX.

**CIS 55, Advanced WebPage Development and Scripting** 3 units

Transfer: CSU
- **Prerequisite: None.**
- **Advisory: CIS 54.**

This course is for web designers who want to expand their knowledge of creating script-based Web pages. Students will learn the more advanced techniques used in today’s websites. This course assumes a good foundational knowledge of HTML 4, JavaScript and a server-side scripting language such as ASP, PHP, CFM, or ASP.NET. Students will learn how to extend JavaScript to create interactive, dynamic Web pages using Dynamic HTML, incorporate cookies, hidden fields, create animations, write search functionalities, and interface with databases. MySQL or Microsoft
Access will be used to create data driven applications, such as a shopping cart, or a mailing list. At the completion of this course, students will be proficient in designing and developing interactive Web sites.

CIS 56, Web Media Production 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 50 or CIS 60A.

This course provides the knowledge, skills, and hands-on experience needed to deliver successful commercial websites. Students will learn the many pitfalls of website planning and production and how to overcome them. This includes understanding what is wanted, and learning how to create the website in a speedy and efficient manner. Students will learn how to manage the project and the client, and perfect techniques in design. Learning how to design for the intended audience, obtain content, select a proper navigation, incorporate various media (graphics, database, animations, etc.), deploy and maintain the website are the key elements covered. This is a hands-on course and the students will utilize newly learned skills to build a website for a client which can be added to their portfolio.

CIS 57, Website Planning and Production 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 51 or CIS 59A.

This course provides the knowledge, skills, and hands-on experience needed to deliver successful commercial websites. Students will learn the many pitfalls of website planning and production and how to overcome them. This includes understanding what is wanted, and learning how to create the website in a speedy and efficient manner. Students will learn how to manage the project and the client, and perfect techniques in design. Learning how to design for the intended audience, obtain content, select a proper navigation, incorporate various media (graphics, database, animations, etc.), deploy and maintain the website are the key elements covered. This is a hands-on course and the students will utilize newly learned skills to build a website for a client which can be added to their portfolio.

CIS 58, Designing Accessible Websites 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 51.

Web accessibility benefits everyone—those with and those without disabilities, through increased usability and interoperability of Web-based materials. The law requires government Web sites to be accessible, and several states have adopted the standards (California included). The requirement will expand exponentially as the law continues to be defined. This class will prepare the developer to deliver legal and accessible Web sites. Topics will include Section 508 guidelines, assistive technologies, and universal design principles. This class is structured to allow learners to explore the area of Web accessibility using a hands-on, project-based approach.

CIS 59A, Dreamweaver I 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 50.

This is an introductory course in learning Web page design with Dreamweaver. Students will learn techniques for designing Web pages and expand their knowledge of HTML, Dynamic HTML, and JavaScript. Students will learn to integrate images, sound, and other multimedia using Dreamweaver. This course covers Web site creation and management features including Web file management, navigation bars, formatting text styles, Cascading Style Sheets, and content management. Upon completing this course, students will be ready to plan, build, upload, and maintain a professional Web site. This course uses Adobe Dreamweaver CC.

CIS 59B, Dreamweaver II 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 59A.

This course examines advanced Web development techniques and concepts utilizing the Dreamweaver toolset. Topics covered include site architecture, Web project management, integration with dynamic Web development tools, code management and site enhancements. Students will learn to enhance the development of Dreamweaver Web pages utilizing server-side includes, dynamic XHTML & XML, and intelligent use of graphics and color schemes. Additional topics will include the CSS toolset, site management utilizing cascading templates & libraries, including cutting edge technologies (RSS, podcasting), and dynamic content design with XML tools. Dreamweaver extension manager and use of extensions will also be covered. This course uses Adobe Dreamweaver CC.

CIS 60A, Photoshop I 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 51.

This course is for the non-design student interested in learning Photoshop. Students will learn image creation and editing using Adobe Photoshop. Students learn to create, repair and modify images, scan photos, plan composite images and create special effects for use in a variety of applications. Hands-on experience is provided in a microcomputer lab. This class covers the objectives necessary for the Visual Communication using Adobe Photoshop (ACA) certification. This course uses Adobe Photoshop CC.

CIS 60B, Photoshop II 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 60A.

This course is for the non-design student interested in learning Photoshop. Students will learn image creation and editing using Adobe Photoshop. Students learn to create, repair and modify images, scan photos, plan composite images and create special effects for use in a variety of applications. Hands-on experience is provided in a microcomputer lab. This class covers the objectives necessary for the Visual Communication using Adobe Photoshop (ACA) certification. This course uses Adobe Photoshop CC.

CIS 61, Fireworks 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 50.
This hands-on course provides in-depth coverage of Fireworks features. Students will learn to create and understand graphics projects, Web Vector Objects. Topics include working with Web page objects using Vector Tools, importing, modifying and creating graphics, skinning Flex components, building Web and RIA prototypes, and extending Fireworks. Students will learn how to modify pixels on a Bitmap and manipulate images. This course covers masks, color, interactivity, creating animation, and creating sophisticated Web page navigation. Upon completion of this course, students will be ready to plan, build, modify, and optimize graphics designed for Web and AIR deployment.

CIS 62A, Flash I 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 50.
In this course students who are not design majors will learn to use Flash. Topics will include the creation of graphic elements using Flash’s unique drawing tools, turning graphic elements into animation, and introduction to ActionScripting techniques for the creation of interactive movies.

CIS 62B, Flash II 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 62A.
In this course, students who are non-design majors will learn to take their Flash skills to the next level by taking advantage of its scripting language, ActionScript, which offers a more robust programming model and better object-oriented programming support. Topics will include learning how ActionScript can control graphic, sounds, and text. To create user-interface elements, and learn how Flash communicates with outside applications such as Web browsers.

CIS 64, Illustrator 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 60A.
This course is for the non-design students interested in learning Adobe Illustrator using Personal Computers for Windows. Students will develop the skills and use a variety of tools to create sophisticated illustrations, logos, advertisements, and other business media graphics for the Web. This class covers the objectives necessary for the Adobe Illustrator certification.

This course uses Adobe Illustrator CC.

CIS 65, Flash Catalyst 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 51 and one of the following: CIS 60A, CIS 64, or CIS 61.
This hands-on course provides students with the skills to create expressive interfaces using Adobe Flash Catalyst. Students will learn how to convert static artwork into interactive components, such as sliders, scroll panels, buttons, and input boxes. They will graphically edit and create animated transitions between pages or states of components. Other learning objectives include rapid prototyping, testing interactivity, choreographing motion, creating accessible SWF files, blending objects, creating widgets, and handling dynamic data, touch screen and mouse events.

CIS 67, WordPress 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 54 and CIS 60A.
WordPress is the world’s most popular Content Management System (CMS) platform, powering personal blogs, some of the largest community/society websites, eCommerce web stores and fan sites built with cutting edge technology. This course provides students with the knowledge, skills, and hands-on experience to create, enhance, and maintain a successful WordPress site. Students learn the necessary skills to install WordPress, design, and build a WordPress website, create and sustain a blog, populate the site with content aggregation, and build a content management system. Students will be able to edit the site, integrate analytics, optimize for Search Engine Optimization (SEO), and build for multiple contributors. The design and integration of WordPress themes, widgets, and plugins will be emphasized.

CIS 70, Social Media Applications 3 units
Transfer: CSU
• Prerequisite: None.
• Advisory: CIS 50 or Graphic Design 65.
Social media provides an avenue for individuals and business of all sizes to reach global audiences. Armed with the skills to build podcasts, video galleries, photo streams, Facebook pages, content management systems, and to post information with blogs, wikis, micro-blogging, and RSS feeds one person has the ability to share a multifaceted message with millions worldwide. This course will provide the knowledge and skills to integrate all of the pieces, strategies and tactics with the tools of the social web to create a successful online community that includes interactivity, sharing, and collaboration.

CIS 88A, Independent Studies in CIS 1 unit
Transfer: CSU
Please see “Independent Studies” section.

CIS 88B, Independent Studies in CIS 2 units
Transfer: CSU
Please see “Independent Studies” section.

CIS 88C, Independent Studies in CIS 3 units
Transfer: CSU

CIS 90A, Internship in Computer Applications 1 unit
Transfer: CSU
Please see “Internships” section.

CIS 90B, Internship in Computer Applications 2 units
Transfer: CSU
Please see “Internships” section.