CAOT R009—Office Procedures 3 units
Advisory: CAOT R001B or CAOT R002 and CAOT R003C. 3 hours lecture weekly
This course provides instruction and practical applications in current office techniques. Students will learn about the workplace environment, communication skills, technology basics, workforce behaviors, correspondence, meetings and travel, and job search and advancement among other related topics essential for employment in office positions. Field trips may be required. Formerly CIS R009. (2)

CAOT R122—Microsoft Office 3 units
2½ hours lecture, 1½ hours lab weekly
Students will be introduced to the various application programs that make up the suite of Microsoft Office. The focus for this course will be on learning the basic features of Word, Excel, Access, and PowerPoint. Students will learn to apply these productivity tools to various business documents. Formerly CIS R122. (2)
Transfer credit: CSU

CAOT R123—Microsoft Excel 3 units
2½ hours lecture, 1½ hours lab weekly
This course provides instruction in Microsoft Excel, concentrating on the development of an understanding and working knowledge of the business and practical applications of a spreadsheet. Students will be introduced to topics such as charts, formulas, functions, Web queries, formatting, financial functionsk, data tables, and hyperlinks. Formerly CIS R123A. (2)
Transfer credit: CSU

CAOT R124—Microsoft Access 3 units
2½ hours lecture, 1½ hours lab weekly
This course provides in-depth knowledge of the concepts behind a database management system and focuses on issues related to practical database design. Students will learn to create conceptual, logical and physical designs of relational databases in response to a set of user requirements. The student will design and implement databases utilizing Microsoft Access. Formerly CIS R024A. (2)
Transfer credit: CSU

CAOT R129—Microsoft PowerPoint 3 units
2½ hours lecture, 1½ hours lab weekly
Students will be introduced to various methods of creating presentation slides using graphics, animation, and transitions that are part of the Microsoft PowerPoint features. The focus for this course will be on learning the basic features and functions of Microsoft PowerPoint. Students will learn to apply these productivity tools to various business documents. Formerly CIS R129. (2)
Transfer credit: CSU

CAOT R130—Microsoft Word 3 units
2½ hours lecture, 1½ hours lab weekly
This course provides a solid foundation in the use of a word processor utilizing MS Word. This includes the knowledge and skills needed to perform formatting specifications required for business and research documents. Formerly CIS R130. (2)
Transfer credit: CSU

COMPUTER INFORMATION SYSTEMS

Computer Information Systems (CIS) is the use of computers and Information to enable organizations and people to be more productive and creative. The CIS program prepares students to pursue a technology career with an understanding of how technology facilitates achieving business objectives and goals. Students prepare for careers in a variety of business, government, and educational settings.

For more information, contact:
Henry Bouma, hbouma@vcccd.edu
(805) 986-5800, ext. 2054
Dr. Diane Eberhardy, debberhardy@vcccd.edu
(805) 986-5800 ext. 1993

Career Opportunities

<table>
<thead>
<tr>
<th>Applications Programmer</th>
<th>Office Systems Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Consultant</td>
<td>Systems Analyst</td>
</tr>
<tr>
<td>Customer Service Support Tech</td>
<td>Web Designer</td>
</tr>
<tr>
<td>Database Administrator</td>
<td></td>
</tr>
</tbody>
</table>

Faculty

<table>
<thead>
<tr>
<th>Full-Time</th>
<th>Part-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hank Bouma</td>
<td>Billy Davis</td>
</tr>
<tr>
<td>Diane Eberhardy</td>
<td>Sandy Iverson</td>
</tr>
<tr>
<td>Maria Pinto-Casillas</td>
<td>Kathlynn Spencer</td>
</tr>
<tr>
<td></td>
<td>Alexandra Zuronski</td>
</tr>
</tbody>
</table>

◆ Computer Information Systems

Associate in Science Degree Certificate of Achievement

The Computer Information Systems program is designed for students who are interested in the implementation and administration of technology in a business environment. The program provides the skills necessary for career entry or advancement in such positions as application programmers, systems analysts and computer support specialists.

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOT R124</td>
<td>Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS R100</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS R101</td>
<td>Programming Principles and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS R104</td>
<td>Introduction to Windows</td>
<td>3</td>
</tr>
<tr>
<td>CIS R110</td>
<td>Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>CIS R120</td>
<td>Systems Analysis &amp; Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS R127</td>
<td>Web Design and Programming</td>
<td>3</td>
</tr>
<tr>
<td>ENGT R150</td>
<td>Introduction to Computer Network Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Core Units 24

Required Additional Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS R120</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS R140</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENGT R130</td>
<td>Administering Microsoft Windows Server</td>
<td>3</td>
</tr>
<tr>
<td>ENGT R131</td>
<td>Administering Microsoft Windows Server</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Required Units 30

Program Student Learning Outcomes

Upon successful completion of the Computer Information Systems program students will be able to:

- The student must demonstrate an understanding of the basic principles of computer programming and design.
- The student must demonstrate an understanding of basic computer knowledge and skills.
- The student must demonstrate an understanding of basic Internet/WWW knowledge and skills.
- The student must demonstrate an understanding of systems analysis and design.
- Students will be able to identify the ethical, cultural, and societal issues related to technology.
Office Information Systems

Associate in Science Degree
Certificate of Achievement

This program is designed for students interested in learning popular computer application systems that are in demand for a variety of professions. Students will be prepared to seek employment as an administrative assistant, office clerk/receptionist, or in the fields of information technology or office management. This program is oriented to applying computer application systems skills to a business, industry, or government environment using microcomputer systems.

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAOT R123</td>
<td>Microsoft Excel</td>
<td>3</td>
</tr>
<tr>
<td>CAOT R124</td>
<td>Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>CAOT R129</td>
<td>Microsoft PowerPoint</td>
<td>3</td>
</tr>
<tr>
<td>CAOT R130</td>
<td>Microsoft Word</td>
<td>3</td>
</tr>
<tr>
<td>CIS R100</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS R104</td>
<td>Introduction to Windows</td>
<td>3</td>
</tr>
<tr>
<td>CIS R126</td>
<td>Introduction to the Internet/WWW</td>
<td>3</td>
</tr>
<tr>
<td>CIS R127</td>
<td>Web Design and Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS R142</td>
<td>Web Pages with Dreamweaver</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Core Units: 27

Complete a minimum of three units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS R128C</td>
<td>Photoshop I</td>
<td>3</td>
</tr>
<tr>
<td>CIS R128D</td>
<td>Photoshop II</td>
<td>3</td>
</tr>
<tr>
<td>CIS R144</td>
<td>Web Pages with Flash</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Required Units: 30

Program Student Learning Outcomes

Upon successful completion of the Office Information Systems program students will be able to:

- The student must demonstrate an understanding of the basic functions and features of word processing, spreadsheet, database, and presentation software.
- The student must demonstrate an understanding of basic computer knowledge and skills.
- The student must demonstrate an understanding of basic Internet/WWW knowledge and skills.
- The student must demonstrate an understanding of basic photo editing knowledge and skills.

Computer Information Systems Courses

CIS R007—Office Occupations Preparation  1-12.5 units

This course is for students with little or no previous office training and who have immediate job goals in mind. The course may include training in keyboarding, keyboarding speed and accuracy development; document processing using Word; basic knowledge of Windows and Excel; filing; business problems calculation using a ten-key; spelling, vocabulary, telephone techniques, e-mail etiquette, Internet research, job skills, and other office procedures skills. Field trips may be required. Course may be taken three times.

CIS R020A—Introduction to Microcomputers  3 units

This course provides an initial introduction to computer technology for students who have no experience or limited experience with computers. A basic introduction of the fundamentals of computers in topics such as computer terminology, the history of computers, the components of computers, the Internet and World Wide Web, computer communications, computer networks, network operating systems, operating system software and application software, storage media, word processing, spreadsheets, database management, presentation software, information privacy, and computer security. Students will obtain hands-on experience with various software applications.

CIS R021A—Introduction to Windows Concepts  1 unit

Microsoft Windows® is an Operating System with graphical user interface (GUI). By learning Microsoft Windows® students will be able to organize and manage a computer. Students will learn the fundamental concepts of Windows® (desktop management, opening, moving, and sizing windows; help and support); file, document and folder management (how to create and modify documents, save, close, and print, create folders); and working with Windows Explorer® (expanding drives and folders, copy disks, copy files from folder to folder, rename files, delete files). This course is a prerequisite or advisory for the software applications courses.

CIS R100—Introduction to Computer Information Systems  3 units

This course is a comprehensive introduction to computer technology and information systems and their relationship to business and society. Students will be introduced to computer terminology, computer systems, hardware, software, the Internet and World Wide Web, communications and networking, programming languages, information systems, data structures, database management, enterprise computing, computer security, ethics, and privacy, careers in the computer industry, as well as the impact of computers on business and society as a whole.

CIS R101—Programming Principles and Design  3 units

This is an introductory course in computer program design and development. Emphasis is on basic analytical and problem-solving techniques of algorithm development. Students will utilize program specification sheets, structure charts, flowcharts and pseudo-code in developing designs for business applications programs. Structured programming techniques will be stressed throughout the course. This course is recommended prior to or concurrent with the first course taken in a computer programming language. Students are encouraged to take CIS R100 prior to this course. Field trips may be required.

CIS R104—Introduction to Windows  3 units

This course is for students with little or no previous office training and who have immediate job goals in mind. The course may include training in keyboarding, keyboarding speed and accuracy development; document processing using Word; basic know
CIS R110—Visual Basic 3 units
Advisory: CIS R110.
2½ hours lecture, 1½ hours lab weekly
This course provides a solid foundation in the fundamentals of object-oriented programming in the Visual Basic .NET language. The course will emphasize basic concepts of programming, problem solving, and programming logic. (2)
Transfer credit: CSU

CIS R120—Systems Analysis & Design 3 units
Prerequisites: CIS R100.
3 hours lecture weekly
This course is a comprehensive introduction to business information systems analysis and design. Students will be introduced to the role of business information systems, the analysis of information systems, the design of information systems, system implementation, and computer-aided systems engineering tools. Field trips may be required. (2)
Transfer credit: CSU

CIS R126—Introduction to the Internet/WWW 3 units
2½ hours lecture, 1½ hours lab weekly
Students will be introduced to the various services that make up the Internet. The primary focus for this course will be the World Wide Web. Students will learn the basic components that make up the Internet and how to interact with the World Wide Web. Particular emphasis will be placed on such topics as browser programs, communicating with e-mail, searching the web for information, information resources on the web, downloading and storing data, real-time communication, Internet security, and e-commerce. (2)
Transfer credit: CSU

CIS R127—Web Design and Programming 3 units
2½ hours lecture, 1½ hours lab weekly
This course provides an overview of web design and programming. The course addresses style and coding of website development. This includes the website creation process linking both graphical design and programming together utilizing HTML/XHTML, CSS, XML, and JavaScript. The latest technologies in web design will be emphasized throughout the course. (2)
Transfer credit: CSU

CIS R128C—Photoshop I 3 units
2½ hours lecture, 1½ hours lab weekly
This course will introduce students to basic topics in using Photoshop digital image editing software. Students will learn to manipulate digital images using such features as basic photo corrections, retouching and repairing digital images, working with image selections, layer basics, masks and channels, correcting and enhancing digital photographs. (2)
Transfer credit: CSU

CIS R128D—Photoshop II 3 units
Prerequisites: CIS R128C.
2½ hours lecture, 1½ hours lab weekly
This course will introduce students to advanced topics in Photoshop. Students will learn to manipulate digital images using such features as typographic design, vector drawing, advanced layer techniques, advanced compositing, image links, rollovers, and image animation. (2)
Transfer credit: CSU

CIS R142—Web Pages with Dreamweaver 3 units
2½ hours lecture, 1½ hours lab weekly
This course provides instruction on the design and development of web pages using Macromedia Dreamweaver. Students will develop personal and commercial web pages as well as publish web sites on the World Wide Web. Students will learn to integrate text, colors, graphics, sound, and video in developing professional level web sites. This course is for anyone who wishes to learn how to create web sites quickly and easily as well as create sophisticated web sites for business purposes. (2)
Transfer credit: CSU

CIS R144—Web Pages with Flash 3 units
2½ hours lecture, 1½ hours lab weekly
This course provides instruction on the design and development of web pages using Macromedia Flash. Students will develop personal and commercial web pages as well as publish web sites on the World Wide Web. Students will learn to integrate text, colors, graphics, sound, and video in developing professional level web sites. This course is for anyone who wishes to learn how to create web sites using Flash components quickly and easily as well as create sophisticated web sites for business purposes. (2)
Transfer credit: CSU

CIS R189—Topics in Computer Information Systems ½-10 units
Lecture and/or lab hours as required by unit formula
This class offers specialized topics designed to inform or update interested persons in various disciplines within the field of business and computer information systems. Unit credit is determined by length of course. Field trips may be required. (2)
Transfer credit: CSU

COT R190G—General Cooperative Work 1-3 units
This course is designed for students interested in furthering their knowledge of computer information systems on an independent study basis. Assignments may include writing programs for campus use. Field trips may be required. Course may be taken two times. (1)
Transfer credit: CSU

COT R198A-Z—Short Courses in Computer ½-10 units
Lecture and/or lab hours as required by unit formula
This course offers specialized topics designed to inform or update interested persons whose needs are not met by regular course offerings. This course is transferable. Field trips may be required. (2)
Transfer credit: CSU

COOPERATIVE WORK EXPERIENCE

Cooperative Work Experience Courses

COT R199—Directed Studies in Computer Information Systems 1-3 units
Prerequisites: Completion of at least one full semester of a computer programming language or a minimum of 12 units in computer applications.
3-9 hours lab weekly as required by unit formula
This course is designed for students interested in furthering their knowledge of computer information systems on an independent study basis. Assignments may include writing programs for campus use. Field trips may be required. Course may be taken two times. (1)
Transfer credit: CSU