Sacramento City College

**Information**

Website: http://www.sierracollege.edu/

Catalog: http://www.sierracollege.edu/\_files/resources/academics/catalog/catalog-11-12-web.pdf

Email:

Phone: (916) 624-3333

Address: 5000 ROCKLIN ROAD ROCKLIN, CA 95677

**Full Time Courses**

**Degree**

**Computer Information Systems**

Administrative Technical Support: AA , AS

Computer Applications: AA , AS

Computer Service Technologist: AA , AS

Computer Support: AA , AS

Internet: AA , AS

Networking: AA , AS

Virtual Office Professional—Administrative: AA , AS

Virtual Office Professional—Technical Support: AA , AS

Virtual Office Professional—Web Management: AA , AS

**Computer Science**

Computer Science: AA , AS

Management Information Systems: AA , AS

**Engineering: AA , AS**

**Environmental Studies and Sustainability: AS**

**Certificate**

**Certificates of Achievement**

**Computer Information Systems:**

Administrative Technical Support

Computer Applications

Computer Service Technologist

Computer Support

Internet

Networking

Virtual Office Professional — A dministrative

Virtual Office Professional — T echnical Support

Virtual Office Professional — Web Management

**Computer Science:**

Embedded Systems

Web Programming

**Engineering**:

Civil Engineering Technology

General Engineering Technology

**Mechatronics Technology**

**Skills Certificates**

**Computer Information Systems:**

Computer Essentials

Microsoft Office Specialist—Core Level

Microsoft Office Specialist—Expert Level

Online Business

PC Care

Web Page Editor

Web Site Production

**Environmental Studies and Sustainability:**

Photovoltaic

Photovoltaic Advanced

COMPUTER INFORMATION SYSTEMS — ADMINISTRATIVE TECHNICAL SUPPORT CONCENTRATION

A.A. or A.S. DEGREE and/or CERTIFICATE

The Administrative Technical Support concentration prepares students for positions as computer applications users, computer applications installers/trainers, and technically oriented administrative personnel.

CIS 50 Applying Computer Software

CIS 65 Networking Fundamentals (also CSCI 65)

CIS 67 Foundations for Creating Web Pages

CIS 70 Word Processing-Beyond the Basics

CIS 80 Spreadsheets in a Business Environment

CIS 90 Database Management

CIS 100 Software for Dynamic Presentations

CIS 105 Microsoft Outlook-Managing Information

CIS 15 Keyboarding for Computer Users

CIS 35 Computer Skills for Success in an Online Course

CIS 45 Computer User Support Concepts

CIS 95 Internship in Computer Information Systems

CIS 115 Software Configuration and Troubleshooting

CIS 120 Creating Business Graphics with Microsoft Publisher

CIS 127 Creating Web Sites

CIS 137 Managing a Successful Web Project

CIS 150 Careers in the Computer Industry

COMPUTER INFORMATION SYSTEMS - COMPUTER APPLICATIONS CONCENTRATION

A.A. or A.S. DEGREE and/or CERTIFICATE

The Computer Applications concentration prepares students for positions as entry-level users of current computer applications including word processing, spreadsheets, and databases.

CIS 5 Computer Keyboarding & Word Processing Basics

CIS 20 Keyboarding Review and Skill Building

CIS 35 Computer Skills for Success in an Online Course

CIS 50 Applying Computer Software

CIS 70 Word Processing-Beyond the Basics

CIS 80 Spreadsheets in a Business Environment

CIS 100 Software for Dynamic Presentations

CIS 12 Voice Recognition Software

CIS 15 Keyboarding for Computer Users

CIS 30 Fundamental Computer Concepts & Applications

CIS 45 Computer User Support Concepts

CIS 67 Foundations for Creating Web Pages

CIS 90 Database Management

CIS 95 Internship in Computer Information Systems

CIS 105 Microsoft Outlook-Managing Information

CIS 115 Software Configuration and Troubleshooting

CIS 120 Creating Business Graphics with Microsoft Publisher

CIS 127 Creating Web Sites

CIS 137 Managing a Successful Web Project

CIS 150 Careers in the Computer Industry

COMPUTER INFORMATION SYSTEMS — COMPUTER SERVICE TECHNOLOGIST

CONCENTRATION

A.A. or A.S. DEGREE and/or CERTIFICATE

(Formerly Computer Service Technology-Computer Service Technologist Concentra tion)

Successful completion of the curriculum in the Computer Service Technologist concentration prepares students for entry-level Information Technology support positions in a number of areas. This concentration also helps prepare students for a number of vender neutral, industry certification exams, offered through the CompTIA organization.

CIS 26 Preparation for A+ Certification

CIS 50 Applying Computer Software

CIS 65 Networking Fundamentals

MECH 25 Personal Computer Configuration and Repair

CIS 95 Internship in Computer Information Systems

CIS 115 Software Configuration & TroubleshootinG

CIS 141 Installing, Configuring & Administering Microsoft Client OS

CIS 142 Installing, Configuring & Administering a Secure Windows Server

CIS 146 Wireless Networking and Security

CIS 147 Internet and Intranet Security

COMPUTER INFORMATION SYSTEMS —COMPUTER SUPPORT CONCENTRATION

A.A. or A.S. DEGREE and/or CERTIFICATE

(Formerly Computer Information Systems-Help Desk Concentra tion)

The Computer Support concentration provides students with education in Computer Information Systems with an emphasis in technical customer support services.

CIS 45 Computer User Support Concepts

CIS 50 Applying Computer Software

CIS 65 Networking Fundamentals

CIS 67 Foundations for Creating Web Pages

CIS 105 Microsoft Outlook-Managing Information

CIS 115 Software Configuration and Troubleshooting

BUS 85 Introduction to Oral Communication

BUS 100 Management Concepts and Applications

CIS 15 Keyboarding for Computer Users

CIS 80 Spreadsheets in a Business Environment

CIS 90 Database Management

CIS 95 Internship in Computer Information Systems

CIS 28 Independent Study

MECH 25 Personal Computer Configuration and Repair

COMPUTER INFORMATION SYSTEMS — INTE RNET CONCENTRATION

A.A. or A.S. DEGREE and/or CERTIFICATE

Successful completion of the Internet concentration prepares students to develop and use Internet business strategies.

CIS 50 Applying Computer Software

CIS 67 Foundations for Creating Web Pages

CIS 105 Microsoft Outlook-Managing Information

CIS 127 Creating Web Sites

CIS 137 Managing a Successful Web Project

CSCI 62 Web Programming I

AA D 70 Introduction to Digital Art & Design

BUS 122 Marketing in the Digital Age

CIS 15 Keyboarding for Computer Users

CIS 90 Database Management

CIS 100 Software for Dynamic Presentations

CSCI 50 Introduction to UNIX

CSCI 52 Introduction to SQL

CSCI 63 Web Programming II

COMPUTER INFORMATION SYSTEMS — NETWORKING CONCENTRATION

A.A or A.S. DEGREE and/or CERTIFICATE

(Formerly Computer Service Technology-Networking Concentra tion)

Successful completion of the curriculum in the Networking concentration prepares students for positions as network administrators and other network personnel. Many of the courses also help prepare students for the Microsoft Certification exams needed for achieving MCSA, MCSE and MCDBA.

CIS 65 Networking Fundamentals

CIS 141 Installing, Configuring & Administering Microsoft Client OS

CIS 142 Installing, Configuring & Administering a Secure Windows Server

CIS 143 Managing a Windows Network Environment

CSCI 50 Introduction to UNIX

CIS 88 Computer Forensics

CIS 90 Database Management

CIS 95 Internship in Computer Information Systems

CIS 115 Software Configuration and Troubleshooting

CIS 135 Project Management Concepts

CIS 136 Project Management Software

CIS 147 Internet and Intranet Security

CIS 149 Database Administration in a Client/Server Environment

CSCI 52 Introduction to SQL

VIRTUAL OFFICE PROFESSIONAL

Successful completion of the Virtual Office Professional concentrations prepare students for starting virtual office businesses, addressing issues of creating, marketing, and managing virtual offices. In addition, students are prepared to assume positions in businesses and industries that utilize administrative support, including executive assistants and office support specialists. Topics include time management, workplace customization, technology evaluation and purchasing, communication through the use of advanced technologies, and business ethics.

VIRTUAL OFFICE PROFESSIONAL— ADMINISTRATIVE CONCENTRATION

A.A. OR A.S. DEGREE AND /OR CERTIFICATE

BUS 86 Written Communications for Business

ENGL 12 Writing in the Workplace

BUS 140 Small Business Management

CIS 52 Creating a Virtual Office

CIS 53 Marketing a Virtual Office

CIS 54 Managing a Virtual Office

CIS 70 Word Processing-Beyond the Basics

CIS 95 Internship in Computer Information Systems

BUS 95 Internship in Business

BUS B Accounting and Finance for the Small Business Owner

BUS 8 Computerized Accounting for Windows

BUS 55 International Business Practices

BUS 70 Introduction to Risk Management and Insurance

BUS 71 Principles of Property and Liability Insurance

BUS 72 Principles of Personal Insurance

BUS 73 Principles of Commercial Insurance

BUS 74 Insurance Code and Ethics

BUS 85 Introduction to Oral Communication .

BUS 116 Customer Service Skills

BUS 122 Marketing in the Digital Age

CIS 12 Voice Recognition Software

CIS 67 Foundations for Creating Web Pages

CIS 80 Spreadsheets in a Business Environment

CIS 90 Database Management

CIS 100 Software for Dynamic Presentations

CIS 105 Microsoft Outlook-Managing Information

CIS 120 Creating Business Graphics with Microsoft Publisher

CIS 127 Creating Web Sites

CIS 135 Project Management Concepts

CIS 136 Project Management Software

CIS 137 Managing a Successful Web Project

VIRTUAL OFFICE PROFESSIONAL—TECHNICAL SUPPORT CONCENTRATION

A.A. OR A.S. DEGREE AND /OR CERTIFICATE

CIS 52 Creating a Virtual Office

CIS 54 Managing a Virtual Office

CIS 65 Networking Fundamentals

CIS 95 Internship in Computer Information Systems

BUS 95 Internship in Business

CIS 115 Software Configuration and Troubleshooting

CIS 141 Installing, Configuring & Administering Microsoft Client OS

CIS 142 Installing, Configuring & Administering a Secure Windows Server

BUS B Accounting and Finance for the Small Business Owner

BUS 55 International Business Practices

BUS 86 Written Communication for Business

BUS 116 Customer Service Skills

CIS 45 Computer User Support Concepts

CIS 53 Marketing a Virtual Office

CIS 80 Spreadsheets in a Business Environment

CIS 90 Database Management

CIS 105 Microsoft Outlook-Managing Information

CIS 135 Project Management Concepts

CIS 136 Project Management Software

CIS 143 Managing a Windows Network Environment

CIS 144 Supporting a Network Infrastructure

CIS 145 Implementing and Administering Directory Services

CIS 146 Wireless Networking and Security

CIS 160 Home Technology Integration

MECH 25 Personal Computer Configuration and Repair

VIRTUAL OFFICE PROFESSIONAL—WEB MANAGEMENT CONCENTRATION

A.A. OR A.S. DEGREE AND /OR CERTIFICATE

CIS 52 Creating a Virtual Office

CIS 53 Marketing a Virtual Office

CIS 54 Managing a Virtual Office

CIS 67 Foundations for Creating Web Pages

CIS 95 Internship in Computer Information Systems

BUS 95 Internship in Business

CIS 127 Creating Web Sites

CIS 137 Managing a Successful Web Project

AA D 60 Graphic Design: Principles and Process

AA D 61 Graphic Design II : Digital Design and Production

AA D 66 Business Practices for the Applied Arts

AA D 85 Introduction to Web Design

BUS B Accounting and Finance for the Small Business Owner

BUS 55 International Business Practices

BUS 85 Introduction to Oral Communication

BUS 86 Written Communications for Business

BUS 116 Customer Service Skills

BUS 122 Marketing in the Digital Age

BUS 140 Small Business Management

CIS 50 Applying Computer Software

CIS 70 Word Processing-Beyond the Basics

CIS 80 Spreadsheets in a Business Environment

CIS 90 Database Management

CIS 120 Creating Business Graphics with Microsoft Publisher

CIS 135 Project Management Concepts

CIS 136 Project Management Software

COMPUTER ESSENTIALS

SKILLS CERTIFICATE

Equips students with the essential Windows personal computer skills required for school or business. Helps prepare students for careers or fields of study that require computer use, such as data entry, clerical support, receptionist, or customer service, and may serve as a foundation for acquiring advanced or specialized computer skills. Appropriate for students seeking retraining. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CIS 5 Computer Keyboarding and Word Processing Basics

CIS 20 Keyboarding Review and Skill Building

CIS 30 Fundamental Computer Concepts and Applications

CIS 35 Computer Skills for Success in an Online Course

CIS 45 Computer User Support Concepts

CIS 50 Applying Computer Software

PC CARE

SKILLS CERTIFICATE

Prepares students to perform basic Windows computer setup, care, maintenance, and troubleshooting with focus on personal computers. Addresses needs to understand and maintain computers. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CIS 65 Networking Fundamentals

CIS 67 Foundations for Creating Web Pages

CIS 115 Software Configuration and Troubleshooting

MECH 25 Personal Computer Configuration and Repair

MICROSOFT OFFICE SPECIALIST —CORE LEVEL

SKILLS CERTIFICATE

Helps students prepare for Core Level Microsoft Office Specialist industry certification exams in Word, Excel, Access, and Power- Point. Prepares students for advancement in the workplace and builds technical proficiency, comprehension of Office applications, and ability to integrate the Office applications. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CIS 15 Keyboarding for Computer Users

CIS 30 Fundamental Computer Concepts and Applications

CIS 50 Applying Computer Software

MICROSOFT OFFICE SPECIALIST —EXPERT LEVEL

SKILLS CERTIFICATE

Helps students prepare for Expert Level Microsoft Office Specialist industry certification exams in Word, Excel, Access, PowerPoint and Outlook. Students will increase technical proficiency and expertise, overall comprehension of Office applications, ability to use advanced features, and ability to integrate the Office applications with other software applications. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CIS 70 Word Processing-Beyond the Basics

CIS 80 Spreadsheets in a Business Environment

CIS 90 Database Management

CIS 100 Software for Dynamic Presentations

CIS 105 Microsoft Outlook-Managing Information

ONLINE BUSINESS

SKILLS CERTIFICATE

For those students who want to build skills surpassing those of the typical Internet user. Prepares students to effectively understand and apply the Internet for upgrading business skills including researching and identifying high quality information, applying advanced online business communication and collaboration tools, and publishing or maintaining Web pages with HTML and/or Web editing software. Helps prepare students for careers as research/ reference coordinators, customer service coordinators, and Internet content coordinators, as well as for educational advancement. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CIS 37 Fundamental Internet Techniques & Strategiesfor College

CIS 67 Foundations for Creating Web Pages

CIS 105 Microsoft Outlook-Managing Information

CIS 137 Managing a Successful Web Project

WEB PAGE EDITOR

SKILLS CERTIFICATE

Assists in preparing students for entry level positions on a Web team or upgrades and expands existing office skills. Students will apply skills to edit web sites using HTML, Web page editing software, imaging, and animation programs; assist in the production of professional web sites; maintain or update an organization’s existing web site; create small business web sites. Helps prepare students for careers in Web Production Support. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CIS 67 Foundations for Creating Web Pages

CIS 100 Software for Dynamic Presentations

CIS 127 Creating Web Sites

AA D 65 Capturing Digital Images

AA D 85 Introduction to Web Design

WEB SITE PRODUCTION

SKILLS CERTIFICATE

Helps prepare students for positions as a Web site producer or production assistant. This certificate features practical business experience in the form of an internship. Students will learn to assist in the production and management of new Web projects and site re-designs. Strategize small business Web projects from initial idea through planning, design, implementation, promotion and maintenance. A skills certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

AA D 90 Interactive Multimedia Production

AA D 95 Internship in Applied Art and Design

CIS 95 Internship in Computer Information Systems

CIS 127 Creating Web Sites

CIS 137 Managing a Successful Web Project

COMPUTER SCIENCE —COMPUTER SCIENCE CONCENTRATION

A.A. or A.S. DEGREE

The curriculum in Computer Science concentration prepares students for transfer to many university Computer Science degree programs.

CSCI 12 Introduction to Object-Oriented Programming

CSCI 13 Intermediate Object-Oriented Programming

CSCI 26 Discrete Structures for Computer Science

CSCI 39 Introduction to Computer Architecture and Assembly Language

CSCI 50 Introduction to UNIX

CSCI 62 Web Programming I

CSCI 21 The Game Development Process

CSCI 27 Visual Basic .NET Programming I

CSCI 46 C Language Programming

CSCI 52 Introduction to SQL

CSCI 54 Visual Basic .NET Programming II

CSCI 55 ASP.NET Programming

CSCI 63 Web Programming II

CSCI 66 Object-Oriented Programming Using C++

CSCI 76A Game Programming I

CSCI 79 Mobile Device Programming

COMPUTER SCIENCE —MANAGEMENT INFORMATION SYSTEMS

CONCENTRATION

A.A. or A.S. DEGREE

The curriculum in Management Information Systems has special emphasis on development, installation, and maintenance of business software applications.

CSCI 10 Introduction to Computing

CSCI 27 Visual Basic .NET Programming I

CSCI 50 Introduction to UNIX

CSCI 52 Introduction to SQL

CSCI 54 Visual Basic .NET Programming II

CSCI 62 Web Programming I

CSCI 65 Networking Fundamentals

CSCI 12 Introduction to Object-Oriented Programming

CSCI 46 C Language Programming

CSCI 55 ASP.NET Programming

CSCI 59P Web Programming with PHP

CSCI 59R Developing Web Applications with Ruby on Rails

CSCI 63 Web Programming II

CSCI 79 Mobile Device Programming

COMPUTER SCIENCE —EMBEDDED SYSTEMS CONCENTRATION

CERTIFICATE

Successful completion of the curriculum in Embedded Systems concentration prepares students for entry-level programming positions in companies which manufacture products that have embedded microprocessors. A certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CSCI 12 Introduction to Object-Oriented Programming

CSCI 26 Discrete Structures for Computer Science

CSCI 39 Introduction to Computer Architecture and Assembly Language

CSCI 46 C Language Programming

CSCI 70 Microcontroller Programming

MECH 10 Fundamentals of Electronics

COMPUTER SCIENCE —WEB PROGRAMMING CONCENTRATION

CERTIFICATE

Successful completion of the curriculum in Web Programming Concentration prepares students for careers in Web design, access, and implementation, and for writing programs that can be run from the Internet. A certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

CSCI 55 ASP.NET Programming

CSCI 59P Web Programming with PHP

CSCI 59R Developing Web Applications with Ruby on Rails

CSCI 62 Web Programming I

CSCI 63 Web Programming II

CSCI 68 XML Programming

CSCI 79 Mobile Device Programming

ENGINEERING

A.A. or A.S. DEGREE

The Engineering major recognizes a concentration in the field of Engineering. Successful completion of the curriculum in Engineering prepares engineering students for transfer to four-year colleges or universities.

MAT H 30 Analytical Geometry & Calculus

MAT H 31 Analytical Geometry & Calculus

MAT H 32 Analytical Geometry & Calculus

PHYS 4B Principles of Physics: Electricity and Magnetism

PHYS 4C Principles of Physics: Heat, Waves and Modern Physics

CHEM 1A General Chemistry

CHEM 3A-3B General Chemistry

ENGR 35 Statics

ENGR 45 Materials Science

MAT H 33 Differential Equations & Linear Algebra

CHEM 1B General Chemistry

ENGR 17 Introduction to Circuit Theory

ENGR 17L Circuit Theory Laboratory

ENGR 22A Engineering Drawing and CAD

ENGR 22B Descriptive Geometry and Solid Modeling

ENGR 95 Internship in Engineering

ENGR 150 Introduction to Engineering Profession

PHYS 4B Principles of Physics: Electricity and Magnetism

PHYS 4C Principles of Physics: Heat, Waves and Modern Physics

CIVIL ENGINEERING TECHNOLOGY

CERTIFICATE

Successful completion of the curriculum in Civil Engineering Technology will prepare students for entry-level positions as civil engineering technicians. The certificate is designed to provide knowledge and career technical skills in mathematics, physics, chemistry, and civil engineering to assist engineers in fields such as surveying, construction, architecture, environmental, material testing, public utilities and land use. The certificate is not equivalent to an associate degree.

CHEM 1A General Chemistry

CHEM 3A AND 3B General Chemistry

CIS 50 Applying Computer Software

ENGR 10 Engineering Survey Measurements

ENGR 22A Engineering Drawing and CAD

ENGR 150 Introduction to Engineering Profession

MAT H 8 Trigonometry

MECH 10 Fundamentals of Electronics

PHYS 2A General Physics

PHYS 4A Principles of Physics: Mechanics

ENGR 22B Descriptive Geometry and Solid Modeling

GEOG 90 Introduction to Geographic Information Systems

PHYS 2B General Physics

PHYS 4B Principles of Physics: Electricity and Magnetism

GENERAL ENGINEERING TECHNOLOGY

CERTIFICATE

Successful completion of the curriculum in General Engineering Technology will prepare students for entry-level positions as engineering technicians. The certificate is designed to provide knowledge and career technical skills in mathematics, physics, chemistry, and engineering to assist engineers in fields such as fabrication, HVAC, building maintenance, environmental, industrial, safety, mechanical equipment and medical equipment. The certificate is not equivalent to an associate degree.

CHEM 1A General Chemistry

CHEM 3A AND 3B General Chemistry

CIS 50 Applying Computer Software

ENGR 22A Engineering Drawing and CAD

ENGR 150 Introduction to Engineering Profession

MAT H 8 Trigonometry

MECH 10 Fundamentals of Electronics

PHYS 2A General Physics

PHYS 4A Principles of Physics: Mechanics

CHEM 1B General Chemistry

ENGR 22B Descriptive Geometry and Solid Modeling

MAT H 29 Pre-Calculus Mathematics

PHYS 2B General Physics

PHYS 4B Principles of Physics: Electricity and Magnetism