



A Course of Study for

COMPUTER INFORMATION SYSTEMS

Computer Information Systems managers oversee a variety of administrative, clerical, and accounting functions necessary to efficiently run and maintain computerized business systems. Office workers use a variety of software to produce correspondence, maintain databases, manage projects, organize meetings, manage financial records, and create presentations. Students focusing on Web applications attain the skills to professionally design, develop, and manage websites.

This major may also lead to many other careers. For additional career possibilities, visit the Career Services Center on the main campus to utilize computerized career information systems and other valuable career resources.

PROGRAMS OFFERED

- Transfer Preparation

DEGREES AND CERTIFICATES

Associate Degrees

- Business Information Worker 2
- Computer Business Applications
- Website Software Specialist

Certificates of Achievement

- Business Information Specialist
- Business Information Worker – Data Analytics Applications
- Business Information Worker 1
- Business Information Worker 2
- Computer Business Applications
- Digital Publishing
- QuickBooks Virtual Enterprise
- Social Media Assistant
- Website Creator
- Website Software Specialist

ASSOCIATE DEGREE REQUIREMENTS

An Associate degree is granted upon successful completion of a program of study with a minimum grade point average (GPA) of 2.0 (C) in degree applicable coursework and a minimum of **60 degree applicable semester units**, including:

- Completion of the area of emphasis with a grade of C or higher in each course, or with a P if the course was taken on a Pass/No Pass basis, and the P is equal to a C or higher;
- Completion of one of the following general education patterns: SMC GE, CSU GE, or IGETC;
- Completion of the SMC Global Citizenship graduation requirement.

CERTIFICATE OF ACHIEVEMENT REQUIREMENTS

A Certificate of Achievement is granted upon successful completion of a program of study with a minimum overall grade point average (GPA) of 2.0 (C) and a **designated minimum number of units**, including:

- Completion of the area of emphasis with a grade of C or higher in each course, or with a P if the course was taken on a Pass/No Pass basis, and the P is equal to a C or higher;
- Completion of at least 50% of area of emphasis units at Santa Monica College. Department Chairs have the discretion to waive the 50% minimum units required at SMC to meet the major or area of emphasis. All major coursework must be completed with a "C" or better grade.

CATALOG RIGHTS

A student may satisfy the requirements of a degree that were in effect at any time of the student's *continuous* enrollment. Continuous enrollment means attendance in at least one semester (Fall or Spring) in each academic year.

TRANSFER PREPARATION

Students planning to transfer to a four-year college or university should refer to the transfer preparation information under Business.

BUSINESS INFORMATION WORKER 2, ASSOCIATE DEGREE AND CERTIFICATE OF ACHIEVEMENT

The Business Information Worker 2 (BIW-2) program builds on the BIW I foundation. The program provides students with additional skills in PowerPoint, QuickBooks, Records Management, and collaboration software. Graduates of this second stage in the BIW pathway program will be prepared to meet the workforce demands of today's business environment such as office, business, and executive administrative support, office supervision/coordination, small business support, retail sales, and customer service. Students completing the BIW pathway will be equipped to take multiple Microsoft Office Specialist credentials exams and become a QuickBooks certified user.

Program Learning Outcomes:

Demonstrate proficiency in Microsoft Office applications, collaboration software, and QuickBooks.

Apply professional customer relationship and management techniques in a business environment.

Employ interpersonal and critical thinking skills as well as problem solving.

AREA OF EMPHASIS: (18 UNITS)

Required Courses:

BUS 35	Customer Relationship Management	3
CIS 30	Microsoft Excel	3
CIS 32	Microsoft Access	3

CIS 35A	QuickBooks Desktop (<i>formerly CIS 35; formerly same as ACCTG 35</i>)	3
<i>or</i>		
CIS 35B	QuickBooks Online	3

CIS 36M	Adobe Acrobat	1
CIS 38	Microsoft PowerPoint	3
OFTECH 33	Records Management	2

COMPUTER BUSINESS APPLICATIONS, ASSOCIATE DEGREE OR CERTIFICATE OF ACHIEVEMENT

The core of this program provides advanced computer skills and business concepts that can be applied in nearly every industry. Students will learn to use Microsoft Office products, as well as other computer software applications, that can be applied in business situations to create, edit, format, and publish documents, spreadsheets, presentations, and databases.

Students can select from three specializations within the Computer Business Applications program:

- **Social Media Specialist** students will be introduced to the finer points of the most popular social media applications, including search engine optimization, HTML and Web design.
- **Office Finance Specialist** students will develop the skills necessary to handle basic accounting and bookkeeping procedures for small businesses.
- **Microsoft Office Specialist** students will develop additional expertise in each of the Microsoft Office applications. This specialization assists in preparation for the Microsoft Office Specialist (MOS) certification exams.

Program Learning Outcomes: Upon completion of the program, students will be able to analyze different types of business information, use the Internet to support findings, and use software applications to produce various business reports and presentations used in industry of concentration area.

AREA OF EMPHASIS: (30 UNITS)

Required Courses: (21 units)

BUS 1	Introduction to Business	3
CIS 1	Introduction to Computer Information Systems	3
CIS 4	Business Information Systems with Applications	3
CIS 37	Microsoft Word	3
CIS 39	MS Outlook – Comprehensive Course	3
OFTECH 5	English Skills for the Office	3

OFTECH 1	Keyboarding I	3
<i>or</i>		
OFTECH 10	Skill Building on the Keyboard	3
Complete 1 of the following specialization tracks listed below based on career interest: (9 units minimum)		
TRACK 1: Social Media Specialist		
BUS 34A	Introduction to Social Media Marketing (<i>formerly BUS 34</i>)	3
CIS 50	Internet, HTML, and Web Design	3
CIS 70	Digital Marketing Applications (<i>same as BUS 34A</i>)	3
TRACK 2: Office Finance Specialist		
CIS 30	Microsoft Excel	3

ACCTG 1	Introduction to Financial Accounting	5
<i>or</i>		
ACCTG 21	Business Bookkeeping	3

CIS 35A	QuickBooks Desktop (<i>formerly CIS 35</i>)	3
<i>or</i>		
CIS 35B	QuickBooks Online	3
TRACK 3: Microsoft Office Specialist		
CIS 30	Microsoft Excel	3
CIS 32	Microsoft Access	3
CIS 38	Microsoft PowerPoint	3

WEBSITE SOFTWARE SPECIALIST, ASSOCIATE DEGREE OR CERTIFICATE OF ACHIEVEMENT

A Website Software Specialist designs, develops, and manages websites with the skills needed to be successful in today's job market. A Website Software Specialist needs to be knowledgeable in variety of Internet technologies (HTML, CSS, JavaScript, and server-side scripting), as well as web-authoring applications such as Dreamweaver, Photoshop, and WordPress. These specialists are primarily responsible for developing user friendly and interactive webpages, integrating and optimizing different multimedia components, and implementing hosting, publishing, and development workflow strategies.

Program Learning Outcomes:

Upon completion of the program, students will learn a variety of Internet technologies and web-authoring tools for website development and maintenance.

Upon completion of this program, students will gain the necessary knowledge and skills for designing, developing, and managing websites.

AREA OF EMPHASIS: (27 UNITS)

Required Courses: (27 units)

CIS 1	Introduction to Computer Information Systems	3
CIS 50	Internet, HTML, and Web Design	3
CIS 51	HTML5, CSS3, and Accessibility	3
CIS 54	Web Development and Scripting	3
CIS 59A	Dreamweaver I	3
CIS 60A	Photoshop I	3
CIS 67	WordPress	3
CIS 70	Digital Marketing Applications (<i>same as BUS 34B</i>)	3
CS 87A	Python Programming	3

BUSINESS INFORMATION SPECIALIST, CERTIFICATE OF ACHIEVEMENT

The Business Information Specialist program builds on the BIW I and BIW II foundation. The program provides students with additional skills in marketing communication support, project management, and Salesforce (CRM). Graduates of this third stage BIW pathway program will be prepared to meet the workforce demands of today's business environment, such as various levels of administrative support, office supervision/coordination, and customer service. Students completing the BIW pathway will be equipped to take multiple Microsoft Office Specialist certifications, Salesforce certifications and become QuickBooks certified users.

Program Learning Outcomes:

Upon completion of the program, students will demonstrate proficiency in using the Salesforce application.

Upon completion of the program, students will demonstrate marketing and project management techniques in a business environment.

Upon completion of the program, students will employ interpersonal and critical thinking skills as well as problem-solving.

AREA OF EMPHASIS: (9 UNITS)**Required Courses: (9 units)**

CS 9A	Technology Project Management I (<i>same as CIS 9A</i>)	3
<i>or</i>		
CIS 9A	Technology Project Management I (same as CS 9A)	3

BUS 20	Principles of Marketing	3
CS 77A	Salesforce Administration Essentials	3

BUSINESS INFORMATION WORKER – DATA ANALYTICS APPLICATIONS, CERTIFICATE OF ACHIEVEMENT

This certificate prepares students with the skill sets and the learning tools needed to implement visual data explorations to enable educated decisions derived from the analysis of big data. Students will produce quality reports with visualizations, charts, PivotTables, maps, slicer, and combining them in an interactive dashboard, which tells stories with data to better understand the operations, improve efficiency and quality within an organization.

Program Learning Outcomes: Upon completion of the program, students will be able to analyze data and employ different software tools to make certain predictions and optimize organizational operations. Employ interpersonal and critical thinking skills as well as problem solving.

AREA OF EMPHASIS: (12 UNITS)**Required Courses:**

CIS 30	Microsoft Excel	3
CIS 30T	Tableau Desktop Essentials	3
CIS 32	Microsoft Access	3
Select 1 course from the following: (3 units)		
CIS 1	Introduction to Computer Information Systems	3
<i>or</i>		
CS 3	Introduction to Computer Systems	3

BUSINESS INFORMATION WORKER 1, CERTIFICATE OF ACHIEVEMENT

The Business Information Worker (BIW) program prepares students for entry-level office and administrative support in a variety of job positions, including general office clerks, retail salespersons, customer service representatives, receptionists, and information clerks. Students learn basic oral and written communications, basic computer application skills, including beginning Excel, Word, and Outlook and the fundamentals of computer systems. Graduates of this program bring critical thinking and problem-solving skills as well as interpersonal skills essential to the workplace. With a solid foundation in Microsoft Windows and Office, as well as strong digital and web literacy skills, students will be prepared to meet the workforce demands of today's business environment.

Program Learning Outcomes:

Upon completion of the program, students will: Demonstrate Proficiency in Windows, Microsoft Office applications, as well as strong digital and web literacy skills.

Apply professional communication techniques in an office environment.

Employ interpersonal and critical thinking skills as well as problem solving.

AREA OF EMPHASIS: (21 UNITS)

Required Courses: (21 units)

BUS 32	Business Communications	3
BUS 62	Human Relations and Ethical Issues in Business	3
CIS 1	Introduction to Computer Information Systems	3
CIS 30	Microsoft Excel	3
CIS 37	Microsoft Word	3
CIS 39	MS Outlook – Comprehensive Course	3
OFTECH 1	Keyboarding I	3

DIGITAL PUBLISHING, CERTIFICATE OF ACHIEVEMENT

This program provides students with specific skills that make them job ready for the publishing industry, whether it is for printing or the web. Digital Publishing Specialists use Adobe Acrobat, Adobe Photoshop, InDesign, and Illustrator programs, along with Microsoft Word and Microsoft PowerPoint, to format and combine text, numeral data, photographs, charts, drawings, and other visual graphic elements to produce digital and/or printed publication-ready materials.

Program Learning Outcomes: Given client data, students will utilize marketing research tools, apply creative techniques, choose and utilize appropriate software program(s) and analyze and solve graphic design and page layout problems to produce an effective publication. Working as a member of a Digital Publishing team, demonstrate professional work habits, meet scheduled timeline milestones and deadlines, and communicate effectively via oral presentations and written documents.

AREA OF EMPHASIS (20 UNITS)**Required Courses: (19 units)**

CIS 36M	Adobe Acrobat	1
CIS 37	Microsoft Word	3
CIS 38	Microsoft PowerPoint	3
CIS 40	InDesign	3
CIS 60A	Photoshop I	3
CIS 64	Illustrator	3
OFTECH 5	English Skills for The Office	3
Select 1 course from the following keyboarding courses: (1 unit minimum)		
OFTECH 1	Keyboarding I	3
OFTECH 1A	Keyboarding 1A	1
OFTECH 1B	Keyboarding 1B	1
OFTECH 1C	Keyboarding 1C	1
OFTECH 9	Keyboarding Improvement	1
OFTECH 10	Skill Building on The Keyboard	3

WEBSITE CREATOR, CERTIFICATE OF ACHIEVEMENT

This program provides students with the basic skills needed to create websites. Students will use web-authoring programs for web page creation and site management. They will extend their skills in the development of websites through the use of HTML, cascading style sheets, and client and server-side scripting. Focus will be on the creation of effective user-interfaces and website design principles using various state-of-the-art technologies for the web. Upon completing this certificate, students will be ready to plan, build, promote, and maintain a professional website.

Program Learning Outcomes: Upon completion of the program, students will be ready to plan, build, promote, and maintain a professional website.

AREA OF EMPHASIS: (15 UNITS)**Required Courses:**

CIS 50	Internet, HTML, and Web Design	3
CIS 51	HTML5, CSS3, and Accessibility	3
CIS 54	Web Development and Scripting	3
CIS 59A	Dreamweaver I	3
CIS 60A	Photoshop I	3

QUICKBOOKS VIRTUAL ENTERPRISE, CERTIFICATE OF ACHIEVEMENT

The QuickBooks Virtual Enterprise certificate prepares students with specific skills to become QuickBooks ProAdvisor. This program provides students with the skill set to support small businesses with the setup and customization of their QuickBooks to meet the company's needs, train company employees on how to use the QuickBooks features, and provide assistance with small routine bookkeeping tasks.

Program Learning Outcomes: Upon completion of the program, students will demonstrate proficiency and self-confidence in using QuickBooks Desktop, QuickBooks Online, and Excel, as well as the accounting foundation needed to use these programs. Students will apply self-discipline and professional communication techniques in an office environment. Students will also employ interpersonal and critical thinking skills, as well as problem-solving.

AREA OF EMPHASIS: (13 – 15 UNITS)**Select 1 course from this group:**

ACCTG 1	Introduction to Financial Accounting	5
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or

ACCTG 21	Business Bookkeeping	3
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Select 1 course from this group:

ACCTG 31A	Excel for Accounting	3
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ACCTG 31B	Advanced Excel for Accounting	3
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CIS 30	Microsoft Excel	3
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BUS 60	Design Thinking for the Entrepreneur	1
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CIS 35A	QuickBooks Desktop	3
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CIS 35B	QuickBooks Online	3
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SOCIAL MEDIA ASSISTANT, CERTIFICATE OF ACHIEVEMENT

Social media has revolutionized the way businesses interact with consumers. This program is designed to give students an understanding of the concepts involved in marketing and the role social media plays in advertising, public relations, branding, and corporate communication strategies.

Students will gain practical skills and learn the latest technical tools in social media through various projects and other assignments.

Program Learning Outcomes: Upon completion of the program, students will demonstrate the difference between social media platforms, including functionality, target audience, and intended use.

Upon completion of the program, students will determine with social media platforms are best for their business and examine recent changes associated with popular social media platforms.

AREA OF EMPHASIS (15 UNITS)**Required Courses:**

MEDIA 20	Introduction to Media Writing and Producing Short-Form Content	3
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DMPOST 3	Digital Video Fundamentals	3
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BUS 34A	Introduction to Digital Marketing (<i>formerly BUS 34</i>)	3
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CIS 50	Internet, HTML, and Web Design	3
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CIS 60A	Photoshop I	3
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CIS 70	Digital Marketing Applications (<i>same as BUS 34A</i>)	3
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WEBSITE CREATOR, CERTIFICATE OF ACHIEVEMENT

This program provides students with the basic skills needed to create websites. Students will use web-authoring programs for web page creation and site management. They will extend their skills in the development of websites through the use of HTML, cascading style sheets, and client and server-side scripting. Focus will be on the creation of effective user-interfaces and website design principles using various state-of-the-art technologies for the web. Upon completing this certificate, students will be ready to plan, build, promote, and maintain a professional website.

Program Learning Outcomes: Upon completion of the program, students will be ready to plan, build, promote, and maintain a professional website.

AREA OF EMPHASIS: (15 UNITS)**Required Courses: (13 units)**

CIS 50	Internet, HTML, and Web Design	3
CS 51	HTML5, CSS3, and Accessibility	3
CIS 54	Web Development and Scripting	3
CIS 59A	Dreamweaver I	3
CIS 60A	Photoshop I	3

WEBSITE DEVELOPMENT MANAGEMENT, CERTIFICATE OF ACHIEVEMENT

This program provides students with the knowledge needed to develop website projects in a real-world setting. Students learn how to develop websites while applying the skills needed to plan and budget resources in development projects from conceptual design to deployment.

Program Learning Outcomes: Upon completion of the program, students will plan and budget resources in the development of websites from conceptual design to deployment.

AREA OF EMPHASIS: (13 UNITS)**Required Courses: (13 units)**

CIS 9A	Technology Project Management I (<i>same as CS 9A</i>)	3
<u>or</u>		
CS 9A	Technology Project Management I (<i>same as CIS 9A</i>)	3

CIS 9B	Technology Project Management II (<i>same as CS 9B</i>)	3
<u>or</u>		
CS 9B	Technology Project Management II (<i>same as CS 9B</i>)	

CIS 57	Website Planning and Production	3
CIS 67	WordPress	3
CIS 88A	Independent Studies in CIS	1