

- Effectively communicate in front of audiences.
- Demonstrate proficiency in research and citation technique.
- Correctly apply communication theories to enhance the quality of their interactions in their everyday lives.

Required Courses:

SP 1 COMMUNICATION FUNDAMENTALS **3 Units**
 SP 3 ARGUMENTATION AND DEBATE **3 Units** *
 SP 5 INTERPERSONAL COMMUNICATION **3 Units**

Select two of the following courses (6 Units)

CTVR 1 MASS MEDIA AND SOCIETY **3 Units**

or

JRN 1 MASS MEDIA AND SOCIETY **3 Units**
 CTVR 124 TELEVISION PRODUCTION I **3 Units** *
 MATH 10 INTRODUCTION TO STATISTICS **3 Units** *
 SP 20 INTERCULTURAL COMMUNICATION **3 Units**
 SP 106 FORENSICS ACTIVITY **1 Unit**
 SP 30 INTRODUCTION TO ORAL INTERPRETATION **3 Units**

or

TA 30 INTRODUCTION TO ORAL INTERPRETATION **3 Units**

Select one of the following courses or any of the courses not selected above (3 Units)

ANTH 2 CULTURAL ANTHROPOLOGY **3 Units**
 ENG 1B PRINCIPLES OF COMPOSITION II **3 Units** *
 JRN 2 NEWS WRITING **3 Units**
 PSYC 1 INTRODUCTION TO PSYCHOLOGY **3 Units**
 SOC 1 INTRODUCTION TO SOCIOLOGY **3 Units**

Total Units for the Major: 18

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

Computer and Information Management

The Computer and Information Management program includes industry standard programs that prepare students for careers using technology in the business workplace. The programs are: Applications Developer, E-Commerce Specialist, Network Administrator, Software Specialist, Web Designer, and Webmaster.

**Applications Developer
Associate in Science**

This program is designed to prepare the student for entry-level employment as an applications developer.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the areas of application development.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses: *cimp5 offered even yrs Fall*

CIMP 5 BUSINESS PROGRAMMING I - VISUAL BASIC **3.5 Units** CIMP
 7A BUSINESS PROGRAMMING - JAVA--BEGINNING **3 Units** CIMW 105
 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL **3 Units**
 CIMW 250 MICROSOFT ASP.NET **3.5 Units** * *offered odd yrs spring*
 Select from Restricted Electives **5-7 Units**

Total Units for the Major: 18-20**Restricted Electives:** *7B Offered Fall/2nd 8 Weeks*

CIMP 7B BUSINESS PROGRAMMING - JAVA--ADVANCED **3 Units** *
 CIMN 200 INTRODUCTION TO NETWORKING **3 Units**

~~CIMN 230 Computer Operating Systems: 3 Units **cimn130 Com..**~~
~~CIMW 245 Web Development: PHP & CMS/Word Press E-Commerce **3**~~
~~**Units CIMW145 WEB DEVELOPMENT - PHP, ...(offered summer)**~~
 CIMN 250 NETWORK AND SECURITY ADMINISTRATION USING UNIX/
 LINUX **3 Units** * *has not been offered recently*
~~CIMW 250B MICROSOFT ASP.NET 3 Units **cimw250b dropped**~~
~~CIMW 260 WEB DEVELOPMENT: JAVASCRIPT, FRAMEWORKS, JQUERY~~
~~AND AJAX **3 Units CIMW160 WEB DEVELOPMENT JAVASCRIPT, ..**~~
 CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units** *
 CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED **1.5 Units** *
 CIMP 115 BUSINESS PROGRAMMING--C# **3.5 Units** *offered falls*

Associate in Science Degree

Completion of the above courses and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in Science Degree. A minimum of 12 units must be completed at Saddleback College.

General Education Requirements for Associate Degrees

Refer to the Graduation Requirements or to the CSU-GE and IGETC patterns in this catalog for specific courses which meet general education requirements. Refer to ASSIST.org and to the transfer institution's catalog for transfer requirements.

Suggested coursework not required for the major: ACCT 1A, 1B; BUS 1, 12; CIM 112, CIM 121A, CIMW 207, CIMN 200, 210, ECON 2, 4, MATH 10

**Applications Developer
Certificate of Achievement**

This program is designed to prepare the student for entry-level employment as an applications developer.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the areas of application development.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses *cimp5 offered even yrs Fall*

CIMP 5 BUSINESS PROGRAMMING I - VISUAL BASIC **3.5 Units**
 CIMP 7A BUSINESS PROGRAMMING - JAVA--BEGINNING **3 Units**
 CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL **3 Units**

CIMW 250A - MICROSOFT ASP.NET - BEGINNING **3.5 Units**

Select from Restricted Electives **5-7 Units**

Total Units for the Certificate: 18-20**Restricted Electives:** *cimp7b offered fall 2nd 8weeks*

CIMP 7B BUSINESS PROGRAMMING - JAVA--ADVANCED **3 Units** *
 CIMN 200 INTRODUCTION TO NETWORKING **3 Units**
~~CIMN 230 Computer Operating Systems: Unix/Linux **3 cimn130**~~
~~CIMW 245 Web Development: PHP & CMS/Word Press E-Commerce **3**~~
~~**Units CIMW145 WEB DEVELOPMENT - PHP, CMS (offered sum)**~~
 CIMN 250 NETWORK AND SECURITY ADMINISTRATION USING UNIX/
 LINUX **3 Units** *
~~CIMW 250B MICROSOFT ASP.NET--ADVANCED **3 Units**~~
~~CIMW 260 WEB DEVELOPMENT: JAVASCRIPT, FRAMEWORKS, JQUERY~~
~~AND AJAX **3 Units CIMW160 WEB DEVELOPMENT JAVASCRIPT, ..**~~
 CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units** *
 CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED **1.5 Units** *
 CIMP 115 BUSINESS PROGRAMMING--C# **3.5 Units** *offered falls*
 CIMA 288 DATABASE REPORTING **3.5 Units**

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

Suggested coursework not required for the major: ACCT 1A, ACCT 1B; BUS 1, BUS 12; CIM 112, CIM 121A, CIMW 207, CIMN 200, CIMN 210; ECON 2, ECON 4; MATH 10.

E-Commerce Specialist Associate in Science

The E-Commerce Specialist Certificate program prepares the student to apply business functions to the web. All types of business sectors and activities can be web-based, including retail, wholesale, import/export, human resources, customer service, or departments within an organization. Electronic commerce, or e-commerce, is used in public and private business, both profit and non-profit sectors, in corporations, government, small businesses, professional associations, and personal applications as well. This program provides the skills for conducting business on the web, preparing an electronic approach, and managing an e-commerce web presence.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the areas of E-commerce.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units** *
~~CIMW 110A INTRO TO CREATING WEB PAGES I USING DREAMWEAVER & WP 1.5 Units~~ cimw115: creating web pages
 CIMW 280 WEB DESIGN - CAPSTONE PORTFOLIO PROJECT **1.5 Units** ‡
 Select from Restricted Electives **9 Units** (offered spring 2nd 8weeks)

Total Units for the Major: 18

Restricted Electives:

BUS 135 MARKETING **3 Units**
~~CIMW 245 WEB DEVELOPMENT: PHP & CMS/WORD PRESS E-COMMERCE 3 Units~~ **CIMW145 WEB DEVELOPMENT - PHP, (sum)**
~~CIMW 220A/B WEB ANIMATION: FLASH BEGINNING/ADVANCED 1.5 Units, 1.5 Units~~ **CIMW 140 CSS offered Spring 1st 8 weeks**
~~CIMW 110B CREATING WEB PAGES: DREAMWEAVER ADVANCED 1.5 Units~~ **cimw115 Creating Web Pages**
 CIMS 200 INFORMATION SECURITY FUNDAMENTALS **3 Units** *
~~CIMW 235 WEB DEVELOPMENT: ADOBE FIREWORKS 1.5 Units~~
 CIMA 106 DATABASE - ACCESS **3 Units**

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

‡Final course to be taken

Associate in Science Degree

Completion of the certificate program and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in Science Degree. A minimum of 12 units must be completed at Saddleback College.

General Education Requirements for Associate Degrees

Refer to the Graduation Requirements or to the CSU-GE and IGETC patterns in this catalog for specific courses which meet general education requirements. Refer to ASSIST.org and to the transfer institution's catalog for transfer requirements.

E-Commerce Specialist Certificate of Achievement

The E-Commerce Specialist Certificate program prepares the student to apply business functions to the web. All types of business sectors and activities can be web-based, including retail, wholesale, import/export, human resources, customer service, or departments within an organization. Electronic commerce, or e-commerce, is used in public and private business, both profit and non-profit sectors, in corporations, government, small businesses, professional associations, and personal applications as well. This program provides the skills for conducting business on the web, preparing an electronic approach, and managing an e-commerce web presence.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the areas of E-commerce.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units** *
 CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED **1.5 Units** *
~~CIMW 240 WEB 2.0 DESIGN: CASCADING 3 Units~~ **CIMW140 CSS**
~~CIMW 110A CREATING WEB PAGES: DREAMWEAVER BEGINNING 1.5 Units~~ **CIMW 115 Creating Web Pages 3 Units**
 CIMW 280 WEB DESIGN - CAPSTONE PORTFOLIO PROJECT **1.5 Units** ‡
 Select from Restricted Electives **9 Units** offered spring 2nd 8 weeks

Total Units for the Certificate: 18

Restricted Electives:

BUS 135 MARKETING **3 Units**
~~CIMW 245 WEB DEVELOPMENT: PHP & CMS/WORD PRESS E-COMMERCE 3 Units~~ **CIMW145 WEB DEVELOPMENT - PHP, (sum)**
~~CIMW 220A/B WEB ANIMATION: FLASH BEGINNING/INTERMEDIATE 1.5 Units, 1.5 Units~~ **CIMW 140 CSS Spring 1st 8 Weeks**
~~CIMW 110B CREATING WEB PAGES: DREAMWEAVER ADVANCED 1.5 Units~~ **cimw 115 Creating Web Pages**
 CIMS 200 INFORMATION SECURITY FUNDAMENTALS **3 Units** * ~~CIMW 235 WEB DEVELOPMENT: ADOBE FIREWORKS 1.5 Units~~ CIMA 106 DATABASE - ACCESS **3 Units**

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

‡Final course to be taken

Network Administrator Associate in Science

This program prepares the student for an entry-level position as an information systems network administrator.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the area of Network Administration.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required CoursesCIM 1 COMPUTER INFORMATION SYSTEMS **4 Units***or*CIM 112 MICROSOFT OFFICE **3 Units**~~CIMN 230—COMPUTER OPERATING SYS— 3 Units~~ **cimn130 Comp..**CIMN 100 COMPUTER OPERATING SYSTEMS- WINDOWS **3 Units +**CIMN 200 INTRODUCTION TO NETWORKING **3 Units**CIMN 210 NETWORKING ESSENTIALS AND TECHNOLOGIES **3.5 Units**Select from Restricted Electives **6 Units****Total Units for the Major: 21****Restricted Electives:**CIMP 7A BUSINESS PROGRAMMING - JAVA--BEGINNING **3****Units or cimp7b offered fall 2nd 8**CIMP 7B BUSINESS PROGRAMMING - JAVA--ADVANCED **3 Units ***CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL **3****Units**CIMA 106 DATABASE - ACCESS **3 Units**CIMW 207 SOCIAL MEDIA & WEB FUNDAMENTALS **1.5 Units**CIMA 108 BUSINESS PRESENTATIONS - POWERPOINT **3 Units**CIMN 240 FUNDAMENTAL UNIX/LINUX SYSTEM ADMINISTRATION **3****Units**

CIMN 250 NETWORK AND SECURITY ADMINISTRATION USING

UNIX/LINUX **3 Units**CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units ****or*CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED **1.5 Units ***CIMS 200 INFORMATION SECURITY FUNDAMENTALS **3 Units**CIMS 230 SECURITY+ **3 Units**CIMN 220A MCITP CERTIFICATION EXAM PREP I **3 Units**CIMN 220B MCITP CERTIFICATION EXAM PREP II **3 Units**CIMN 220C MCITP CERTIFICATION EXAM PREP III **3 Units**CIMN 220D MCITP CERTIFICATION EXAM PREP IV **3 Units**CIMN 220E MCITP CERTIFICATION EXAM PREP V **3 Units**CIMS 250 CYBERLAW **3 Units**CIMN 260 INTERCONNECTING CISCO NETWORK DEVICES **3 Units**

* Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

+ Completion of the A and B versions of this course can also be used to fulfill this requirement.

Associate in Science Degree

Completion of the courses above and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in Science Degree. A minimum of 12 units must be completed at Saddleback College.

General Education Requirements for Associate Degrees

Refer to the Graduation Requirements or to the CSU-GE and IGETC patterns in this catalog for specific courses which meet general education requirements. Refer to ASSIST.org and to the transfer institution's catalog for transfer requirements.

Suggested coursework not required for the major: CIM 2A, 214, 216, 216A; ECON 2, ECON 4; CMT 215, CMT 220, CMT 225, CMT 230.

Network Administrator Certificate of Achievement

This program prepares the student for an entry-level position as an information systems network administrator.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the area of Network Administration.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.

- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required CoursesCIM 1 COMPUTER INFORMATION SYSTEMS **4 Units***or*CIM 112 MICROSOFT OFFICE **3 Units**~~CIMN 230—COMPUTER OPERATING SYS— 3 Units~~ **cimn130 Computer ..**CIMN 100 COMPUTER OPERATING SYSTEMS- WINDOWS **3 Units +**CIMN 200 INTRODUCTION TO NETWORKING **3 Units**CIMN 210 NETWORKING ESSENTIALS AND TECHNOLOGIES **3.5 Units**Select from Restricted Electives **6 Units****Total Units for the Certificate: 21.5-22.5****Restricted Electives: (cimp7b offered fall 2nd 8)**CIMP 7A BUSINESS PROGRAMMING - JAVA--BEGINNING **3 Units**CIMP 7B BUSINESS PROGRAMMING - JAVA--ADVANCED **3 Units ***CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL **3****Units**CIMA 106 DATABASE - ACCESS **3 Units**CIMW 207 SOCIAL MEDIA & WEB FUNDAMENTALS **1.5 Units**CIMA 108 BUSINESS PRESENTATIONS - POWERPOINT **3 Units**CIMN 240 FUNDAMENTAL UNIX/LINUX SYSTEM ADMINISTRATION **3****Units ***

CIMN 250 NETWORK AND SECURITY ADMINISTRATION USING

UNIX/LINUX **3 Units ***CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units ***CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED **1.5 Units ***CIMS 200 INFORMATION SECURITY FUNDAMENTALS **3 Units ***CIMS 230 SECURITY+ **3 Units**CIMN 220A MCITP CERTIFICATION EXAM PREP I **3 Units**CIMN 220B MCITP CERTIFICATION EXAM PREP II **3 Units**CIMN 220C MCITP CERTIFICATION EXAM PREP III **3 Units**CIMN 220D MCITP CERTIFICATION EXAM PREP IV **3 Units**CIMN 220E MCITP CERTIFICATION EXAM PREP V **3 Units**CIMN 220F MCITP CERTIFICATION EXAM PREP VI **3 Units**CIMS 250 CYBERLAW **3 Units**CIMN 260 INTERCONNECTING CISCO NETWORK DEVICES **3 Units**

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

+ Completion of the A and B versions of this course can also be used to fulfill this requirement.

Software Specialist Associate in Science

The Software Specialist Certificate program prepares the student for an entry-level position as a knowledge worker in the technical work environment using industry-standard software packages.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment with industry standard technical software packages.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required CoursesCIM 10 INTRODUCTION TO INFORMATION SYSTEMS **3 Units***or*CIM 112 MICROSOFT OFFICE **3 Units**CIMA 102 WORD PROCESSING - WORD **3 Units +**CIMA 104 SPREADSHEETS - EXCEL **3 Units +**

CIMA 106 DATABASE - ACCESS **3 Units**
 CIMA 108 BUSINESS PRESENTATIONS - POWERPOINT **3 Units**
 Select from Restricted Electives **3 Units**
Total Units for the Major: 18

Restricted Electives:

CIM 121A KEYBOARDING FOR COMPUTERS - BEGINNING **1.5 Units**
 CIM 121B KEYBOARDING FOR COMPUTERS - INTERMEDIATE **1.5 Units**
 *

CIM 121C KEYBOARDING FOR COMPUTERS - ADVANCED **1.5 Units** *
 CIMN 100 COMPUTER OPERATING SYSTEMS- WINDOWS **3 Units** .
~~CIMN 230 COMPUTER OPERATION SYSTEMS- 3 Units **cimn130**~~
 CIMA 212 MANAGING PROJECTS WITH MICROSOFT PROJECT **3 Units**
 CIMA 223A COMPUTERIZED ACCOUNTING - QUICKBOOKS--BEGINNING **1.5 Units** *
 CIMA 223B COMPUTERIZED ACCOUNTING - QUICKBOOKS--ADVANCED **1.5 Units** *
~~CIM 274A WEB DIGITAL IMAGERY PHOTOSHOP BEGINNING **1.5 Units**~~
~~CIM 274B WEB DIGITAL IMAGERY PHOTOSHOP ADVANCED **1.5 Units**~~
 * **CIMW 134 Photoshop and Video Editing**
 CIMW 207 SOCIAL MEDIA & WEB FUNDAMENTALS **1.5 Units**
~~CIMW 110A/B CREATING WEB PAGES- DREAMWEAVER BEGINNING/~~
~~ADVANCED **1.5 Units, 1.5 Units** **CIMW115 Creating Web Pages**~~

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

+Completion of the A and B versions of this course can also be used to fulfill this requirement

Associate in Science Degree

Completion of the certificate program and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in Science Degree. A minimum of 12 units must be completed at Saddleback College.

General Education Requirements for Associate Degrees

Refer to the Graduation Requirements or to the CSU-GE and IGETC patterns in this catalog for specific courses which meet general education requirements. Refer to ASSIST.org and to the transfer institution's catalog for transfer requirements.

Suggested coursework not required for the major: ACCT 214; CIMN 200, CIMN 210; ECON 2, ECON 4.

Software Specialist Certificate of Achievement

The Software Specialist Certificate program prepares the student for an entry-level position as a knowledge worker in the technical work environment using industry-standard software packages.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment with industry standard technical software packages.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

CIM 10 INTRODUCTION TO INFORMATION SYSTEMS **3 Units**
 or
 CIM 112 MICROSOFT OFFICE **3 Units**
 CIMA 102 WORD PROCESSING - WORD **3 Units** +
 CIMA 104 SPREADSHEETS - EXCEL **3 Units** +
 CIMA 106 DATABASE - ACCESS **3 Units**

CIMA 108 BUSINESS PRESENTATIONS - POWERPOINT **3 Units**

Select from Restricted Electives **3 Units**

Total Units for the Certificate: 18

Restricted Electives:

CIM 121A KEYBOARDING FOR COMPUTERS - BEGINNING **1.5 Units**
 CIM 121B KEYBOARDING FOR COMPUTERS - INTERMEDIATE **1.5 Units** *
 CIM 121C KEYBOARDING FOR COMPUTERS - ADVANCED **1.5 Units** * CIMN 100 COMPUTER OPERATING SYSTEMS- WINDOWS **3 Units**
~~CIMN 230 COMPUTER OPERATING SYSTEMS- **3 Units** **cimn130 Comp**~~
 CIMA 212 MANAGING PROJECTS WITH MICROSOFT PROJECT **3 Units**
 CIMA 223A COMPUTERIZED ACCOUNTING - QUICKBOOKS--BEGINNING **1.5 Units** *
 CIMA 223B COMPUTERIZED ACCOUNTING - QUICKBOOKS--ADVANCED **1.5 Units** *
~~CIM 274A WEB DIGITAL IMAGERY PHOTOSHOP BEGINNING **1.5 Units**~~
~~CIM 274B WEB DIGITAL IMAGERY PHOTOSHOP ADVANCED **1.5 Units**~~
 * **CIMW 134 Photoshop and Video Editing**
 CIMW 207 SOCIAL MEDIA & WEB FUNDAMENTALS **1.5 Units**
~~CIMW 110A/B CREATING WEB PAGES- DREAMWEAVER BEGINNING/~~
~~ADVANCED **1.5 Units, 1.5 Units** **CIMW115 Creating Web Pages**~~

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

+Completion of the A and B versions of this course can also be used to fulfill this requirement

Web Designer Associate in Science

The Web Designer Certificate program prepares the student to develop a web presence for businesses, organizations, and individuals in communication, marketing, and data management through the development of a website. Students will learn how to reach an audience and communicate ideas. The program includes basic and advanced software skills, developing a mission, goals, and the promotion and maintenance of a website.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the area of Website Design.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Demonstrate skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

~~CIMW 220 WEB AND MOBILE 3D & 2D ANIMATION ADOBE FLASH **3 Units**~~
 or
 CIMW 220A/B WEB ANIMATION: FLASH BEGINNING/ADVANCED **1.5 Units, 1.5 Units** **CIMW140 CSS offered spring 1st 8 weeks**
~~CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units** *~~
~~CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED **1.5 Units** *~~
~~CIM 274A WEB DIGITAL IMAGERY PHOTOSHOP BEGINNING **1.5 Units** **CIMW134 Photoshop & Video Editing**~~
~~CIMW 110A/B CREATING WEB PAGES- DREAMWEAVER BEGINNING/~~
~~ADVANCED **1.5 Units, 1.5 Units** **CIMW115 Creating Web Pages**~~
 CIMW 280 WEB DESIGN CAPSTONE PORTFOLIO PROJECT **1.5 Units** ‡
 Select from Restricted Electives **6 Units** **offered spring 2nd 8weeks**

Total Units for the Major: 18

Restricted Electives:

~~CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL 3 Units~~

~~CIMW 245 WEB DEVELOPMENT: PHP & CMS/WORD PRESS E-COMMERCE 3 Units~~ **CIMW145 WEB DEVELOPMENT - PHP, CMS AND ...**

~~CIMW 250A MICROSOFT ASP.NET - BEGINNING 3.5 Units~~

~~CIMW 260 WEB DEVELOPMENT: JAVASCRIPT, FRAMEWORKS, JQUERY AND AJAX 3 Units~~ **CIMW160 WEB DEVELOPMENT JAVASCRIPT, .**

~~CIMW 240 WEB 2.0 DESIGN: CASCADING STYLE 3 Units~~ ~~CIMW140 CIM 274B WEB DIGITAL IMAGERY - PHOTOSHOP - ADVANCED 1.5 Units~~ * **(got this with cimw134 Photoshop & Video Editing)**

~~CIMW 235 WEB DEVELOPMENT: ADOBE FIREWORKS 1.5 Units~~

* Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

‡Final course to be taken

Associate in Science Degree

Completion of the certificate program and a minimum of 60 units including the general education requirements with an overall GPA of 2.0 qualifies the student for the Associate in Science Degree. A minimum of 12 units must be completed at Saddleback College.

General Education Requirements for Associate Degrees

Refer to the Graduation Requirements or to the CSU-GE and IGETC patterns in this catalog for specific courses which meet general education requirements. Refer to ASSIST.org and to the transfer institution's catalog for transfer requirements.

Web Designer Certificate of Achievement

The Web Designer Certificate program prepares the student to develop a web presence for businesses, organizations, and individuals in communication, marketing, and data management through the development of a website. Students will learn how to reach an audience and communicate ideas. The program includes basic and advanced software skills, developing a mission, goals, and the promotion and maintenance of a website.

Program Student Learning Outcomes

- Students who complete this program will be able to:
- Demonstrate key skills for employment in the area of Website Design.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Demonstrate skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

~~CIMW 220 WEB AND MOBILE 3D & 2D ANIMATION - ADOBE FLASH 3 Units~~

~~or~~

~~CIMW 220A/B WEB ANIMATION: FLASH - BEGINNING/ADVANCED 1.5 Units, 1.5 Units~~ **CIMW140 CSS Offered Spring 1st 8 wks**

~~CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING 1.5 Units *~~

~~CIMW 100B WEB SITE DEVELOPMENT - HTML--ADVANCED 1.5 Units *~~

~~CIM 274A WEB DIGITAL IMAGERY - PHOTOSHOP - BEGINNING 1.5~~

~~Units~~ **CIMW134 Photoshop & Video Editing**

~~CIMW 110A/B CREATING WEB PAGES: DREAMWEAVER - BEGINNING/ADVANCED 1.5 Units, 1.5 Units~~ **CIMW115 Creating**

~~CIMW 280 WEB DESIGN CAPSTONE PORTFOLIO PROJECT 1.5 Units ‡~~
Select from Restricted Electives **6 Units**

Total Units for the Certificate: 18

Restricted Electives:

~~CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL 3 Units~~

~~CIMW 245 WEB DEVELOPMENT: PHP & CMS/WORD PRESS E-COMMERCE 3 Units~~ **CIMW145 WEB DEVELOPMENT - PHP, (sum)**

~~CIMW 250A MICROSOFT ASP.NET - BEGINNING 3.5 Units~~

~~CIMW 260 WEB DEVELOPMENT: JAVASCRIPT, FRAMEWORKS, JQUERY, AJAX 3 Units~~ **CIMW160 WEB DEVELOPMENT JAVASCRIPT, .**

~~CIMW 240 WEB 2.0 DESIGN: CSS 3 Units~~ **CIMW 140 CSS spring 1st 8**
~~CIM 274B WEB DIGITAL IMAGERY - PHOTOSHOP - ADVANCED 1.5 Units~~ * **got this with cimw134 Photoshop and video editing**

~~CIMW 235 Web Development: Adobe Fireworks 1.5 Units~~

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description

‡Final course to be taken

Webmaster Associate in Science

The Webmaster Certificate program prepares the student to build and administer a website and set up and maintain its web server. Students learn the technical aspect of server-level concerns of web construction and management to efficiently run websites in business and government organizations or for individuals. Topics include networking, security, web development, and database administration.

Program Student Learning Outcomes

Students who complete this program will be able to:

Demonstrate key skills for employment in the area of website design and administration.

- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Demonstrate skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

~~CIMP 7A BUSINESS PROGRAMMING - JAVA--BEGINNING 3 Units~~

~~CIMN 230 - COMPUTER OPERATING SYSTEMS: 3 Units~~ **CIMN 130**

~~CIMN 200 INTRODUCTION TO NETWORKING 3 Units~~

~~CIMN 210 NETWORKING ESSENTIALS AND TECHNOLOGIES 3.5 Units~~

~~CIMW 250A MICROSOFT ASP.NET - 3.5 Units~~ **(offer spring odd yrs)**

~~CIMW 280 WEB DESIGN CAPSTONE PORTFOLIO PROJECT 1.5 Units ‡~~

Select from Restricted Electives **3 Units (offer spring 2nd 8 wks)**

Total Units for the Major: 20.5

Restricted Electives: cimw140 offered Spring 1st 8 wks

~~CIMW 240 - WEB 2.0 DESIGN: CASCADING 3 Units~~ **CIMW 140 CSS**

~~CIMP 7B BUSINESS PROGRAMMING - JAVA--ADVANCED 3 Units *~~

~~CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING 1.5 Units *~~

~~CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL 3~~

~~Units~~

~~CIMN 240 FUNDAMENTAL UNIX/LINUX SYSTEM ADMINISTRATION 3~~

~~Units *~~

~~CIMN 250 NETWORK AND SECURITY ADMINISTRATION USING UNIX/~~

~~LINUX 3 Units *~~

~~CIMS 200 INFORMATION SECURITY FUNDAMENTALS 3 Units *~~

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

‡Final course to be taken

Associate in Science Degree

Completion of the certificate program and a minimum of 60 units including the general education requirements with an overall GPA of 2.0

qualifies the student for the Associate in Science Degree. A minimum of 12 units must be completed at Saddleback College.

General Education Requirements for Associate Degrees

Refer to the Graduation Requirements or to the CSU-GE and IGETC patterns in this catalog for specific courses which meet general education requirements. Refer to ASSIST.org and to the transfer institution's catalog for transfer requirements.

Webmaster Certificate of Achievement

The Webmaster Certificate program prepares the student to build and administer a website and set up and maintain its web server. Students learn the technical aspect of server-level concerns of web construction and management to efficiently run websites in business and government organizations or for individuals. Topics include networking, security, web development, and database administration.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the area of website design and administration.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Demonstrate skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

CIMP 7A BUSINESS PROGRAMMING - JAVA--BEGINNING **3 Units**

~~CIMN 230 COMPUTER OPERATING SYSTEMS-- 3 Units~~ **cimn130**

CIMN 200 INTRODUCTION TO NETWORKING **3 Units**

CIMN 210 NETWORKING ESSENTIALS AND TECHNOLOGIES **3.5 Units**

CIMW 250A MICROSOFT ASP.NET - BEGINNING **3.5 (sp odd yrs)**

CIMW 280 WEB DESIGN CAPSTONE PORTFOLIO PROJECT **1.5 Units ‡**

Select from Restricted Electives **3 Units** (spring 2nd 8 weeks)

Total Units for the Certificate: 20.5

Restricted Electives: (140 1st 8 spring; 7B 2nd 8 Fall)

~~CIMW 240 WEB 2.0 DESIGN: CASCADING 3 Units~~ **CIMW 140 CSS**

CIMP 7B BUSINESS PROGRAMMING - JAVA--ADVANCED **3 Units ***

CIMW 100A WEB SITE DEVELOPMENT - HTML-BEGINNING **1.5 Units ***

CIMW 105 WEB DEVELOPMENT AND DB - INTRO SQL AND MYSQL **3 Units**

CIMN 240 FUNDAMENTAL UNIX/LINUX SYSTEM ADMINISTRATION **3 Units ***

CIMN 250 NETWORK AND SECURITY ADMINISTRATION USING UNIX/LINUX **3 Units ***

~~CIMW 250B MICROSOFT ASP.NET - ADVANCED 3.5 Units~~

CIMS 200 INFORMATION SECURITY FUNDAMENTALS **3 Units ***

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

‡Final course to be taken

Information Security: Security Occupational Skills Award

The Information Security: Security Occupational Skills Award provides the opportunity to master the necessary computer information security concepts to successfully implement various InfoSec security strategies.

Required Courses

CIMS 200 INFORMATION SECURITY FUNDAMENTALS **3 Units ***

CIMS 210 NETWORK DEFENSE AND COUNTERMEASURES **3 Units** CIMS 220 INFORMATION SECURITY MANAGEMENT **3 Units**

CIMS 230 SECURITY+ **3 Units**

CIMS 250 CYBERLAW **3 Units**

Total Units for the Award: 15

*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

Office & Computer Skills Occupational Skills Award

An introduction to office procedures and basic skills needed for employment in today's office environment. Areas of study include: office environment, organizational structure, computer skills, business math, filing, and records management.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate key skills for employment in the areas of office administration.
- Demonstrate comprehensive, broad range introductory computer competencies targeting a diverse and multicultural workforce.
- Complete technically current and challenging ongoing education.
- Apply skills in a broad range of media appropriate for a diverse population of technical students.
- Use job skills in technical professional business environments through meaningful internships and capstone projects.

Required Courses

CIMA 283A OFFICE SKILLS--OFFICE PROCEDURES **2.5 Units**

CIMA 283B OFFICE SKILLS--KEYBOARDING **0.5 Unit**

CIMA 283D OFFICE SKILLS--WINDOWS **0.5 Unit**

CIMA 283E OFFICE SKILLS--WORD PROCESSING (WORD) **0.5 Unit**

CIMA 283F OFFICE SKILLS--SPREADSHEETS (EXCEL) **0.5 Unit**

CIMA 283G OFFICE SKILLS--DESKTOP PRESENTATION FOR BUS (POWERPOINT) **0.5 Unit**

CIMA 283H OFFICE SKILLS--DATABASE (ACCESS) **0.5 Unit**

CIMA 283J OFFICE SKILLS--DESKTOP PUBLISHING (PUBLISHER) **0.5 Unit**

or

CIMA 283K OFFICE SKILLS--BUSINESS EMAIL (OUTLOOK) **0.5 Unit**

Total Units for the Award: 6

Computer Maintenance Technology Associate in Science

The Computer Maintenance Technology Certificate program prepares the student for entry-level employment as a computer technologist or computer technician in companies involved in the manufacture, installation, repair, maintenance, upgrading, or sales of personal computers and hardware for personal computers and computer networks.

Program Student Learning Outcomes

Students who complete this program will be able to:

- Demonstrate proper use of measures and procedures to protect personal computer hardware against damage due to electrostatic discharge (ESD).
- State and demonstrate software and hardware troubleshooting skills and procedures for personal computers.
- State, compare, and contrast the major features and tools in modern PC operating systems.
- Describe the functions and performance specifications of the major hardware items in a PC.

Required Courses

CIM 1 INTRODUCTION TO COMPUTER INFORMATION SYSTEMS **3 Units**

or

~~CIM 10 INTRODUCTION TO INFORMATION SYSTEMS 3 Units~~

~~CIM 174 Computer Operating Systems: Windows 3 Units~~ **cimn100**

CMT 215 ELECTRONICS FOR COMPUTER TECHNOLOGISTS **3 Units** *or* ET 101 SURVEY OF ELECTRONICS **3 Units**

or