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## Accounting

There are three certificate programs available in accounting: Accountant, Computerized Accounting Specialist, and Tax Preparation. Accounting majors intending to transfer to a four-year college should refer to the Business Administration transfer curriculum.

There are three certificate programs available in accounting: Accountant, Computerized Accounting Specialist, and Tax Preparation. Accounting majors intending to transfer to a four-year college should refer to the Business Administration transfer curriculum.

### Accountant Certificate Program

This program meets a substantial portion of the 24-unit Accounting course requirement to take the California CPA exam. It is intended primarily for students possessing a bachelor's degree or foreign university equivalent. In addition, completion of this certificate is helpful in securing entry-level accounting positions in business and industry. CPA EXAM AND LICENSURE: Please contact the California Board of Accountancy.

Course ID	Title	Units
ACCT 1A	Financial Accounting	4
ACCT 1B*	Managerial Accounting	4
or		
ACCT 203*	Cost Accounting	3
ACCT 202A*	Intermediate Accounting I	3
ACCT 202B*	Intermediate Accounting II	3
ACCT 216*	Individual Income Tax	4
ACCT 217*	Partnership and Corporate Taxation	3
ACCT 275*	Auditing	3
BUS 12	Business Law	
or		
BUS 14	Legal Environment of Business	3
<b>Total</b>		<b>26-27</b>

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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 189, 214, 289; BUS 1, 102, 103, 104, 125; CIM 1, 112, 171, 174, 174A, 216, 216C, 218, 229A; ECON 2, 4.

### Computerized Accounting Specialist Certificate Program

This program provides students who plan to enter the accounting field with knowledge of accounting principles and practices to record transactions for various types of businesses using a double-entry accounting system, as well as the latest commercial software, and the ability to analyze financial statements.

Course ID	Title	Units
ACCT 1A	Financial Accounting	4
ACCT 1B*	Managerial Accounting	4
ACCT 216*	Individual Income Tax	4
CIM 216+	Spreadsheets: Excel	3
CIM 223B*	Computerized Accounting: QuickBooks—Advanced	1.5
	Select from Restricted Electives	3
<b>Total</b>		<b>19.5</b>

#### Restricted Electives:

ACCT 120	Introduction to Financial Planning	3
ACCT 202A*	Intermediate Accounting I	3
ACCT 217*	Partnership and Corporate Taxation	3
ACCT 275*	Auditing	3

\*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 Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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 189, 202A, 202B, 203, 214, 289; BUS 102, 103, 104, 125; CIM 1, 112, 171, 174, 174A, 216B, 216C, 218, 229A; ECON 2, 4.

### Tax Preparation Certificate Program

This program provides students with sufficient knowledge of Federal and State of California tax law to prepare individual and small business tax returns and to obtain an entry-level position as a tax preparer.

Course ID	Title	Units
ACCT 1A	Financial Accounting	4
ACCT 216*	Individual Income Tax	4
ACCT 217*	Partnership and Corporate Taxation	3
BUS 12	Business Law	
or		
BUS 14	Legal Environment of Business	3
CIM 216+	Spreadsheets: Excel	3
CIM 223A*	Computerized Accounting: QuickBooks—Beginning	1.5
or		
CIM 223B*	Computerized Accounting: QuickBooks—Advanced	1.5
<b>Total</b>		<b>18.5</b>

\*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 Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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 120, 189, 202B, 203, 214, 289; BUS 1, 102, 103, 104, 125; CIM 1, 10, 112, 171, 174, 174A, 216B, 216C, 218, 229A; ECON 2, 4.

## Administrative Assistant Certificate Program

The Administrative Assistant program prepares individuals for employment in key staff positions or enhances existing skills of office assistants, office managers, and other professionals.

Course ID	Title	Units
BUS 103	Business English	3
CIM 1	Introduction to Computer Information Systems	3
or		
CIM 10	Introduction to Information Systems	3
or		
CIM 112	Microsoft Office	3
CIM 121C*	Keyboarding for Computers—Advanced	1.5
CIM 174+	Computer Operating Systems: Windows	3
CIM 214+	Word Processing: Word	3
CIM 216+	Spreadsheets: Excel	3
CIM 230	Business Presentations: PowerPoint	3
	Select from Restricted Electives	4.5
<b>Total</b>		<b>24</b>

### Restricted Electives:

BUS 102	Oral Business Techniques	3
BUS 104*	Business Communication	3
BUS 125	Human Relations in Business	3
CIM 218	Database: Access	3
CIM 221	Managing Projects with Microsoft Project	3
CIM 223A*/B*	Computerized Accounting: QuickBooks— Beginning/Advanced	1.5, 1.5
CIM 227*	Internet and Web Essentials	1.5
CIM 271A*/B*	Web Development: XHTML—Beginning/ Advanced	1.5, 1.5
CIM 272*	Web 2.0 Design: Cascading Style Sheets	1.5
CIM 278A*/B*	Creating Web Pages : Dreamweaver— Beginning/Advanced	1.5, 1.5

\*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 Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 1, 12, 125, CIM 189, 289.

## American Sign Language Interpreting Certificate Program

The American Sign Language (ASL) Interpreting program is designed to prepare the student to serve as an interpreting intern in a variety of settings. Proficiency in ASL is valuable to professionals in special education, health sciences, audiology, and speech therapy.

Course ID	Title	Units
SL 1*	American Sign Language I	4
SL 2*	American Sign Language II	4
SL 3*	American Sign Language III	4
SL 4*	American Sign Language IV	4
SL 101	Deaf Culture and Its History	3
SL 103*	Sign Language Interpreting I	3
SL 104*	Sign Language Interpreting I Lab	1
SL 105*	Sign Language Interpreting II	3
SL 106*	Sign Language Interpreting II Lab	1
SL 107*	Interpreting Sign to Voice	3
<b>Total</b>		<b>30</b>

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

## Associate Degree

### 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.

### Associate in Arts Degree

Completion of the following courses SL 1, 2, 3, 4, 101 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 Arts 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: SOC 1.

## Anthropology Associate Degree Program

The curriculum in the Anthropology Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
ANTH 1	Biological Anthropology	3
ANTH 2	Cultural Anthropology	3
ANTH 3*	Culture and Language	3
ANTH 9	Introduction to Archaeology	3
	Select from Restricted Electives	6
<b>Total</b>		<b>18</b>

### Restricted Electives:

ANTH 4	Native American Indian Culture	3
ANTH 5	Anthropology of Latin America: Culture, Identity, and Power	3
ANTH 6*	Global Issues in Anthropological Perspective	3
ANTH 7	Indians of Southern California	3
ANTH 8	World Prehistory	3
ANTH 10	Celtic Cultures	3
ANTH 11	Mysteries of the Ancient Maya	3
ANTH 13	Magic, Witchcraft, and Religion	3
ANTH 14	Introduction to Visual Culture	3
ANTH 15	Primate Behavior	3
ANTH 16*	Archaeological Field Methods	4
ANTH 17	The Biological Evolution of Human Nature	3
ANTH 21	Women and Culture: Cross-Cultural Perspectives	3
ANTH 42	Culture and Food	3
ANTH 100*	Forensic Anthropology	3

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BIO 11, 22, 40; CCS 1, 2, 10; GEOG 2; GEOL 2; HIST 20/SOC 20; MATH 10; PSYC 16; SOC 1.

## Aquarium and Aquaculture Science Certificate Program

The Aquarium and Aquaculture Science certificate program provides students with career preparation for entry-level work in public aquarium, interpretive/education centers, pet industry, private business, or aquaculture related venues. For those already in the field, a skills upgrade in the latest techniques and information relating to water chemistry and toxicology, filtration, life support and habitat design, culture protocols, health, nutrition and disease, and equipment will be covered using hands-on application and innovative scientific approach. Current industry standards, state and federal regulations, and licensing are addressed. Through guided practical and technical

experience, field trips, and internships, students will acquire good husbandry skills required to properly care for aquatic organisms and the dynamics involved in aquarium science.

Course ID	Title	Units
MST 10	Introduction to Aquaculture	3
MST 100	Aquarium Systems	3
MST 101*	Aquarium Management	1.5
MST 203	Ecology of Captive Aquatic Fish and Invertebrates	3
MST 204	Aquatic Animal Health and Disease Management	3
MST 205	Water Quality and Toxicity for Aquatic Systems	3
MST 206*	Aquatic System Design and Life Support	3
MST 207*	Internship: Aquarium and Aquaculture	1.5
CWE 180*	Cooperative Work Experience: Aquarium and Aquaculture	2
<b>Total</b>		<b>23</b>

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

It is strongly recommended that students seeking cooperative work experience internships at public aquariums, obtain an Open Water SCUBA Certification from a reputable and nationally recognized organization (PADI, NAUI, etc.), and complete a basic first aid, CPR, and Dan oxygen administration course(s).

### Associate Degree

#### 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: BIO 3A or BIO 19/ENV 19; CHEM 108; CIM 1; MATH 351.

## Aquaculture Technician Occupational Skills Award

The Aquaculture Technician Occupational Skills Award is designed to increase the ability to master the necessary technical skills and knowledge relating to the aquaculture of organisms. Completion of this program will enhance the opportunity for entry level employment, as well as, provide advancement in a career in aquaculture and fish hatcheries.

Course ID	Title	Units
MST 10	Introduction to Aquaculture	3
MST 101*	Aquarium Management	1.5
	Select from below	6
<b>Total</b>		<b>10.5</b>

MST 203	Ecology of Captive Fish and Invertebrates	3
MST 204	Aquatic Animal Health and Disease Management	3
MST 205	Water Quality and Toxicity of Captive Aquatic Systems	3
MST 206*	Aquatic System Design and Life Support	3

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

## Aquarium Technician Occupational Skills Award

The Aquarium Technician Occupational Skills Award is designed to increase the ability to master the necessary technical skills and knowledge relating to the care of captive aquatic organisms in aquariums. Completion of this program will enhance the opportunity for entry-level employment as well as, provide advancement in a career in public aquarium, ocean-themed interpretive/education centers, aquatic pet industry and aquarium related venues.

Course ID	Title	Units
MST 100	Aquarium Systems	3
MST 101*	Aquarium Management Select from below	1.5 6
<b>Total</b>		<b>10.5</b>

MST 203	Ecology of Captive Fish and Invertebrates	3
MST 204	Aquatic Animal Health and Disease Management	3
MST 205	Water Quality and Toxicity of Captive Aquatic Systems	3
MST 206*	Aquatic System Design and Life Support	3

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

## Arabic Associate Degree Program

The Arabic Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in Arabic. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

Course ID	Title	Units
ARAB 1*	Elementary Arabic	5
ARAB 2*	Elementary Arabic	5
ARAB 3*	Intermediate Arabic	5
ARAB 4*	Intermediate Arabic	5
ARAB 999A*	Arabic Language Lab	.25, .25
ARAB 999B*	Arabic Language Lab	.25, .25
	Select one course from Restricted Electives:	3
<b>Total</b>		<b>24</b>

### Restricted Electives

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3
JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin American 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Architectural Drafting Certificate Program

This occupational program is a two-year sequence of courses designed for students who wish to train for employment in architecture or a field related to the construction industry.

Course ID	Title	Units
<b>First Year</b>		
ARCH 10	Introduction to Architecture	2
ARCH 12	History of Architecture	3
ARCH 50*/DR 50*	Introduction to Computer-Aided Drafting	3
ARCH 51*/DR 51*	Computer-Aided Drafting	3
ARCH 124A	Architectural Drawing I	4
ARCH 218	Foundation Studio in Architecture	4
ARCH 219*	Residential and Commercial Space Planning	4
ARCH 220*	Revit and Building Information Management (BIM)	4
<b>Second Year</b>		
ARCH 34*	Basic Architectural Design I	3
ARCH 42*	Descriptive Drawing and Perspective	3
ARCH 122	Architectural Practice	2
ARCH 124B*	Architectural Drawing II	4
ARCH 124C*	Architectural Drawing III	4
ARCH 126	Materials and Methods of Construction	3
	Select from Restricted Electives	3-6
<b>Total</b>		<b>49-52</b>

### Restricted Electives:

ARCH 44*	Architectural Presentation and Rendering	2
ARCH 132*	Residential Planning Principles and Design	3
ARCH 152*/DR 152*	Advanced Computer-Aided Drafting	3
ARCH 161	Blueprint Plans and Specification Reading	4
ARCH 163	International Building Code Inspection	4
ARCH 164*	Combination Residential Dwelling Inspection	3
ARCH 165	Electrical Code Inspection	3
ARCH 200	Design in Arizona, Riverside, and Palm Springs	1.5
ARCH 211	Concrete Inspection	3
ARCH 212	Drains, Waste, Vents, Water and Gas	3
ARCH 213	Mechanical Code: Heating, AC, Refrigeration, and Ductwork	3
ARCH 189/289	Special Topics	1.5-3
DR 189/289	Special Topics	1.5-3
MFG 200*	Introduction to Rapid-Prototyping Technology	3
MFG 201*	Advanced CAD Model Making and Tooling	2
MFG 204*	3D Computer-Aided Design-Solidworks	3

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ARCH 44, 136; ART 40, 41, 80

## Art Associate Degree Program

The curriculum in the Art Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the associate degree would demonstrate achievement and may support attempts to gain entry-level employment in graphic design or promotion.

Course ID	Title	Units
<b>First Year</b>		
ART 40	Two-Dimensional Design	3
ART 41*	Three-Dimensional Design	3
ART 50*	Painting I	3
ART 80	Drawing I	3
	Select from Restricted Electives	3
<b>Second Year</b>		
ART 25	Survey of Art History: Ancient Worlds to Gothic	3
ART 26	Survey of Art History: Renaissance to Modern	3
ART 85*	Drawing from the Live Model I	3
	Select from Restricted Electives	9
	<b>Total</b>	<b>33</b>

### Restricted Electives:

ART 9\*, 10\*, 11\*, 12\*, 13\*, 20, 21, 22, 23, 24, 28, 29, 51\*, 52\*, 54\*, 57, 58\*, 59\*, 60\*, 61\*, 62\*, 63, 70, 71\*, 72\*, 78, 79\*, 81\*, 82\*, 86\*, 87\*, 133\*, 134\*, 140, 141, 142, 144, 145, 175\*, 216\*, 217\*, 240, 250\*.

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Astronomy Associate Degree Program

The curriculum in the Astronomy Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
<b>First Year</b>		
ASTR 20	General Astronomy	3
	and	
ASTR 25*	Observational Astronomy	3
CS 1A	Introduction to Computer Science	3
MATH 3A*	Analytic Geometry and Calculus	5
MATH 3B*	Analytic Geometry and Calculus	5
PHYS 4A*	General Physics	5
<b>Second Year</b>		
PHYS 4B*	General Physics	5
PHYS 4C*	General Physics	5
	<b>Total</b>	<b>34</b>

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

## Associate Degree

### Associate in Science Degree

Completion of all the courses listed 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Automotive Technology

The Automotive Technology programs are designed to prepare students for employment as automotive technicians. Students may also complete their Associate in Science or Associate in Arts Degree requirements and prepare to transfer to a four-year college. Training is given in both theory and practical skills in the operation, maintenance, and repair of all types of automotive systems. The following four certificate options are available: Automotive Chassis Specialist, Automotive Engine Service Specialist, Automotive Engine Performance Specialist, and General Automotive Technician.

## Automotive Chassis Specialist Certificate Program

This program allows a student to prepare for a career with drivetrain emphasis. This program is ideal for the small-business owner, independent shop, or the dealership career-oriented technician.

Course ID	Title	Units
AUTO 100	Automotive Fundamentals	3
AUTO 101*	Automotive Electrical Systems	3
AUTO 105*	Automotive Power Train	3

AUTO 106A*	Automotive Suspension and Alignment	3
AUTO 106B*	Automotive Brakes	3
AUTO 107*	Automatic Transmissions	3
AUTO 108*	Automotive Air Conditioning	3
AUTO 201*	Advanced Automotive Electrical	3
AUTO 207*	Automotive Engineering Fundamentals	3
	Select from Restricted Electives	.5-5
	<b>Total</b>	<b>27.5-32</b>

**Restricted Electives:**

AUTO 109*	California B.A.R. Basic Area Clean Air Car Course	5
AUTO 189/289	Special Topics	1-3
AUTO 205*	Advanced Smog Update Training	.5
AUTO 220*	Alternative Propulsion Systems	3
AUTO 226*	Automotive Service Consultant	2
AUTO 227*	Automotive Service Management	3
AUTO 228*	Advanced Vehicle Performance	1
AUTO 229*	Diesel Technology	3
AUTO 240*	Automotive Lab	3
CWE 180*†	Cooperative Work Experience: Automotive	1

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

†CWE 180\* should be taken after completing at least 9 units of the Automotive Chassis Specialist Certificate program.

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

**Automotive Engine Performance Specialist Certificate Program**

This program allows a student to prepare for a career with an emphasis in engine performance. The student will be qualified to take the State of California Bureau of Automotive Repair Smog License exam upon completion of this program.

Course ID	Title	Units
AUTO 100	Automotive Fundamentals	3
AUTO 101*	Automotive Electrical System	3
AUTO 102*	Automotive Engine Performance/Electronics and Ignition Systems	3
AUTO 103*	Automotive Engine Performance/Fuel and Emissions Systems	3
AUTO 109*	California B.A.R. Basic Area Clean Air Car Course	5
AUTO 200*	Enhanced Area Clean Air Car Course	1
AUTO 201*	Advanced Automotive Electrical	3
AUTO 205*	Advanced Smog Update Training	.5
AUTO 207*	Automotive Engineering Fundamentals	3
	Select from Restricted Electives	3
	<b>Total</b>	<b>24.5-27.5</b>

**Restricted Electives:**

AUTO 108*	Automotive Air Conditioning	3
AUTO 189/289	Special Topics	1-3
AUTO 202*	Advanced Engine Performance Diagnosis	3
AUTO 220*	Alternative Propulsion Systems	3
AUTO 226*	Automotive Service Consultant	2
AUTO 227*	Automotive Service Management	3
AUTO 228*	Advanced Vehicle Performance	1
AUTO 229*	Diesel Technology	3
AUTO 240*	Automotive Lab	3
CWE 180*†	Cooperative Work Experience: Automotive	1

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

†CWE 180\* should be taken after completing at least 9 units of the Automotive Tune-up Specialist Certificate program.

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

**Automotive Engine Service Specialist Certificate Program**

This program provides the student with a comprehensive background in the engine machining process. Emphasis is on detailed instruction in all phases of engine operation, measurement, machining, blueprinting and assembly procedures. Students will rebuild a complete engine in a two-semester course sequence.

Course ID	Title	Units
AUTO 100	Automotive Fundamentals	3
AUTO 102*	Automotive Engine Performance/Electronics and Ignition Systems	3
AUTO 103*	Automotive Engine Performance/Fuel and Emissions Systems	3
AUTO 104A*	Automotive Engines	5
AUTO 104B*	Automotive Engines	5
AUTO 204A*	High Performance Engine Blueprinting-Rotating Assembly	3
AUTO 204B*	High Performance Engine Blueprinting-Cylinder Heads	3
AUTO 207*	Automotive Engineering Fundamentals	3
	Select from Restricted Electives	.5-5
	<b>Total</b>	<b>28.5-33</b>
AUTO 108*	Automotive Air Conditioning	3
AUTO 109*	California B.A.R. Basic Area Clean Air Car Course	5
AUTO 189/289	Special Topics	1-3
AUTO 205*	Advanced Smog Update Training	.5
AUTO 220*	Alternative Propulsion Systems	3
AUTO 226*	Automotive Service Consultant	2
AUTO 227*	Automotive Service Management	3

AUTO 228*	Advanced Vehicle Performance	1	AUTO 229*	Diesel Technology	3
AUTO 229*	Diesel Technology	3	AUTO 240*	Automotive Lab	3
AUTO 240*	Automotive Lab	3	CWE 180*†	Cooperative Work Experience: Automotive	1
CWE 180*†	Cooperative Work Experience: Automotive	1			

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

†CWE 180\* should be taken after completing at least 9 units of the Automotive Engine Service Specialist Certificate program.

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## General Automotive Technician Certificate Program

This program provides students with knowledge of all operating systems in the modern automobile. Ideal for the small business owner, independent shop, or the dealership career-oriented technician.

Course ID	Title	Units
AUTO 100	Automotive Fundamentals	3
AUTO 101*	Automotive Electrical System	3
AUTO 102*	Automotive Engine Performance/Electronics and Ignition Systems	3
AUTO 103*	Automotive Engine Performance/Fuel and Emissions Systems	3
AUTO 104A*	Automotive Engines	5
AUTO 104B*	Automotive Engines	5
AUTO 105*	Automotive Power Train	3
AUTO 106A*	Automotive Suspension and Alignment	3
AUTO 106B*	Automotive Brakes	3
AUTO 207*	Automotive Engineering Fundamentals	3
	Select from Restricted Electives	.5-5
	<b>Total</b>	<b>34.5-39</b>

### Restricted Electives:

AUTO 107*	Automotive Transmissions	3
AUTO 108*	Automotive Air Conditioning	3
AUTO 109*	California B.A.R. Basic Area Clean Air Car Course	5
AUTO 200*	Enhanced Area Clean Air Car Course	2
AUTO 201*	Advanced Automotive Electrical	3
AUTO 202*	Advanced Engine Performance Diagnosis	3
AUTO 204A*	High Performance Engine Blueprinting-Rotating Assembly	3
AUTO 204B*	High Performance Engine Blueprinting-Cylinder Heads	3
AUTO 205*	Advanced Smog Update Training	.5
AUTO 220*	Alternative Propulsion Systems	3
AUTO 226*	Automotive Service Consultant	2
AUTO 227*	Automotive Service Management	3
AUTO 228*	Advanced Vehicle Performance	1

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Biology Associate Degree Program—Biological Science

The curriculum in the Biology Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree would demonstrate achievement may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
<b>First Year</b>		
BIO 3A*	General Biology I	5
BIO 3B*	General Biology II	5
CHEM 1A*	General Chemistry	5
CHEM 1B*	General Chemistry	5
<b>Second Year</b>		
BIO 3C*	Biochemistry and Molecular Biology	5
CHEM 12A*	Organic Chemistry	5
CHEM 12B*	Organic Chemistry	5
	<b>Total</b>	<b>35</b>

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

## Associate Degree

### Associate in Science Degree

Completion of all the courses listed 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BIO 11, 12 or 15; MATH 3A or 11; PHYS 2A, 2B or 4A, 4B.

## Business Associate Degree Programs

**Business Administration**

The curriculum in the Business Administration Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers, earning the Associate degree may support attempts to gain entry-level employment or promotion.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
ACCT 1A	Financial Accounting	4
ACCT 1B*	Managerial Accounting	4
BUS 1	Introduction to Business	3
BUS 12	Business Law	
<i>or</i>		3
BUS 14	Legal Environment of Business	
BUS 104*	Business Communication	3
CIM 1	Introduction to Computer Information Systems	
<i>or</i>		3
CIM 10	Introduction to Information Systems	
<i>or</i>		3
CIM 112	Microsoft Office	3
ECON 2*	Principles (Macro)	3
ECON 4*	Principles (Micro)	3
MATH 3A*	Analytic Geometry and Calculus	5
<i>or</i>		5
MATH 11*	A Brief Course in Calculus	5
	<b>Total</b>	<b>31</b>

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

**Associate Degree****Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 116, 120, 125, 135, 150; MATH 9, 10; PHIL 12 or 15.

**Business Management**

The curriculum in the Business Associate Degree program is designed to provide the student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers in business, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment or promotion.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
ACCT 1A	Financial Accounting	4
BUS 1	Introduction to Business	3
BUS 102	Oral Business Communications (meets AA Oral Communication requirement)	3
BUS 104*	Business Communication	3
BUS 120	Business Management	3
BUS 125	Human Relations In Business	3
CIM 1	Introduction to Computer Information Systems	
<i>or</i>		3
CIM 10	Introduction to Information Systems	
<i>or</i>		1.5
CIM 112	Microsoft Office	1.5
	<b>Total</b>	<b>20.5-22</b>

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

**Associate Degree****Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

**Business**

The Business certificates are designed for the development of a high quality manager for whom there is an ever-growing need. The Business curriculum is structured to furnish a broad preparation for careers in business at the mid-management levels.

**Business Leadership Certificate Program**

The Business Leadership program is designed to increase the ability to succeed in a highly competitive work environment.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
BUS 1	Introduction to Business	3
BUS 12	Business Law	
<i>or</i>		3
BUS 14	Legal Environment of Business	
BUS 102	Oral Business Techniques	3
BUS 104*	Business Communication	3
BUS 120	Business Management	3
BUS 125	Human Relations in Business	
<i>or</i>		3
BUS 223	Human Resources and Employment Law	
	<b>Total</b>	<b>18</b>

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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, BUS 116, 195

### Marketing Certificate Program

The Business Marketing program offers a focus on courses designed to improve student success in the field of promotion, personal selling, and advertising.

Course ID	Title	Units
ACCT 1A	Financial Accounting	4
BUS 1	Introduction to Business	3
BUS 12	Business Law	
or		3
BUS 14	Legal Environment of Business	
BUS 104*	Business Communication	3
BUS 135	Elements of Marketing	3
BUS/CTVR 138	Advertising	3
	Restricted Electives	3
<b>Total</b>		<b>22</b>

#### Restricted Electives:

BUS 102	Oral Business Techniques	3
BUS 136	Principles of Retailing	3
BUS 137	Professional Selling Fundamentals	3

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 12 or 14, 116, 195.

### Entrepreneurship Certificate Program

The Entrepreneurship Certificate is designed for students who wish to emphasize entrepreneurship in their community college business studies, including completing the additional requirements for an Associate in Arts degree in this area. Entrepreneurial studies help prepare students who plan to seek a higher degree in business. Completion of the Entrepreneurship Certificate demonstrates achievement, may support job applications, and, importantly, provides students with critical knowledge and tools for planning and starting a new business. The program provides valuable preparation in proven business practices and with business ownership issues such as market focus, measurements of success, and developing a clear and useful business plan.

Because some of the leading causes of failure in new businesses are poor risk management, lack of adequate capitalization, and mismanagement of resources, this program provides specific information in these areas to help make good decisions to ensure success.

The Entrepreneurship Certificate is also useful for members of the community who are planning or starting a new business. Some of these students might prefer to complete the shorter Entrepreneurship Occupational Skills Award.

Many of the courses in the program are designed with the busy professional in mind.

Course ID	Title	Units
ACCT 235	Entrepreneurial Accounting	3
BUS 1	Introduction to Business	3
BUS 12	Business Law	
or		3
BUS 14	Legal Environment of Business	
BUS 104*	Business Communication	3
BUS 120	Business Management	3
BUS 160	Entrepreneurship	3
	Marketing Specialties	3
	Restricted Electives	1.5-3
	Communication Specialties	1.5-3
<b>Total</b>		<b>24-27</b>

#### Marketing Specialties:

BUS 135	Elements of Marketing	3
BUS 136	Principles of Retailing	3
BUS 137	Professional Selling Fundamentals	3
BUS 138/CTVR 138	Advertising	3

#### Restricted Electives:

BUS 223	Human Resources and Employment Law	3
BUS 237	Financing the Entrepreneurial Business	1.5

#### Communication Specialties:

BUS 102	Oral Business Communications	3
CIM 213E, F, G	Office Skills: Word, Excel, PowerPoint	.5, .5, .5

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 102, 125, 223

### Global Business Certificate Program

Technology and international commerce have redefined business in a global context. The Global Business program prepares students for careers in international business and industries that deal with international trade and global markets. The program focuses on the dynamics of international organization, environments, trade, language, socioeconomic and cultural forces, political and legal issues, and emerging global markets. Completion of the recommended

electives demonstrates global competencies in international business. Elective courses provide specialized areas of study. Transfer International Business majors should refer to the Business Administration transfer curriculum.

Course ID	Title	Units
BUS 1	Introduction to Business	3
BUS 12	Business Law	3
or		
BUS 14	Legal Environment of Business	3
BUS 104*	Business Communication	3
BUS 150	International Business	3
BUS 260	Survey of Exporting and Importing	3
	Restricted Electives	6
<b>Restricted Electives:</b>		
BUS 102	Oral Business Communications	3
BUS 135	Marketing	3
BUS 137	Professional Selling Fundamentals	3
BUS 138/CTVR 138	Advertising	3
BUS 160	Entrepreneurship	3
	<b>Total</b>	<b>21</b>

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 102, 116, 120, 125, 136, 137, 138, 195, 223.

## Professional Retailing Certificate Program

Success in business roles and merchandising is often found in the skills of management, promotion, or merchandising. The Professional Retailing program is designed to allow a choice of additional study in one of the three skill areas.

Course ID	Title	Units
BUS 1	Introduction to Business	3
BUS 125	Human Relations in Business	3
BUS 137	Professional Selling Fundamentals	3
BUS 195*†	Internship	1
and		
CWE 180*†	Cooperative Work Experience: Business	1-4
CIM 112	Microsoft Office	3
	Select one Specialty Industry Area	12-15
	<b>Total</b>	<b>26-32</b>

### Specialty Industry Areas

#### Area I—Management

BUS 12	Business Law	3
or		
BUS 14	Legal Environment of Business	3
BUS 103	Business English	3
or		

BUS 135	Elements of Marketing	3
BUS 104*	Business Communication	3
or		
BUS 120	Business Management	3

#### Area II—Promotion

BUS 135	Elements of Marketing	3
BUS 138/CTVR 138	Advertising	3
FASH 150	Fashion Apparel and Professional Techniques	3
GC 101	Introduction to Graphic Communication	3

#### Area III—Merchandising

BUS 31/FASH 31	Textiles	3
BUS 135	Elements of Marketing	3
BUS 136	Principles of Retailing	3
or		
BUS 143/FASH 143	Fashion Buying and Merchandising	3
BUS 147/FASH 147	Special Events Coordination and Promotion	3
BUS 148/FASH 148	Visual Merchandising	3

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

†Must be taken concurrently

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 12 or 14, 102, 103, 104, 116, 135, 137, 138, 147, 150, 260, 290; CIM 1, 10, 120, 121A, 171, 174, 174A, 174; FASH 140, 144, 150.

## Retail Management Certificate Program

The Retail Management program, designed by managers of major retail corporations, prepares individuals to be effective managers or for promotion to management in the retail industry. The curriculum assists students' understanding of the scope of the retail manager's job and the requirements for success. Completion of the certificate in Retail Management enhances the opportunity for entry employment as well as advancement in a retail career.

Course ID	Title	Units
ACCT 1A	Financial Accounting	4
ACCT 214	Business Analysis and Calculations	3
BUS 102	Oral Business Communications	3
BUS 104*	Business Communication	3
BUS 120	Business Management	3
BUS 125	Human Relations in Business	3
BUS 135	Elements of Marketing	3
BUS 136	Principles of Retailing	3
BUS 223	Human Resources and Employment Law	3
CIM 1	Introduction to Computer Information Systems	3
or		
CIM 10	Introduction to Information Systems	3
or		
CIM 112	Microsoft Office	3
	<b>Total</b>	<b>31</b>

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

## Associate Degree

### 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: BUS 12 or 14, 116, 137, 138, 150, 160, 195.

## Entrepreneurship Occupational Skills Award

The Entrepreneurship Occupational Skills Award is particularly useful for members of the community and other students who are planning or are in the process of starting a new business.

Course ID	Title	Units
ACCT 235	Entrepreneurial Accounting	3
BUS 160	Entrepreneurship	3
BUS 223	Human Resources and Employment Law	3
BUS 237	Financing the Entrepreneurial Business	1.5
<b>Total</b>		<b>10.5</b>

## Human Resources Management Occupational Skills Award

The Human Resources Management Occupational Skills Award is designed to increase the ability to succeed in an emerging and evolving work environment. The curriculum assists students' understanding of the scope of human resources management and the requirements for success. Completion of the program in Human Resources Management enhances the opportunity for entry employment as well as advancement in a career.

Course ID	Title	Units
BUS 120	Business Management	3
BUS 125	Human Relations in Business	3
BUS 223	Human Resources and Employment Law	3
<b>Total</b>		<b>9</b>

## Project Management Occupational Skills Award

The Project Management Occupational Skills Award provides the opportunity to master the necessary management concepts to successfully complete projects with an effective level of leadership, planning, and teamwork. The courses assist in the development of the needed skills to ultimately gain personal confidence and trust of others to lead a project management team. Completion of this program increases the value of the management skills needed for entry-level employment as well as advancement in a career.

Course ID	Title	Units
BUS 120	Essentials of Business Management	3
BUS 125	Human Relations in Business	3
CIM 221	Managing Projects with Microsoft Project	3
<b>Total</b>		<b>9</b>

## Chemistry Associate Degree Program

The curriculum in the Chemistry Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment at the technician level in government agencies and many areas of industry and manufacturing such as petroleum, foods, pharmaceuticals, plastics, and textiles.

Course ID	Title	Units
<b>First Year</b>		
CHEM 1A*	General Chemistry	5
CHEM 1B*	General Chemistry	5
<b>Second Year</b>		
CHEM 12A*	Organic Chemistry	5
CHEM 12B*	Organic Chemistry	5
<b>Total</b>		<b>20</b>

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

## Associate Degree

### Associate in Science Degree

Completion of all the courses listed 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.

### Associate in Arts Degree

Complete the units as described 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 Arts 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: BIO 3C; MATH 3A, 3B; PHYS 2A, 2B or 4A, 4B.

## Child Development

The Child Development program is a theory-based, hands-on program that offers opportunities for students to deepen their understanding of children and families and the unique teaching and learning process that applies to the early years. Coursework focuses on the physical, cognitive, and social and emotional growth and development of children under the age of 12 and the unique care and education needs of children ages 0-5.

The Child Development program offers options for professional development, professional certification and transfer to four-year institutions. The major offers preparation for careers in the field of early child education such as state funded children's programs, private and public preschools, family child care and public school programs, and provides a valuable foundation for students considering elementary school teaching. Classes in child development can also lead to careers working directly or indirectly with children in related fields, such as psychology, social services, educational material development, children's center design services, children's advocacy, special education, and pediatric health.

Certificate and degree coursework are aligned with the State issued Child Development Permit. Core courses are CAP aligned.

## Early Childhood Teacher Certificate

This certificate meets the coursework requirements of the Teacher level Child Development Permit and prepares students to be competent and effective teachers and caregivers for young children ages 3-5. Additional work experience with young children (175 days of 3 hours per day within 4 years) is required to qualify for state permit. Saddleback Certificate can be earned with coursework only.

A minimum grade of "C" in each course is required to receive the certificate.

### Core Courses

Course ID	Title	Units
CD 101*	Principles and Practices of Teaching Young Children	3
CD 105*	Child, Family, and Community	3
CD 107*	Child Growth and Development	3
CD 110*	Introduction to Early Childhood Curriculum	3
CD 111*	Child Guidance and Communication	3
CD 112*	Health, Safety, and Nutrition	3
CD 117*	Teaching Children in a Diverse Society	3
CD 120*	Observation and Assessment	3

### Supervised Field Experience Course

CD 121*	Practicum: The student teaching experience	5
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Lab placement must be in a setting that serves children ages 3-5

### General Education (16 units):

A course in each of the following 4 areas must be included. See Associate Degree, CSU or IGETC General Education lists found in class schedule or student handbook for acceptable courses.

English/Language Arts	
Science or Math	
Social Sciences	
Humanities/Fine Arts	16
<b>Total</b>	<b>45</b>

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

## Associate Degree

### 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. Students intending to transfer must complete IGETC or CSU pattern general education courses.

### 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.

## Early Interventionist Certificate Program

This certificate prepares students for career placements in public and/or private early intervention and educational settings that service typically and atypically developing young children. Specific jobs and responsibilities may include serving as a special education assistant for children birth to eight years of age, a one-one aide to a child, regular classroom aide with expertise in special needs, or as an assistant to the early intervention team for infants' birth to three years of age. This certificate meets the coursework requirements of the Teacher level Child Development Permit.

A minimum grade of "C" in each course is required to receive the certificate.

### Core Courses

Course ID	Title	Units
CD 101*	Principles and Practices for Teaching Young Children	3
CD 105*	Child, Family, and Community	3
CD 107*	Child Growth and Development	3
CD 110*	Introduction to Early Childhood Curriculum	3
CD 111*	Child Guidance and Communication	3
CD 112*	Health, Safety, and Nutrition	3
CD 117*	Teaching Children in a Diverse Society	3
CD 120*	Observation and Assessment	3

### Early Interventionist Courses

CD 123*	Infant and Toddler Development	3
CD 135*	The Young Child with Special Needs	3
CD 140*	Early Intervention and Inclusion	3

### Supervised Field Experience Courses

CD 121*	Practicum: The Student Teaching Experience	5
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Ideally, lab placement must be in a setting that includes atypically developing children

### Prerequisite course:

CD 110*	Introduction to Early Childhood Curriculum	3
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### General Education (16 units):

A course in each of the following 4 areas must be included. See Associate Degree, CSU or IGETC General Education lists found in class schedule or student handbook for acceptable courses.

English/Language Arts	
Science or Math	
Social Sciences	
Humanities/Fine Arts	16
<b>Total Units</b>	<b>54</b>

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

## Associate Degree

### 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. Students intending to transfer must complete IGETC or CSU pattern general education courses.

### 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.

## Infant Toddler Teacher Certificate Program

This certificate meets the coursework requirements of the Teacher level Child Development Permit and prepares students to be competent and effective teachers and caregivers in infant and toddler classrooms.

A minimum grade of "C" in each course is required to receive the certificate.

### Core Courses

Course ID	Title	Units
CD 101*	Principles and Practices of Teaching Young Children	3
CD 105*	Child, Family, and Community	3
CD 107*	Child Growth and Development	3
CD 110*	Introduction to Early Childhood Curriculum	3
CD 111*	Child Guidance and Communication	3
CD 112*	Health, Safety, and Nutrition	3

CD 117*	Teaching Children in a Diverse Society	3
CD 120*	Observation and Assessment	3

**Infant and Toddler Courses**

CD 123*	Infant and Toddler Development	3
CD 133*	Infant and Toddler Curriculum and Group Care	3

**Supervised Field Experience Courses**

CD 121*	Practicum: The Student Teaching Experience	5
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Lab placement must be in a setting that serves children ages 0-2

**General Education:****A course in each of the following 4 areas must be included.**

See Associate Degree, CSU or IGETC General Education lists found in class schedule or student handbook for acceptable courses.

English/Language Arts	
Science or Math	
Social Sciences	
Humanities/Fine Arts	16
<b>Total</b>	<b>51</b>

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

**Associate Degree****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. Students intending to transfer must complete IGETC or CSU pattern general education courses.

**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.

**Master Teacher Certificate Program**

This certificate meets the coursework requirements for the Master Teacher level Children Development Permit: and prepares students to be competent and effective teachers and caregivers for young children ages 0-5 and supervisors of adults in early childhood settings.

A minimum grade of "C" in each course is required to receive the certificate.

**Core Courses**

Course ID	Title	Units
CD 101*	Principles and Practices for Teaching Young Children	3
CD 105*	Child, Family, and Community	3
CD 107*	Child Growth and Development	3
CD 110*	Introduction to Early Childhood Curriculum	3
CD 111*	Child Guidance and Communication	3
CD 112*	Health, Safety, and Nutrition	3
CD 117*	Teaching Children in a Diverse Society	3
CD 120*	Observation and Assessment	3

**Supervised Field Experience Courses**

CD 121*	Practicum: The Student Teaching Experience	5
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**Adult Supervision Course**

CD 127*	Adult Supervision and Mentor Practices	2
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**Specialization Units: Choose one of the clusters below**

<b>Diversity</b>		<b>6</b>
CD 116*	Teaching in Multilingual Classrooms	3
CD 117*	Teaching Children in a Diverse Society	3

**Infant /Toddler**

CD 123*	Infant and Toddler Development	3
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CD 133*	Infant and Toddler Curriculum and Group Care	3
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**Language and Literacy** **6**

CD 115*	Literacy in Early Childhood	3
ENG 142*	Children's Literature	3

**Science and Math**

CD 113*	Math and Science in Early Childhood	3
GEOL 1	Introduction to Physical Geology	4

**Special Needs** **6**

CD 135*	The Young Child with Special Needs	3
CD 140*	Early Intervention and Inclusion	3

**The Arts** **6**

CD 114*	Creative and Dramatic Arts in Early Childhood	3
ART 9*	Ceramic Fundamentals	3

**General Education (16 units):** **16**

A course in each of the following 4 areas must be included.

See Associate Degree, CSU or IGETC General Education lists found in class schedule or student handbook for acceptable courses.

English/Language Arts	
Science or Math	
Social Sciences	
Humanities/Fine Arts	16
<b>Total</b>	<b>58</b>

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

**Associate Degree****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. Students intending to transfer must complete IGETC or CSU pattern general education courses.

**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.

**School Age Care and Recreation Certificate Program**

This certificate provide a system of professional development for individuals working as before and after school recreation leaders and care givers in a variety of settings that serve school age children. It meets the coursework requirement for the School Age Child Development Permit at the Teacher level.

A minimum grade of "C" in each course is required to receive the certificate.

**Core Courses**

Course ID	Title	Units
CD 101*	Principles and Practices of Teaching Young Children	3
CD 107*	Child Growth and Development	3
CD 105*	Child, Family, and Community	3
CD 110*	Introduction to Early Childhood Curriculum	3
CD 111*	Child Guidance and Communication	3
CD 112*	Health, Safety, and Nutrition	3
CD 117*	Teaching Children in a Diverse Society	3
CD 120*	Observations and Assessment	3

**School Age Course**

CD 121*	Practicum: The Student Teaching Experience	5
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Lab placement must be in a before/after school care setting with children ages 6-12

CD 125\* School Age Children and Youth 3

### General Education (16 units):

A course in each of the following 4 areas must be included. See Associate Degree, CSU or IGETC General Education lists found in class schedule or student handbook for acceptable courses.

English/Language Arts	
Science or Math	
Social Sciences	
Humanities/Fine Arts	<b>16</b>
<b>Total</b>	<b>48</b>

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

## Associate Degree

### 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. Students intending to transfer must complete IGETC or CSU pattern general education courses.

### 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.

## Associate Teacher Occupational Skills Award

This skills award meets the coursework requirements for the Associate Teacher level of the Child Development Permit. Additional work experience with young children.

A minimum grade of "C" in each course is required to receive the certificate.

Course ID	Title	Units
CD 101*	Principles and Practices of Teaching Young Children	3
CD 105*	Child, Family, and Community	3
CD 107*	Child Growth and Development	3
CD 110*	Introduction to Early Childhood Curriculum	3
<b>Total</b>		<b>12</b>

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

## Chinese Associate Degree Program

The Chinese Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in Chinese. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

Course ID	Title	Units
CHI 1*	Elementary Chinese	5
CHI 2*	Elementary Chinese	5
CHI 3*	Intermediate Chinese	5
CHI 4*	Intermediate Chinese	5
CHI 999A*	Chinese Language Lab	.25, .25
CHI 999B*	Chinese Language Lab	.25, .25

Select one course from Restricted Electives: 3

**Total 24**

### Restricted Electives

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3
JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin American 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Cinema/Television/Radio Certificate Program

The certificate program in Cinema/Television/Radio prepares the student in all areas relating to the understanding and use of cinematic and broadcast media, with particular emphasis on hands-on experience. Employment possibilities include: producing, directing, on-air talent, editing, and numerous other vocational opportunities. This program provides and encourages both field and studio work in the student's area of specialty. Coursework includes participation in internships at various stations and facilities.

Course ID	Title	Units
CTVR 1/JRN 1	Mass Media and Society	3
or		
CTVR 100	Introduction to Cinema, TV, and Radio	3
CTVR 40*	Television and Film Scriptwriting I	3
CTVR 101	Video Production Basics	3
	Select from one Specialty Area	15
<b>Total</b>		<b>24</b>

### Specialty Area 1—Cinema

#### Required Courses:

CTVR 31*	Film Production I	3
CTVR 32*	Film Production II	3

#### Electives: (9 units)

CTVR 42*	TV/Film Directing	3
CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 129*	Documentary Production	3
CTVR 140*	Television and Film Scriptwriting II	3
CTVR 151	Non-Linear Editing I	3
CTVR 233*	Film Production III	3
CTVR 251*	Non-Linear Editing II	3

CTVR 262	Production Management	1
CTVR 264*	Cinematography	2
CTVR 266	Script Supervising	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Cinema	1
CTVR 290*	Acting for the Camera I	3
CTVR 291*	Acting for the Camera II- Creating a Character	3

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

†Must be taken concurrently

### Specialty Area 2—Television

#### Required courses:

CTVR 124*	Television Production I	3
CTVR 125*	Television Production II	3

#### Electives: (9 units)

CTVR 42*	Television and Film Directing	3
CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 128*	Television and Radio News	3
CTVR 129*	Documentary Production	3
CTVR 140*	Television and Film Scriptwriting II	3
CTVR 151	Non-Linear Editing I	3
CTVR 251*	Non-Linear Editing II	3
CTVR 262	Production Management	1
CTVR 264*	Cinematography	2
CTVR 266	Script Supervising	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Television	1

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

†Must be taken concurrently

### Specialty Area 3—Radio

#### Required Courses:

CTVR 110	Audio Production	3
CTVR 113*	Radio Broadcasting	3

#### Electives: (9 units)

CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 114*	Radio Station Activities	2
CTVR 115*	Advanced Radio Broadcasting	2
CTVR 118/MUS 118	Digital Multi-Track Music Recording	4
CTVR 128*	Television and Radio News	3
CTVR 191	Radio and Television Announcing and Voice-Over	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Radio	1

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

†Must be taken concurrently

### Specialty Area 4—Post Production

#### Required Courses:

CTVR 151	Non-Linear Editing I	3
CTVR 251*	Non-Linear Editing II	3

#### Electives: (9 units)

CTVR 42*	TV/Film Directing	3
CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 118/MUS 118	Digital Multi-Track Music Recording	4
CTVR 253*	Digital Special Effects	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Post Production	1

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

†Must be taken concurrently

### Specialty Area 5—CTVR-Critical Studies

#### Required Courses:

CTVR 3	History and Appreciation of Film	3
CTVR 5	History and Appreciation of International Cinema	3
CTVR 7	Cross Cultural Cinema	3
CTVR 9	Women in Film	3

#### Electives: (6 units)

CTVR 1	Mass Media and Society	3
CTVR 31*	Film Production I	3
CTVR 42*	TV/Film Directing	3
CTVR 100	Introduction to Radio, Television, and Film	3
CTVR 124*	Television Production I	3
CTVR 129*	Documentary Production	3
CTVR 140*	Television and Film Scriptwriting II	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: CTVR Critical Studies	1-3
ENG 52*	Film as Literature	3

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

†Must be taken concurrently

### Specialty Area 6—Screen Acting and Voice Performance

#### Required Courses: (12 units)

CTVR 3	History and Appreciation of Film	3
CTVR 128*	Television and Radio News	3
CTVR 191	Voice-Over and Announcing	3
CTVR 260	Production Design for Film and Television	2

#### Electives: (6 units)

CTVR 1	Mass Media and Society	3
CTVR 31*	Film Production I	3
CTVR 42*	TV/Film Directing	3
CTVR 100	Introduction to Radio, Television, and Film	3
CTVR 124*	Television Production I	3
CTVR 125*	Television Production II	3
CTVR 129*	Documentary Production	3
CTVR 140*	Television and Film Scriptwriting II	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*	Cooperative Work Experience	1
TA 290*	Acting for Television and Film	3

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Cinema Occupational Skills Awards

The Cinema Production Occupational Skills Award provides the opportunity to master the fundamental proficiencies to complete a filmic production from the conception to finished product. The courses assist in student development by focusing on specific technical skills as well as working on practical assignments that mirror real-world tasks, including the production of several broadcast-quality short films suitable for use on a demonstration reel. Completion of this program increases the value of the technical, aesthetic, and project management skills needed for employment and advancement in a career in this field.

Course ID	Title	Units
CTVR 31*	Film Production I	3
CTVR 32*	Film Production II	3
	Select from Restricted Electives	9
<b>Total</b>		<b>15</b>

### Restricted Electives:

CTVR 40*	Television and Film Scriptwriting I	3
CTVR 42*	TV/Film Directing	3
CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 140*	Television and Film Scriptwriting II	3
CTVR 151	Non-Linear Editing I	3
CTVR 233*	Film Production III	3
CTVR 251*	Non-Linear Editing II	3
CTVR 262	Production Management	1
CTVR 264*	Cinematography	2
CTVR 266	Script Supervising	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Cinema	1
CTVR 290*	Performance for Television and Film	3

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

## CTVR-Critical Studies Occupational Skills Award

The Critical Studies Occupational Skills Award provides the opportunity to master the fundamental proficiencies to analyze and gain appreciation for visual and media literacy in general and motion pictures/cinematic communication in particular. The courses assist in student development by focusing on specific areas of cinematic history, appreciation and analysis. Completion of this skills award increases the value of the technical, aesthetic, and professional skills in the field of entertainment.

Course ID	Title	Units
CTVR 3	History and Appreciation of Film	3
CTVR 5	History and Appreciation of International Cinema	3
CTVR 7	Cross Cultural Cinema	3
CTVR 9	Women in Film	3
<b>Total</b>		<b>12</b>

## Post Production Occupational Skills Awards

The Post Production Occupational Skills Award provides the opportunity to master the fundamental proficiencies to complete a film, television or electronic media production from the delivery of media to finished product. The courses assist in student development by focusing on specific technical skills as well as working on practical assignments that mirror real-world tasks. Completion of this Occupational Skills Award increases the value of the technical, aesthetic, and project management skills needed for employment and advancement in a career in this field.

Course ID	Title	Units
CTVR 151	Non-Linear Editing I	3
CTVR 251*	Non-Linear Editing II	3
	Select from Restricted Electives	9
<b>Total</b>		<b>15</b>

### Restricted Electives:

CTVR 42*	TV/Film Directing	3
CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 118/MUS 118	Digital Multi-Track Music Recording	4
CTVR 253*	Digital Special Effects	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Post Production	1

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

## Radio Occupational Skills Awards

The Radio Broadcasting Occupational Skills Award provides the opportunity to master the fundamental proficiencies to complete a radio production from the conception to finished product as well as to understand the principles of radio broadcasting and station management. The courses assist in student development by focusing on specific technical skills as well as working on practical assignments that mirror real-world tasks, including the production of broadcast-quality radio programs suitable for use on a demonstration reel and the hands-on management of the college's flagship radio station KSBR. Completion of this program increases the value of the technical, aesthetic, and project management skills needed for employment and advancement in a career in this field.

Course ID	Title	Units
CTVR 110	Audio Production	3
CTVR 113*	Radio Broadcasting	3
	Select from Restricted Electives	9
<b>Total</b>		<b>15</b>

### Restricted Electives:

CTVR 111*	Audio Sound Design for Television and Film	3
CTVR 114*	Radio Station Activities	2
CTVR 115*	Advanced Radio Broadcasting	2
CTVR 118/MUS 118	Digital Multi-Track Music Recording	4
CTVR 128*	Television and Radio News	3
CTVR 191	Radio and Television Announcing and Voice-Over	3
CTVR 280*†	Cinema/Television/Radio Internship	1
<i>and</i>		
CWE 180*†	Cooperative Work Experience: Radio	1

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

## Television Occupational Skills Awards

The Television Production Occupational Skills Award provides the opportunity to master the fundamental proficiencies to complete a television production from the conception to finished product. The courses assist in student development by focusing on specific technical skills as well as working on practical assignments that mirror real-world tasks, including the production of broadcast-quality programs suitable for use on a demonstration reel. Completion of this program increases the value of the technical, aesthetic, and project management skills needed for employment and advancement in a career in this field.

Course ID	Title	Units
CTVR 124*	Television Production I	3
CTVR 125*	Television Production II	3

	Select from Restricted Electives	9
	<b>Total</b>	<b>15</b>
<b>Restricted Electives:</b>		
CTVR 40*	Television and Film Scriptwriting I	3
CTVR 42*	Television and Film Directing	3
CTVR 111*	Advanced Audio Production and Sound Design	3
CTVR 128*	Television and Radio News	3
CTVR 129*	Documentary Production	3
CTVR 140*	Television and Film Scriptwriting II	3
CTVR 151	Non-Linear Editing I	3
CTVR 251*	Non-Linear Editing II	3
CTVR 262	Production Management	1
CTVR 264*	Cinematography	2
CTVR 266	Script Supervising	3
CTVR 280*†	Cinema/Television/Radio Internship	1
and		
CWE 180*†	Cooperative Work Experience: Television	1

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

## Screen Acting and Voice Performance Occupational Skills Award

The Screen Acting and Voice Performance Occupational Skill Award prepares the student in all areas relating to the understanding and application of the skills necessary to perform in mass/electronic media, with particular emphasis on practical on-air/on-camera experience. Employment possibilities include: on-air talent, hosting, news, web-based promotions, film and television production roles, and numerous other vocational opportunities. This program provides and encourages both field and studio work in the student's area of specialty. Coursework may include participation in internships at various stations and facilities.

Course ID	Title	Units
CTVR 3	History and Appreciation of Film	3
CTVR 128*	Television and Radio News	3
CTVR 191	Voice-Over and Announcing	3
CTVR 260	Production Design for Film and Television	2
	<b>Total</b>	<b>11</b>

\*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 Certificate Program

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

Course ID	Title	Units
CIM 2A	Business Programming I: Visual Basic	3
CIM 7A*	Business Programming: Java—Beginning	3
CIM 205A	Web Development and DB: Intro SQL and MySQL	3
CIM 251*	Introduction to Networking	3
CIM 260A*	Microsoft ASP.NET—Beginning	3
CIM 269A*	Web Development: JavaScript—Beginning	1.5
CIM 271A*	Web Development: XHTML—Beginning	1.5
	Select from Restricted Electives	3
	<b>Total</b>	<b>21</b>

### Restricted Electives:

CIM 2B*	Business Programming II: Visual Basic	3
CIM 6A	Business Programming I: C++	3
CIM 7B*	Business Programming: Java—Advanced	3
CIM 172*	Computer Operating Systems: Unix/Linux	3
CIM 205B	Web 2.0: LAMP PHP/MYSQL—Web Site Application Integration	3
CIM 225*	Web Development: PHP	3
CIM 246*	Application Development for Excel with Visual Basic	3
CIM 248*	Visual Basic for Applications—Access	3
CIM 257*	Network and Security Administration using Unix/Linux	3
CIM 260B*	Microsoft ASP.NET—Advanced	3
CIM 269B*	Web Development: Javascript, Frameworks, and Intro to AJAX	3
CIM 271B*	Web Development: XHTML—Advanced	1.5
CIM 287*	Business Programming—C#	3
CIM 288*	Database Reporting	3
CIM 289	Special Topics	1.5-3

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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, 121A, 189, 227, 251, 252, 289; ECON 2, 4; MATH 9, 10.

### E-Commerce Specialist Certificate Program

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.

Course ID	Title	Units
CIM 218	Database: Access	3
CIM 271A*/271B*	Web Development: XHTML—Beginning/Advanced	1.5, 1.5
CIM 272*	Web 2.0 Design: Cascading Style Sheets	3
CIM 278A*	Creating Web Pages: Dreamweaver—Beginning	1.5
CIM 298*†	Web Design: Capstone Portfolio Project	1.5
	Select from Restricted Electives	9
	<b>Total</b>	<b>21</b>

**Restricted Electives:**

BUS 135	Elements of Marketing	3
CIM 225*	Web Development: PHP	3
CIM 264A/B*	Web Animation: Flash— Beginning/Intermediate	1.5, 1.5
CIM 264C*	Web Animation: Flash ActionScript— Beginning	3
CIM 264D*	Web Animation: Advanced Flash Sites and ActionScript Hacks	3
CIM 275	Web Marketing/Positioning	1.5
CIM 277*	E-Commerce and Web Site Design	3
CIM 278B*	Creating Web Pages: Dreamweaver— Advanced	1.5
CIM 279*	Information Security Fundamentals	3
CIM 281	Web Development: Adobe Fireworks	1.5
CIM 289*	Special Topics	1.5-3

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

†Must be taken concurrently

‡Final course to be taken

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

**Network Administrator Certificate Program**

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

Course ID	Title	Units
CIM 1	Introduction to Computer Information Systems	3
or		
CIM 10	Introduction to Information Systems	3
or		
CIM 112	Microsoft Office	3
CIM 172*	Computer Operating Systems: Unix/Linux	3
CIM 174+	Computer Operating Systems: Windows	3
CIM 251*	Introduction to Networking	3
CIM 252*	Networking Essentials and Technologies	3
	Select from Restricted Electives	6
	<b>Total</b>	<b>21</b>

**Restricted Electives:**

CIM 7A*/B*	Business Programming: Java—Beginning/ Advanced	3, 3
CIM 171*	Computer Operating Systems: Windows Admin at the Command Line	3
CIM 205A	Web Development and DB: Intro SQL and MYSQL	3
CIM 218	Database: Access	3
CIM 227*	Internet and Web Essentials	1.5
CIM 230	Business Presentations: PowerPoint	3
CIM 249	Administering Microsoft Windows Clients	3
CIM 253*	Supporting Windows Server	3

CIM 254*	Windows Server Active Directory	3
CIM 256*	Fundamental Unix/Linux System Administration	3
CIM 257*	Network and Security Administration using Unix/Linux	3
CIM 258*	Advanced Network and Security Administration using Unix/Linux	3
CIM 259	Windows Server Network Infrastructure	3
CIM 271A*/B*	Web Development: XHTML—Beginning/ Advanced	1.5, 1.5
CIM 279*	Information Security Fundamentals	3
CIM 284	Security+	3
CIM 289	Special Topics	1.5-3
CIM 294	Cyberlaw	3
CIM 297	Interconnecting CISCO Network Devices	3

\*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 Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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, 2B, 6A, 214, 216, 216A, 229A; ECON 2, 4; CMT 215, 220, 225, 230.

**Software Specialist Certificate Program**

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.

Course ID	Title	Units
CIM 1	Introduction to Computer Information Systems	3
or		
CIM 10	Introduction to Information Systems	3
or		
CIM 112	Microsoft Office	3
CIM 174+	Computer Operating Systems: Windows	3
CIM 214+	Word Processing: Word	3
CIM 216+	Spreadsheets: Excel	3
CIM 218	Database: Access	3
CIM 230	Business Presentations: PowerPoint	3
	Select from Restricted Electives	3
	<b>Total</b>	<b>21</b>

**Restricted Electives:**

CIM 121A/B*/C*	Keyboarding for Computers—Beginning/ Intermediate/Advanced	1.5, 1.5, 1.5
CIM 171*	Computer Operating Systems: Windows Admin at the Command Line	3
CIM 172*	Computer Operating Systems: Unix/Linux	3
CIM 216C*	Spreadsheets: Excel—Advanced	1.5
CIM 223A*	Computerized Accounting: QuickBooks— Beginning	1.5

or

CIM 223B*	Computerized Accounting: QuickBooks—Advanced	1.5
CIM 227*	Internet and Web Essentials	1.5

\*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 Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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; CIM 229A, 251, 252; ECON 2, 4.

## Web Designer Certificate Program

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. Students may choose electives to round out their program.

Course ID	Title	Units
CIM 264A/B*	Web Animation: Flash—Beginning/Intermediate	1.5, 1.5
CIM 271A*/B*	Web Development: XHTML—Beginning/Advanced	1.5, 1.5
CIM 274A	Web Digital Imagery: Photoshop—Beginning	1.5
CIM 278A*/B*	Creating Web Pages: Dreamweaver—Beginning/Advanced	1.5, 1.5
CIM 298*‡	Web Design: Capstone Portfolio Project Select from Restricted Electives	1.5 6
<b>Total</b>		<b>18</b>

### Restricted Electives:

CIM 205A	Web Development and DB: Intro SQL and MySQL	3
CIM 205B	Web 2.0: LAMP PHP/MYSQL—Web Site Application Integration	3
CIM 225*	Web Development: PHP	3
CIM 229A*/B*	Business Graphics—Beginning/Advanced	1.5, 1.5
CIM 260A*	Microsoft ASP.NET—Beginning	3
CIM 264C*	Web Animation: Flash ActionScript—Beginning	3
CIM 264D*	Web Animation: Advanced Flash Sites and ActionScript Hacks	3
CIM 269A*	Web Development: JavaScript—Beginning	1.5
CIM 269B*	Web Development: Javascript, Frameworks, and Intro to AJAX	3
CIM 272*	Web 2.0 Design: Cascading Style Sheets	3

CIM 274B*	Web Digital Imagery: Photoshop—Advanced	1.5
CIM 277*	E-Commerce and Web Site Design	3
CIM 281	Web Development: Adobe Fireworks	1.5
CIM 289*	Special Topics	1.5-3

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

‡Final course to be taken

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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 Program

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.

Course ID	Title	Units
CIM 7A*	Business Programming: Java—Beginning	3
CIM 172*	Computer Operating Systems: Unix/Linux	3
CIM 251*	Introduction to Networking	3
CIM 252*	Networking Essentials and Technologies	3
CIM 260A*	Microsoft ASP.NET—Beginning	3
CIM 271A*	Web Development: XHTML—Beginning	1.5
CIM 272*	Web 2.0 Design: Cascading Style Sheets	3
CIM 298*‡	Web Design: Capstone Portfolio Project Select from Restricted Electives	1.5 3
<b>Total</b>		<b>24</b>

### Restricted Electives:

CIM 7B*	Business Programming: Java—Advanced	3
CIM 205A	Web Development and DB: Intro SQL and MySQL	3
CIM 205B	Web 2.0: LAMP PHP/MYSQL—Web Site Application Integration	3
CIM 256*	Fundamental Unix/Linux System Administration	3
CIM 257*	Network and Security Administration using Unix/Linux	3
CIM 258*	Advanced Network and Security Administration using Unix/Linux	3
CIM 260B*	Microsoft ASP.NET—Advanced	3
CIM 277*	E-Commerce and Web Site Design	3
CIM 279*	Information Security Fundamentals	3
CIM 289*	Special Topics	1.5-3

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

‡Final course to be taken

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## 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.

Course ID	Title	Units
CIM 279*	Information Security Fundamentals	3
CIM 282	Network Defense and Countermeasures	3
CIM 283	Information Security Management	3
CIM 284	Security+	3
CIM 294	Cyberlaw	3
<b>Total</b>		<b>15</b>

\*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.

Course ID	Title	Units
CIM 213A	Office Skills: Office Procedures	2.5
CIM 213B	Office Skills: Keyboarding	.5
CIM 213D	Office Skills: Windows	.5
CIM 213E	Office Skills: Word Processing (Word)	.5
CIM 213F	Office Skills: Spreadsheets (Excel)	.5
CIM 213G	Office Skills: Desktop Presentation for Business (PowerPoint)	.5
CIM 213H	Office Skills: Database (Access)	.5
CIM 213J	Office Skills: Desktop Publishing (Publisher)	.5
<b>Total</b>		<b>6</b>

## Computer Maintenance Technology Certificate Program

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.

Course ID	Title	Units
CIM 1	Introduction to Computer Information Systems	3
or		
CIM 10'	Introduction to Information Systems	3

CIM 174+	Computer Operating Systems: Windows	3
CMT 215	Electronics for Computer Technologists	3
or		
ET 101	Survey of Electronics	3
or		
ET 133	DC and AC Fundamentals	4
CMT 220*	Computer Maintenance and Repair I	3
CMT 225*	Computer Maintenance and Repair II	3
CMT 230*	Applied Network Technology	3
CMT 235*	A+ Exam Preparation for Computer Service Technicians	3
<b>Total</b>		<b>21-22</b>

\*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 Degree

### 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: CIM 227, 251, 252; ET 114

## Computer Science Associate Degree Program

The curriculum in the Computer Science Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering a major in computer science, earning the associate degree would demonstrate achievement and may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
CS 1A	Introduction to Computer Science	3
CS 1B*	Introduction to Programming	3
CS 1C*	Advanced Programming	3
CS 1D*	Data Structures	3
CS 3A*	Computer Organization and Machine Language	3
CS 3B*	Computer Organization and Assembly Language	3
MATH 3A*	Analytic Geometry and Calculus	5
MATH 3B*	Analytic Geometry and Calculus	5
	Select from Restricted Electives	3-4
<b>Total</b>		<b>31-32</b>

### Restricted Electives:

CS 4A*	Introduction to Java for Computer Science	3
CS 4B*	Advanced Topics in Java for Computer Science	3
ET 114*	Digital Electronic Circuits	4

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

## Associate Degree

### Associate in Science Degree

Completion of all courses listed 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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: MATH 3C, 24, 26.

## Construction Inspection Certificate Program

This program is designed to provide technical and theoretical knowledge of construction and secure employment as in-house, agency, city, county, or state building safety inspector.

Course ID	Title	Units
ARCH 161	Blueprint Plans and Specification Reading	4
ARCH 163	International Building Code Inspection	4
ARCH 164*	Combination Residential Dwelling Inspection	3
ARCH 165	Electrical Code Inspection	3
ARCH 211	Concrete Inspection	3
ARCH 212	Plumbing Codes—Drains, Waste, Vents, Water, and Gas	3
ARCH 213	Mechanical Codes—Heating, Air Conditioning, Refrigeration, and Ductwork	3
<b>Total</b>		<b>23</b>

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: MATH 351.

## Consumer Services Certificate Program

The Consumer Services program prepares students for a wide variety of employment opportunities that link the consumer, business, and government and improve communication among all three groups. This includes acting in a responsible manner to consumer problems and trends and providing information so that the consumer can use the products and services of a company correctly and with maximum benefits.

This program offers coursework for professional improvement and retraining as well as core courses to be utilized as transfer courses for students pursuing a Bachelor's degree in programs involving Family and Consumer Sciences/Home Economics, Business/Credit Counseling, or Consumer Affairs.

Course ID	Title	Units
BUS 125	Human Relations in Business	3
BUS 160	Introduction to Small Business Management	3
CIM 112	Microsoft Office	3
FCS 115	Consumer Issues	3
FCS 142	Life Management	3
CWE 180*	Cooperative Work Experience: Consumer Services	2
	Select one Specialty Area	6-7
<b>Total</b>		<b>23-24</b>

**Specialty Area 1—Foods and Nutrition:**

FN 50	Fundamentals of Nutrition	3
FN 110*	Food Preparation Essentials	3

**Specialty Area 2—Interior Design:**

ID 110	Fundamentals of Interior Design	3
ID 116	Interior Materials and Products	4

**Specialty Area 3—Fashion:**

FASH 31/BUS 31	Textiles	3
FASH 150	Fashion Apparel and Professional Techniques	3

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 12; 103, 104, 135, 137; FN 64, 160, 171.

## Cosmetology Certificate Program

The following program is designed to prepare students for the State Board of Cosmetology examination and with successful completion of the program, students should be able to enter careers as cosmetologists. This program is offered on an open enrollment basis, and a waiting list may be maintained for those students who desire to enroll. Interested students should contact the Advanced Technology and Applied Science Division office.

This program has a minimum requirement of 1600 hours with 400 hours required for each course.

Course ID	Title	Units
COS 400A	Comprehensive Cosmetology I (400 hours)	12
COS 400B*	Comprehensive Cosmetology II (400 hours)	12
COS 400C*	Comprehensive Cosmetology III (400 hours)	12
COS 400D*	Comprehensive Cosmetology IV (400 hours)	12
<b>Total (1,600 hours)</b>		<b>48</b>

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

The Cosmetology Certificate Program is a nondegree-granting program; the courses in this program may not be used to satisfy Associate degree major elective unit requirements.

## Cosmetician Occupational Skills Award

The Cosmetician Occupational Skills Award is designed to prepare the student for licensure as a Cosmetician/Esthetician. The student will be able to administer skin care to clients at salons, spas, dermatology offices, private clinics, and stores specializing in skin care products.

Course ID	Title	Units
COS 440	Cosmetician	16
<b>Total</b>		<b>16</b>

## Cross-Cultural Studies Associate Degree Program

The curriculum in the Cross-Cultural Studies Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment or promotion.

The Cross-Cultural Studies program is interdisciplinary in scope and will begin with a focus on the history, literature, and cultures of African Americans, Asian Americans, Chicanas(os)/Latinas(os), Middle Eastern Americans, and Native Americans. Courses also explore the relations of these cultures to each other and their relations to the dominant American culture in order to foster understanding about such topics as ethnicity, race, gender, sexuality/sexual orientation, class, and religion. Other groups which have been isolated in a similar manner from the dominant culture in the United States may be included in the Cross-Cultural Studies Program.

Select a minimum of 21 units from the following list of required Cross-Cultural Studies classes. Many of these courses also fulfill general education course requirements.

### Core Requirements

(Both courses are required for a major)

Course ID	Title	Units
CCS 1	Multicultural Experiences in the United States	3
CCS 2	Multicultural Identities in the United States	3

### Breadth Requirements

Social and Behavioral Sciences	6
Humanities/Arts Perspective	6
Restricted Electives	3
<b>Total</b>	<b>21</b>

### Social and Behavioral Sciences

Select six units from the following courses:

Course ID	Title	Units
ANTH 4	Native American Indian Culture	3
ANTH 7	Indians of Southern California	3
CCS 10	Margins and Border Crossings	3
HIST 21	Women in United States History: A Multicultural Perspective	3
HIST 33	The Political/Social History of the Chicanas(os)	3
HIST 81	African American History	3
PSYC 16*	Introduction to Cross-Cultural Psychology	3
SOC 6	Introduction to Asian Cultures in the United States	3
SOC 20/HIST 20	Ethnic Cultures of the United States	3

### Humanities/Arts Perspective

Select six units from the following courses:

Course ID	Title	Units
ART 24	Indigenous Arts of the Americas	3
CTVR 7	Cross Cultural Cinema	3
ENG 23A*	American Ethnic Writing: African American Literature	3
ENG 24*	Ethnic Voices in Literature: The American Experience	3
ENG 50*	Women Authors	3
MUS 27	History of Jazz	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3
SL 101	Deaf Culture and Its History	3
TA 110	Chicana(o)/Latina(o) Theatre	3

### Restricted Electives

Select one course from the following:

ANTH 5, 21, ARAB 21\*, ART 22, 23, 29, CHI 21\*, DANC 64, HIST 27, 28, 30, 70, 71, 72, 74, 75, HIST/PS 80, JA 21\*, KOR 21\*, MUS 23, PHIL 10\*, PSYC 16\*, SPAN 21A\*, 21B\*.

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: FASH 144; KNES 28, 29.

## Culinary Arts

### (ALSO SEE FOODS)

The Culinary Arts courses are designed to train students for careers in catering, chef training, and restaurant operations, as well as for promotion of foods, equipment, and products. The program offers coursework for professional improvement, and some courses can be utilized as transfer courses for students pursuing a bachelor's degree in Family and Consumer Sciences/Home Economics with a Foods emphasis.

## Catering Certificate Program

The Catering program is designed to prepare students for a wide variety of employment opportunities within catering operations as well as for developing and owning their own catering business.

Course ID	Title	Units
BUS 160	Small Business Management	3
CWE 180*†	Cooperative Work Experience: Foods and Nutrition	2
FN 50	Fundamentals of Nutrition	3
or		
FN 205	Nutrition for Culinary Professionals	3
FN 110*†	Food Preparation Essentials	3
FN 120*	Contemporary Meals	3
FN 142*†	Classical Cuisine	2
FN 171	Sanitation and Safety	2
or		
FN 210	Servsafe in Food Production	1
FN 173*	Catering and Banquets	2
FN 275	Food and Beverage Operations	3

Select from Restricted Electives 4

**Total 26-27**

### Restricted Electives:

FN 140*	Cultural Foods	2
FN 189/289	Special Topics: Foods and Nutrition	1
FN 220*	Country French Foods	2
FN 221*	French Cuisine	2
FN 222*	Chinese Foods	2
FN 223*	Asian Foods	2
FN 226*	Mexican Foods	2
FN 227*	Mediterranean Foods	2
FN 228*	Italian Foods	2
FN 230*	Vegetarian Foods	2
FN 232*	Lite Cuisine Strategies	2
FN 236*	American Regional Foods	2
FN 245*	Specialty and Savory Baking	2

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

†FN 110\* and 142\* recommended prior to CWE 180\*.

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: FCS 115, 142; FN 64, 160.

## Culinary Arts Certificate Program

The Culinary Arts program prepares students for many contemporary employment opportunities within the restaurant and hospitality industries..

Course ID	Title	Units
CWE 180*†	Cooperative Work Experience: Food and Nutrition	2
FN 50	Fundamentals of Nutrition	3
or		
FN 205	Nutrition for Culinary Professionals	3
FN 110*†	Food Preparation Essentials	3
FN 142*†	Classical Cuisine	2
FN 171	Sanitation and Safety	2
or		
FN 210	Servsafe in Food Production	1
FN 173*	Catering and Banquets	2
FN 240*	Introduction to Culinary Arts	2
FN 242*	Modern Garde Manger - Cold Food Preparation	1
or		
FN 243*	Modern Garde Manger - Hot Food Preparation	1
FN 244*	Baking Basics	2
FN 275	Food and Beverage Operations	3
	Select two Specialty Courses	2-6
	<b>Total</b>	<b>23-28</b>

### Specialty Courses:

FN 120*	Contemporary Meals	3
FN 140*	Cultural Foods	2
FN 189/289	Special Topics: Foods and Nutrition	1
FN 220*	Country French Foods	2
FN 221*	French Cuisine	2
FN 222*	Chinese Foods	2
FN 223*	Asian Foods	2
FN 226*	Mexican Foods	2
FN 227*	Mediterranean Foods	2
FN 228*	Italian Foods	2
FN 230*	Vegetarian Foods	2
FN 232*	Lite Cuisine Strategies	2
FN 236*	American Regional Foods	2

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

†FN 110\* and 142\* recommended prior to CWE 180\*.

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 104, 135, 136, 160; FN 64, 160; FCS 115, 142.

## Food Service Certificate Program

The Food Service program prepares students for many contemporary employment opportunities. These include Chef, Cook, Specialty and Ethnic Restaurant Operations, Food and Beverage Service, Fast Foods Operations, and Food Service in schools and day-care centers for the young and elderly.

Course ID	Title	Units
CWE 180*	Cooperative Work Experience: Foods	1
FN 50	Fundamentals of Nutrition	3
or		
FN 205	Nutrition for Culinary Professionals	3
FN 110*	Food Preparation Essentials	3
FN 120*	Contemporary Meals	3
FN 171	Sanitation and Safety	2
or		
FN 210	Servsafe in Food Production	1
FN 173*	Catering and Banquets	2
FN 240*	Introduction to Culinary Arts	2
	Select from Restricted Electives	2-4
	<b>Total</b>	<b>18-19</b>

### Restricted Electives:

FN 220*	Country French Foods	2
FN 222*	Chinese Foods	2
FN 226*	Mexican Foods	2
FN 227*	Mediterranean Foods	2
FN 230*	Vegetarian Foods	2
FN 236*	American Regional Foods	2

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 104, 135, 136, 160; FCS 115, 142; FN 64, 140, 142, 160.

## Dance Associate Degree Program

The curriculum in the Dance Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

The following course of study must be completed to fulfill major requirements for the Associate Degree in Dance:

Course ID	Title	Units
DANC 9*	Choreography	3
DANC 10	Dance Production	
or		2
DANC 11	Dance Rehearsal and Performance	
DANC 52*	Ballet Dancing Level I	1-1.5
DANC 53*	Intermediate Ballet	1-1.5
DANC 55*	Modern Dance Level I	1-1.5
DANC 56*	Intermediate Modern Dance	1-1.5
DANC 58*	Jazz Dancing Level I	1-1.5
DANC 64	History of Dance	3
	Select from Restricted Electives	5.5-8
<b>Total</b>		<b>21</b>

#### Restricted Electives:

DANC 51, 54, 57, 59\*, 60, 61\*, 62\*, 63, 65, 66, 67, 68; ETT 42; KNES 28.

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

### Associate Degree

#### Associate in Arts Degree

Completion of the required courses in the major 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 Arts 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.

## Drafting Technology Certificate Program

The Drafting Technology program includes courses designed to provide a general background and specialized skills to help the student find employment in government and private enterprise, especially where drafting skills are required.

Course ID	Title	Units
DR 23*	Engineering Graphics and Descriptive Geometry	3
or		
DR 100	Fundamentals of Mechanical Drafting	3
DR 50*/ARCH 50*	Introduction to Computer-Aided Drafting	3
DR 51*/ARCH 51*	Computer-Aided Drafting	3
DR 101*	Mechanical Drafting	3
DR 102*	Mechanical Drafting and Design	3
DR 120*	Fundamentals of Technical Illustration	2
DR 152*/ARCH 152*	Advanced Computer-Aided Drafting	3
MFG 204*	3D Computer-Aided Design-Solidworks	3
	Select from Restricted Electives	3
<b>Total</b>		<b>26</b>

#### Restricted Electives:

ET 101	Survey of Electronics	3
MFG 200*	Introduction to Rapid-Prototyping Technology	3

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

Students who have completed one year of high school mechanical drafting, or equivalent, are exempt from taking DR 100.

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ARCH 124A; CIM 1; CS 1A; GEOL 23/ENV 23; MATH 124, 251, 253, 255; PHYS 20.

## Ecological Restoration Certificate Program

The certificate in Ecological Restoration trains students for a practical ecological application of appropriate techniques for a variety of ecological restoration projects. The projects may be carried out by industry or government agencies and may have specific legal requirements for implementation and proof of success. Students completing the certificate may be hired by local, county, state, or federal government; private consulting firms; or subcontractors hired by any of these agencies.

Course ID	Title	Units
ECOL 201	Ecological Restoration Techniques	4
ECOL 202	Advanced Ecological Restoration Techniques	4

ENV 1	Introduction to Environmental Studies	3
ENV 18	Introduction to Ecology	4
	Select from Restricted Electives	13
	<b>Total</b>	<b>28</b>
<b>Restricted Electives:</b>		
ENV 24	Natural History of California	3
ENV 105*	Environmental. Studies Internship	2
	<i>and</i>	
CWE 180*	Cooperative Work Experience: Ecological Restoration	1-2
ENV 123	Water and Soil Conservation	3
ENV 189	Special Topics	.5-4
GEOG/GIS 110*	Introduction to Geographic Information Systems (GIS)	2
HORT 113	Soils and Fertilizers	3
HORT 116	Irrigation Systems	3
HORT 166	Ornamental Native Plants	1.5
ENV 202	Green Living	2

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

Suggested coursework not required for the major: ARCH 50/DR 50; ENV 106; GEOL 23/ENV 23.

## Economics Associate Degree Program

The curriculum in the Economics Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this major, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

Course ID	Title	Units
ECON 2*	Principles (Macro)	3
ECON 4*	Principles (Micro)	3
MATH 3A*	Analytic Geometry and Calculus	5
	<i>or</i>	
MATH 11*	A Brief Course in Calculus	5
MATH 3B*	Analytical Geometry and Calculus	5
	<i>or</i>	
MATH 10*	Introduction to Statistics	3
	Select from Restricted Electives	4-6
	<b>Total</b>	<b>18-22</b>

### Restricted Electives:

ACCT 1A, 1B; BUS 1, 104; CIM 1, 10; CS 1A; HIST 7, 8; MATH 3C, 24, 26; PS 11/ECON 11.

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

## Associate Degree

### Associate in Arts Degree

Complete units as described 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 Arts 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.

## Education

The Education department prepares students for a diverse range of teaching opportunities at a variety of levels. The program provides support for those just entering the field as well as to those who are already working in the classroom and community. Classes that meet the early fieldwork and coursework requirements of the California Commission on Teacher Credentialing can also be found in this department.

**The Instructional Assistant Program** prepares students to assist teachers in K-12 settings as paraprofessionals.

**The Online Educator Program** provides professional development skills for secondary and post secondary instructors who are interested in learning about or improving their online teaching skills.

## Instructional Assistant Occupational Skills Award

The purpose of the Educational Assistant award is designed to provide a system of professional development for individuals working as educational assistants in a variety of elementary classroom settings.

Course ID	Title	Units
CD 105*	Child, Family, and Community	3
CD 107*	Child Growth and Development	3
EDUC 118*	Exceptional Children	3
EDUC 131*	Educational Psychology	3
EDUC 240*	Instructional Assistant	2
	<b>Total</b>	<b>14</b>

## Online Educator Occupational Skills Award

This program offers an opportunity for secondary and post secondary instructors to learn about online teaching in a practical, hands-on environment. Coursework is specifically designed to provide new and experienced online instructors information about the development and implementation of best practices in online course delivery and the use of course management systems as supplements to face to face courses. Participants will be introduced to a wide variety of instructional technologies, curriculum design models, assessment methods, quality indicators for online instruction, and strategies to meet state and federal laws for universal design using current educational research as a foundation.

Course ID	Title	Units
EDUC 200	Introduction to Online Teaching and Learning	2
EDUC 205	Models of Online Instruction	2
EDUC 210	Technology for Online Instruction	2
EDUC 215	Effective Interaction for Online Courses	2
EDUC 220	Universal Design for Online instruction	2
EDUC 225	Student Assessment Methods for Online instruction	2
	<b>Total</b>	<b>12</b>

## Electronic Technology

The Electronic Technology program serves three main purposes: (1) to provide certificate programs to prepare the student for a multitude of careers as an electronic technician, (2) to provide electronics skill upgrading or updating for improved job-related technical competency, and (3) to prepare students for transfer to university Engineering Technology or Industrial Technology programs.

The program curriculum and equipment are reviewed regularly by local electronics companies to ensure that the graduate can work effectively in the current electronics industry and adapt to new electronic products and technologies.

The three-certificate programs available are: Analog and Digital Circuit Electronic Technology, Digital Electronic Technology, and General Electronic Technology.

## Analog and Digital Circuit Electronic Technology Certificate Program

This program prepares the student for entry-level employment as an Electronic Technician in companies involved in the manufacture, testing, troubleshooting, and repair of analog and digital circuit hardware. Courses cover a wide variety of discrete and integrated circuits with many functions, technologies, physical implementations, frequency bands, and complexities to provide maximum flexibility for employment within the electronics industry.

Course ID	Title	Units
ET 114*	Digital Electronic Circuits	4
ET 118*	Electronic Communication Systems	4
ET 133	D.C. and A.C. Fundamentals	4
ET 135*	Semiconductor Devices and Circuits	4
ET 200*	Digital Signal Processing and Microcontrollers	4
<b>Total</b>		<b>20</b>

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: Any Electronic Technology course not taken in certificate program; CMT 220, 225, 230; MATH 7, 124, 251, 253; PHYS 2A, 2B, 20.

## Digital Electronic Technology Certificate Program

This program prepares the student for entry-level employment as an Electronic Technician in companies involved in the manufacture, testing, installation, and repair of digital computers and related equipment. This certificate covers an introduction to computer software and repair.

Course ID	Title	Units
CMT 220*	Computer Maintenance and Repair I	3
CMT 225*	Computer Maintenance and Repair II	3
ET 114*	Digital Electronic Circuits	4
ET 133	D.C. and A.C. Fundamentals	4
ET 135*	Semiconductor Devices and Circuits	4
ET 200*	Digital Signal Processing and Microcontrollers	4
<b>Total</b>		<b>22</b>

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: Any Electronic Technology course not taken in certificate; CMT 230; CS 1B, 3A, 3B; MATH 7, 124, 251, 253; PHYS 2A, 2B, 20.

## General Electronic Technology Certificate Program

This program provides the student an education in the fundamentals of electronics and maximum flexibility to take elective courses of personal interest and complete a certificate in the shortest period of time. This program prepares the student for entry-level employment as an Electronic Technician at many companies.

Course ID	Title	Units
ET 114*	Digital Electronic Circuits	4
ET 133	D.C. and A.C. Fundamentals	4
ET 135*	Semiconductor Devices and Circuits	4
	Select from Restricted Electives	6-8
<b>Total</b>		<b>18-20</b>

#### Restricted Electives:

ET 118*	Electronic Communication Systems	4
ET 189/289	Special Topics	2-4
ET 200*	Digital Signal Processing and Microcontrollers	4
ET 201	Robotic Fundamentals	2
ET 202*	Intermediate Robotics	2

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: Any Electronic Technology course not taken in certificate; CIM 10, CMT 220, 225, 230; MATH 7, 124, 251, 253, 255; PHYS 2A, 2B, 20.

## Emergency Medical Technician Occupational Skills Award

The Emergency Medical Technology curriculum is designed to prepare the student for licensure as an EMT-1. The course prepares the student to care for the sick and injured in the hospital, at the scene of an emergency, and/or during transport.

**Due to state changes in Emergency Medical Technician (EMT) courses EMT 205 and 205L will be offered as EMT 289 & EMT 289L. These courses will reflect the new educational standards and increase in hours.**

Course ID	Title	Units
EMT 205*	Emergency Medical Technician Procedures	6
EMT 205L*	Emergency Medical Technician Lab	.5
<b>Total</b>		<b>6.5</b>

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

## Engineering Associate Degree Program

The curriculum in the Engineering Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

Course ID	Title	Units
<b>First Year</b>		
CHEM 1A*	General Chemistry	5
CHEM 1B*	General Chemistry	5
CS 1A	Introduction to Computer Science	3
MATH 3A*	Analytic Geometry and Calculus	5
MATH 3B*	Analytic Geometry and Calculus	5
PHYS 4A*	General Physics	5
<b>Second Year</b>		
MATH 3C*	Analytic Geometry and Calculus	5
MATH 24*	Elementary Differential Equations	4
MATH 26*	Introduction to Linear Algebra	4
PHYS 4B*	General Physics	5
PHYS 4C*	General Physics	5
<b>Total</b>		<b>51</b>

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

### Associate Degree

#### Associate in Science Degree

Completion of all the courses listed 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.

## English as a Second Language Completion Certificate

### BEGINNING LEVEL

The beginning level multiskills courses leading to a certificate prepare students for the next level by working on all four language skills, including reading, writing, speaking, and listening. Students acquire a practical communicative vocabulary, rudimentary skills in conversation, composition, and comprehension as well as an introduction to the American sound system.

Course ID	Title	Hours
ESL 320	Beginning Multiskills I	99.6
ESL 321*	Beginning Multiskills II	99.6
ESL 322	Beginning Conversation	49.8
ESL 323*	Beginning Pronunciation	33.2
and		
ESL 999*	ESL Laboratory	16.6
ESL 325*	Beginning Reading and Writing	49.8
<b>Total Semester Hours</b>		<b>348.6</b>

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

### INTERMEDIATE LEVEL-PRE COLLEGE

The intermediate level multiskills courses leading to a certificate prepare students for the next level by working on all four language skills, including reading, writing, speaking, and listening while acquiring a practical communicative vocabulary of approximately 1400-1800 words. Additionally students complete specialized courses designed to further develop skills in conversation, composition and comprehension as well as focus on intonation and sounds of American English.

#### CORE COURSES

Course ID	Title	Hours
ESL 330*	Intermediate Multiskills I	99.6
ESL 331*	Intermediate Multiskills II	99.6
ESL 332*	Intermediate Conversation	49.8
ESL 333*	Intermediate Pronunciation	49.8
and		
ESL 999*	ESL Laboratory	16.6
<b>Select one Reading and Writing course:</b>		
ESL 335*	Intermediate Reading and Writing I	49.8
or		
ESL 336*	Intermediate Reading and Writing II	49.8
and		
ESL 888*	ESL Skills Lab	16.6
<b>Total Semester Hours</b>		<b>381.8</b>

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

### ADVANCED LEVEL

The required course advanced level multiskills courses leading to a certificate prepare students to mainstream academic or vocational courses by focusing on reading, writing, and grammar while acquiring a more academic vocabulary of an additional 300-500 words. Additionally, students have options within the two remaining required classes. One option is designed to further develop skills in conversation on a variety of topics, vocabulary including affixes, or nuances in pronunciation patterns of American English. The options within the second requirement expose students to American culture through film, literature, or simulated college lectures. These advanced courses transition into mainstream coursework.

#### CORE COURSES

Course ID	Title	Hours
ESL 340*	Advanced Multiskills	99.6
ESL 342*	Advanced Conversation	49.8

ESL 343*	Advanced Pronunciation	49.8
and		
ESL 999*	ESL Laboratory	16.6
<b>Select one Vocabulary course:</b>		
ESL 344*	Idioms and Expressions in American English	33.2
or		
ESL 354*	Vocabulary Skills for College	49.8
<b>Select one Academic/Writing course:</b>		
ESL 350*	Essential Academic Skills	99.6
or		
ESL 346*	Advanced Writing for Work	49.8
or		
ESL 345*	Advanced Reading and Writing	49.8
and		
ESL 888*	ESL Skills Lab	16.6
<b>Select one Grammar course with a lab</b>		
ESL 347*	Advanced Grammar Review	49.8
and		
ESL 999*	ESL Laboratory	16.6
or		
ESL 357*	Grammar Review for College	49.8
and		
ESL 999*	ESL Laboratory	16.6
	Select one Restricted Elective from below	49.8
<b>Total Semester Hours</b>		<b>348</b>
<b>Restricted Electives:</b>		
ESL 355*	ESL Reading for College: American Literature	49.8
ESL 358*	Listening and Notetaking Skills for College	49.8
ESL 359*	American Language and Culture through Film	49.8

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

## English Literature Associate Degree Program

The curriculum in the English Literature Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
ENG 1A*	Principles of Composition I (meets AA Writing Proficiency requirement)	4
ENG 1B*	Principles of Composition II	3
	Select from Restricted Electives	12

### Restricted Electives:

ENG 15A\*, 15B\*, 17A\*, 17B\*, 18\*, 19\*, 20\*, 21A\*, 21B\*, 27A\*, 27B\*, 27E\*.

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ENG 23A, 44, 46, 50, 52; HIST 4, 5; PHIL 1, 12. Completion of four college semesters, or the equivalent, of a foreign language is strongly recommended.

## Environmental Studies Associate Degree Program

Environmental Studies in an interdisciplinary program that provides students with an integrated and critical knowledge of the natural environment and the relationships and interactions humans have with it. The program provides students with the understanding that environmental challenges face every aspect of society, and it provides them with the skills needed to help solve these complex problems through cooperation and negotiation with the different and often competing stakeholders. The program combines classroom, laboratory, and field study instruction giving students a well-rounded preparation in the field of environmental studies.

The curriculum in the Environmental Studies Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
ENV 1	Introduction to Environmental Studies	3
ENV 18	Introduction to Ecology	4
	Select from Restricted Electives	13
<b>Total</b>		<b>20</b>

### Restricted Electives:

ENV 6*/ECON 6*	Scarcity and Environment	3
ENV 19*/BIO 19*	Marine Biology	4
ENV 23*/GEOL 23	Environmental Geology	4
ENV 24	Natural History of California	3
ENV 25	Environmental Hazards to Health	3
ENV 30	Alternative Energy Technologies	3
ENV 37	Environmental Ethics	3
ENV 40	Environmental Law and Policy	3
ENV 105*	Environmental Studies Internship	2
<i>and</i>		
CWE 180*	Cooperative Work Experience: Environmental Studies	1-2
ENV 106	Natural Resource Conservation	3
ENV 123/HORT 123	Water and Soil Conservation	3
ENV 189	Special Topics	.5-4
GEOG/GIS 110*	Introduction to Geographic Information Systems (GIS)	2

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ANTH 2; ARCH 12; BIO 3A, 3B; CHEM 1A, 1B; CIM 1; CS 1A, 1B or higher programming course; GEOG 1; GEOL 1; HORT 166; PHYS 2A, 2B.

## Sustainability Studies Occupational Skills Award

The goal of Sustainability Studies is to create ecologically and socially appropriate solutions to manage our human needs, impacts with the built environment, and the emerging green economy within the capacity of nature without compromising future generations. The goal is to educate students on the importance of sustainability and then train them how to become sustainable not only in their everyday lives, but in their careers as well. Students will be prepared to transfer to sustainability related programs at the university level, be at an advantage for jobs in the coming green economy, be positioned to develop new businesses and other employment opportunities, and become more engaged citizens.

Course ID	Title	Units
ENV 1	Introduction to Environmental Studies	3
ENV 6*/ECON 6*	Scarcity and Environment	3
<i>or</i>		
ENV 37	Environmental Ethics	3
ENV 202	Green Living	2
	Select from Restricted Electives	6
<b>Total</b>		<b>14</b>
<b>Restricted Electives:</b>		
ENV 30	Alternative Energy Technologies	3
ENV 106	Natural Resource Conservation	3
ENV 123	Water and Soil Conservation	3

## Family and Consumer Sciences Certificate Program

The Family and Consumer Sciences program is designed to develop those skills necessary for gainful employment in the field of Home Economics. Combined with courses such as business, journalism, television, or advertising, the Family and Consumer Sciences curriculum can also fulfill the vocational objectives of those who want to use their background in business or communications. Those wishing to transfer to a four-year college and receive a Bachelor's degree in Family and Consumer Sciences/Home Economics should refer to the transfer program in the catalog and in the catalog of the intended college of transfer.

Course ID	Title	Units
FASH 31/BUS 31	Textiles	3
FASH 110*	Contemporary Clothing Construction	3
FCS 115	Consumer Issues	3
FN 50	Fundamentals of Nutrition	3
FN 110*	Food Preparation Essentials	3
ID 110	Fundamentals of Interior Design	3
ID 121*	Space Planning	3
	Select from Restricted Electives	6
	Select from Special Topics	.5-3
<b>Total</b>		<b>27.5-30</b>
<b>Restricted Electives:</b>		
FASH 112*	Fashion Sewing—Advanced	3
FASH 141	Apparel Selection	3
FASH 144	Fashion Trends and Cultural Costumes	3
FCS 142	Life Management	3
FN 64	Nutrition Issues	3
FN 120*	Contemporary Meals	3

FN 160	Nutrition, Weight Management, and Eating Disorders	3
FN 171	Sanitation and Safety	2
FN 210	Servsafe in Food Production	1
ID 122	History of Interior Architecture and Furnishings I	3
ID 125	History of Interior Architecture and Furnishings II	3
<b>Special Topics:</b>		
FASH 189/289	Special Topics	.5-3
FCS 189/289	Special Topics	.5-3
FN 189/289	Special Topics	.5-3
ID 189/289	Special Topics	.5-3

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: FASH 120, 130, 140; FN 140, 142, 171.

## Fashion Design

The Fashion Design program prepares students with the necessary skills to obtain positions in the design, apparel manufacturing, tailoring, pattern making, custom dressmaking, and related fields. Students may focus on one of the following certificate programs: Fashion Design and Advanced Fashion Design and Apparel Manufacturing. Many of the clothing courses can be utilized as transfer courses for those pursuing a Bachelor's degree in Family and Consumer Science (Home Economics) with a Clothing and Textiles emphasis. Refer also to Transfer Patterns section of this catalog or of the intended college of transfer.

### Fashion Design Certificate Program

This Fashion Design program prepares the student for entry-level positions in the field of Fashion Design. They will be able to design clothing using the three major design procedures: flat pattern-making, draping on a dress form, and designing by sketching.

Course ID	Title	Units
FASH 31/BUS 31	Textiles	3
FASH 101	Introduction to Fashion Careers	3
FASH 111*	Fashion Sewing—Intermediate	3
FASH 112*	Fashion Sewing—Advanced	3
<i>or</i>		
FASH 124*	Wearable Art	3
<i>or</i>		
FASH 211*	Advanced Dressmaking & Custom Sewing	3
FASH 130*	Flat Pattern Design	4
FASH 132*	Draping Fashion Designs	3
FASH 141	Apparel Selection	3
FASH 144	Fashion Trends and Cultural Costumes	3

FASH 145*/BUS 145*	Internship	1	FASH 124*	Wearable Art	
and			or		3
CWE 180*†	Cooperative Work Experience: Fashion	1	FASH 240	Dye Processes on Fabrics	
FASH 150	Fashion Apparel and Professional Techniques	3	or		
FASH 154	Fashion Illustration	3	FASH 205*	Corset Construction	3
FASH 189/289	Special Topics: Fashion	.5-3	FASH 130*	Flat Pattern Design	4
or			FASH 132*	Draping Fashion Designs	3
FASH 254	Fashion in Southern California	1	FASH 136*	Apparel Design	3
FASH 260*	Computer Applications in Fashion	2	or		
or			FASH 251*	Designing for a Cause and Sustainable Fashion	3
GD 149*	Digital Illustration	3	FASH 141	Apparel Selection	3
or			FASH 144	Fashion Trends and Cultural Costumes	3
FASH 204	AIMS Certification	1	FASH 145*/BUS 145*	Internship	1
	<b>Total</b>	<b>34.5-42</b>	and		
<b>Optional Lab/Studio</b>			CWE 180*†	Cooperative Work Experience: Fashion	1
FASH 212	Construction Lab	1	FASH 150	Fashion Apparel and Professional Techniques	3
FASH 213*	Designer's Lab	1	FASH 154	Fashion Illustration	3
FASH 214*	Couture Lab	1	FASH 189/289	Special Topics: Fashion	.5-3
FASH 216*	Costumer's Lab	1	or		

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

†Recommended to be taken in last semester of program.

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 136, 138, 160; FCS 115; FASH 120, 147, 209, 221, 230, 235; TA 42.

## Advanced Fashion Design and Apparel Manufacturing Certificate Program

The Advanced Fashion Design and Apparel Manufacturing certificate prepares the Fashion design student to enter the apparel manufacturing field. It explores the fashion industry, studying the many career options available beyond design. It then goes deeply into pattern and clothing manufacturing. The student who completes the Fashion Design program and then completes this advanced program will not only be able to design clothing but will be able to participate in many of the manufacturing processes.

Course ID	Title	Units
FASH 31/BUS 31	Textiles	3
FASH 101	Introduction to Fashion Careers	3
FASH 111*	Fashion Sewing—Intermediate	3
FASH 112*	Fashion Sewing—Advanced	3
or		
FASH 211*	Advanced Dressmaking & Custom Sewing	3
or		
FASH 120	Tailoring	3
FASH 113*	Couture Sewing	2

FASH 124*	Wearable Art	
or		3
FASH 240	Dye Processes on Fabrics	
or		
FASH 205*	Corset Construction	3
FASH 130*	Flat Pattern Design	4
FASH 132*	Draping Fashion Designs	3
FASH 136*	Apparel Design	3
or		
FASH 251*	Designing for a Cause and Sustainable Fashion	3
FASH 141	Apparel Selection	3
FASH 144	Fashion Trends and Cultural Costumes	3
FASH 145*/BUS 145*	Internship	1
and		
CWE 180*†	Cooperative Work Experience: Fashion	1
FASH 150	Fashion Apparel and Professional Techniques	3
FASH 154	Fashion Illustration	3
FASH 189/289	Special Topics: Fashion	.5-3
or		
FASH 254	Fashion in Southern California	1
FASH 234*	Advanced Pattern and Design Techniques	2
or		
FASH 238*	Advanced Draping and Fashion Design	
FASH 235*	Designing for the Fashion Industry	2
FASH 260*	Computer Applications in Fashion	2
or		
GD 149*	Digital Illustration	3
or		
FASH 204	AIMS Certification	1
	<b>Total</b>	<b>46.5-52</b>
<b>Optional Lab/Studio</b>		
FASH 212	Construction Lab	1
FASH 213*	Designer's Lab	1
FASH 214*	Couture Lab	1
FASH 216*	Costumer's Lab	1

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

†Recommended to be taken in last semester of program.

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ART 42; CIM 1; FASH 120, 143, 147, 209, 221; GC 101, TA 42.

## Basic Costume Construction and Sourcing Occupational Skills Award

The Basic Costume Construction and Sourcing Occupational Skills Award prepares the student with the basic skills necessary to source and construct costumes for a costume designer working in the areas of: film, television, dance, theater/opera, theme parks, special events, cultural/ethnic costumes, costume shops, e-commerce, uniform/sports, and advertisement/promotion. Course work covers material sourcing, costume, and underpinning construction for different audiences, costume history, textiles and dyeing, draping, pattern making, drafting, and an internship in the field.

Course ID	Title	Units
FASH 31	Textiles	3
FASH 111*	Intermediate Sewing	3
or		
FASH 221	Contemporary Tailoring	2
or		
FASH 206*	Designing/Constructing Knitwear, Activewear, Swimwear	3
FASH 132*	Draping Fashion Design	3
FASH 144	Fashion Trends	3
or		
TA 42	Costume Design	3
FASH 205*	Corset Construction	3
or		
FASH 240	Dye Processes on Fabrics	3
or		
FASH 208*	Sewing Vintage Fashion	3
FASH 145*	Internship	1
CWE 180*	Cooperative Work Experience: Fashion	1
<b>Total</b>		<b>17</b>
<b>Optional Lab/Studio</b>		
FASH 216*	Costumer's Lab	1

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

## Sustainable Fashion and Social Entrepreneurship Occupational Skills Award

The Sustainable Fashion and Social Entrepreneurship Occupational Skills Award prepares the student with basic skills necessary to develop, design, source, and manufacture a socially and environmentally friendly line of clothing or accessories. Course work covers developing a line and designing for a cause, ethics of fashion, sourcing and manufacturing in an eco friendly way and marketing your line. Students will complete an internship and tour other eco friendly fashion industry leaders.

Course ID	Title	Units
FASH 31	Textiles	3
FASH 130	Flat Pattern Design	4
or		
FASH 132	Draping Fashion Designs	3
FASH 136	Apparel Design	3
or		
FASH 251*	Designing for a Cause and Sustainable Fashion	3
or		
FASH 235	Designing for the Fashion Industry	2
FASH 145	Internship	1
and		
CWE 180	Cooperative Work Experience: Fashion	1
FASH 240	Dye Processes on Fabrics	3
FASH 207	Eco Friendly Fashion	1
FASH 247	Special Events Participation	1
or		
FASH 254	Fashion in Southern California	1
<b>Total</b>		<b>15-17</b>

## Fashion Merchandising

The Fashion Merchandising program is designed to prepare professionally-trained individuals for the fashion industry. The program places emphasis on developing the fashion sense and the unique creativity of each student. The curriculum offers a comprehensive analysis of such subject areas as the manufacture, distribution, buying, and merchandising of fashion apparel.

The Fashion Merchandising program includes two certificates: Fashion Merchandising and Visual Fashion Merchandising.

### Fashion Merchandising Certificate Program

The Fashion Merchandising certificate emphasizes all aspects of fashion merchandising including techniques of buying and selling, distributing and marketing, and promoting fashion goods. It combines a general merchandising background with training in specialized skills in order for students to find employment in today's fashion industry.

Course ID	Title	Units
FASH 31/BUS 31	Textiles	3
FASH 101	Introduction to Fashion Careers	3
FASH 143/BUS 143	Fashion Buying and Merchandising	3
FASH 140	Fashion Image	3
or		
FASH 141	Apparel Selection	3
FASH 144	Fashion Trends and Cultural Costumes	3
FASH 147/BUS 147	Special Events Coordination and Promotion	3
FASH 148/BUS 148	Visual Merchandising	3
FASH 150	Fashion Apparel and Professional Techniques	3
FASH 154	Fashion Illustration	3
Select one course from each Group		9.5-15
<b>Total</b>		<b>36.5-42</b>

#### Group 1

BUS 136	Principles of Retailing	3
BUS 137	Professional Selling Fundamentals	3
BUS 160	Small Business Management	3

#### Group 2

FASH 204	AIMS Certification	1
FASH 260*	Computer Applications in Fashion	2
GD 147	Introduction to Computer Graphics	3
GD 149*	Digital Illustration	3

#### Group 3

FASH 100	Fashion Sewing-Beginning	3
FASH 110*	Contemporary Clothing Construction	3

#### Group 4

FASH 189/289	Special Topics: Fashion	.5-3
FASH 254	Fashion in Southern California	1

#### Group 5

FASH 145*/BUS 145* and	Internship	1
CWE 180*+	Cooperative Work Experience: Fashion	1

#### Optional Lab/Studio

FASH 212	Construction Lab	1
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\*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

+Recommended to be taken with Cooperative Work Experience in last semester of program.

### Associate Degree

#### 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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 12; BUS 103, 125, 136, 137, 138; FCS 115; FASH 145/BUS 145, 154, 254; GC 101.

## Visual Fashion Merchandising Certificate Program

The Visual Fashion Merchandising program explores interior and exterior displays with an emphasis on presentation of the products and on lighting and window design. Techniques and utilization of specialized materials in a diverse range of retail options are examined, as are the development of major presentations and overall store design.

Course ID	Title	Units
FASH 31/BUS 31	Textiles	3
FASH 101	Introduction to Fashion Careers	3
FASH 143/BUS 143	Fashion Buying and Merchandising	3
FASH 144	Fashion Trends	3
FASH 147/BUS 147	Special Events Coordination and Promotion	3
FASH 148/BUS 148	Visual Merchandising	3
FASH 150	Fashion Apparel and Professional Techniques	3
FASH 154	Fashion Illustration	3
	Select one course from each Group	6-10
	<b>Total</b>	<b>30-36</b>
<b>Group 1</b>		
ART 42*	Color Theory and Practice	3
ART 100	Art Gallery/Display and Exhibition	3
ID 114	Applied Color and Design Theory for Interior Design	4
<b>Group 2</b>		
GD 144	Typography	3
GD 147	Introduction to Computer Graphics	3
GD 149*	Digital Illustration	3
FASH 204	AIMS Certification	1
<b>Group 3</b>		
FASH 145*/BUS 145*	Internship	1
and		
CWE 180*†	Cooperative Work Experience: Fashion	1

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

†Recommended to be taken in last semester of program.

**Associate Degree****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.

**Associate in Arts**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ART 20, 40, 41, 42, 50, 80; BUS 138/CTVR 138; FASH 110, 154, 254; GC 101, GD 141/ART 141; ID 110, 112, 121, 127, TA 44.

## Fine and Applied Arts Associate Degree

The curriculum in the Fine and Applied Arts Associate Degree program provides the student the opportunity to design an interdisciplinary degree by selecting appropriate courses in the Fine or Applied Arts which may support attempts to gain entry-level employment in such areas as architectural drafting, graphics design, horticulture, interior design, photography and performing arts.

Select a minimum of 18 units from the following including a minimum of 12 units in one discipline:

Architecture	ARCH 10, 12, 34*, 42*, 44*, 124A/B*/C*, 136*
Art/ Graphic Design	ART 4, 9*, 10*, 11*, 12*, 13*, 20, 21, 22, 23, 24, 25, 26, 28, 29, 40, 41*, 42*, 50*, 51*, 52, 53*, 54*, 57*, 58*, 59*, 60*, 61*, 62*, 63, 70, 71*, 72*, 78, 79*, 80, 81*, 82*, 85*, 86*, 87*, 100, 120, 133*, 134*, 140, 141, 142, 145, GD 148*, 149*, 150*, 151, GC 63, 101
Cinema/Television/Radio	CTVR 3, 9, 31*, 32*, 40*, 42*, 100, 101, 110, 113, 124, 125, 128, 140, 191
Dance	DANC 9*, 51, 52*, 53*, 54, 55*, 56*, 57, 58*, 59*, 60, 61*, 62*, 64, 66
Entertainment & Theatre	ETT 7*, 40, 41*, 42, 45*, 100, 101, 104, 144*
Fashion	FASH 124*, 136*, 144, 154
Horticulture	HORT 7, 10, 11, 20, 106, 109, 115, 116, 130
Interior Design	ID 110, 111*, 112, 114, 122, 123*, 125, 126*, 127*, 133*
Music	MUS 1, 10*, 11*, 12*, 14*, 15*, 20, 23, 24, 25, 26, 27, 28, 29, 31*, 32*, 33*, 34*, 35*, 40*, 41*, 42*, 43*, 44, 46*, 47*, 50*, 51*, 52*, 54, 55*, 56*, 58*, 60, 61*, 62*, 63, 64*, 65*, 66*, 67, 75*, 80, 81*, 82*, 92*, 93*, 117*, 118, 148, 178*, 179*
Photography	PHOT 25, 50, 51*, 55*, 152*, 156*, 160*, 190
Theatre Arts	TA 1, 2*, 3*, 4*, 5*, 10, 11, 12*, 15, 16, 17, 18, 19, 20, 22, 25, 26, 30, 32*, 35, 102, 110 113, 130, 142, 201
<b>Total</b>	<b>18</b>

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

**Associate Degree****Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Foods Certificate Program

### (ALSO SEE CULINARY ARTS)

The Foods program is designed to train students for career applications in the food and hospitality industries such as with food companies, food-related businesses and industries, and restaurants. The program offers coursework for professional improvement, and some courses can be utilized as transfer courses for students pursuing a Bachelor's degree in Family and Consumer Sciences/Home Economics with a Foods emphasis.

Course ID	Title	Units
FN 50	Fundamentals of Nutrition	3
FN 110*†	Food Preparation Essentials	3
FN 120*	Contemporary Meals	3
FN 140*	Cultural Foods	2
FN 142*†	Classical Cuisine	2
FN 171	Sanitation and Safety	2
<i>or</i>		
FN 210	Servsafe in Food Production	1
FN 189/289	Special Topics: Foods and Nutrition	1
FN 232*	Lite Cuisine Strategies	2
FN 275	Food and Beverage Operations	3
CWE 180*†	Cooperative Work Experience: Foods and Nutrition	2
	Select from Specialty Courses	6-7
<b>Total</b>		<b>25-27</b>

### Specialty Courses:

FN 173*	Catering and Banquets	2
FN 220*	Country French Foods	2
FN 221*	French Cuisine	2
FN 222*	Chinese Foods	2
FN 223*	Asian Foods	2
FN 226*	Mexican Foods	2
FN 227*	Mediterranean Foods	2
FN 228*	Italian Foods	2
FN 230*	Vegetarian Foods	2
FN 236*	American Regional Foods	2
FN 244*	Baking Basics	2
FN 245*	Specialty and Savory Baking	2

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

†FN 110\* and 142 recommended prior to CWE 180\*.

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## French Associate Degree Program

The French Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in French. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

Course ID	Title	Units
FR 1*	Elementary French	5
FR 2*	Elementary French	5
FR 3*	Intermediate French	5
FR 4*	Intermediate French	5
FR 999A*	French Language Lab	.25, .25
FR 999B*	French Language Lab	.25, .25
	Select one course from Restricted Electives:	3
<b>Total</b>		<b>24</b>

### Restricted Electives

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3
JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin American 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## General Education (IGETC or CSU-GE) Certificate of Achievement

Students may earn a certificate of achievement in general education upon completion of a pattern of approved courses intended for transfer.

### Intersegmental General Education Transfer Curriculum (IGETC)

Completion of a minimum of 34 units including all requirements of the Intersegmental General Education Transfer Curriculum.

### California State University General Education Certification (CSU-GE)

Completion of a minimum of 39 units including all of the requirements of the California State University General Education certification.

SEE THE ARTICULATION/TRANSFER PATTERN SECTION OF THE CATALOG FOR A LIST OF SPECIFIC COURSE REQUIREMENTS

## General Studies Associate Degree

The General Studies Associate degree provides an opportunity for students to earn a comprehensive Associate of Arts (AA) and is intended for the student who may not be planning to transfer to a university in the near future. Completion of an associate degree may support efforts to gain entry-level employment or promotion.

Select 18 units from one of the following areas of emphasis:

### FINE ARTS AND HUMANITIES

Students develop aesthetic understanding including an appreciation of philosophical, historical, and cultural importance and an awareness of the ways in which people responded to themselves and the world around them. Included are artistic and cultural creations and the development of aesthetic understanding and an ability to make value judgements.

ARAB 1\*, 2\*, 21\*  
 ARCH 12  
 ART 4, 20, 21\*, 22\*, 23\*, 24\*, 25, 26, 28, 29\*  
 CHI 1\*, 2\*, 21\*  
 CTVR 3, 9\*  
 DANC 64  
 ENG 3\*, 4\*, 5\*, 15A\*, 15B\*, 17A\*, 17B\*, 18\*, 19\*, 20\*, 21A\*, 21B\*, 23A\*, 24\*, 25\*, 27A\*, 27B\*, 27E\*, 44\*, 50\*, 52\*, 142\*  
 FASH 144\*  
 FA 27  
 FR 1\*, 2\*, 3\*, 4\*  
 GER 1\*, 2\*, 3\*, 4\*  
 HIST 4, 5  
 HORT 115  
 HUM 1\*, 3\*, 10A\*, 10B\*, 21, HUM 22\*, HUM 25\*  
 ID 110, 122, 125  
 ITA 1\*, 2\*, 3\*, 4\*, 21\*  
 JA 1\*, 2\*, 21\*  
 KOR 21\*  
 MUS 1, 20, 23\*, 24, 25, 26, 27, 28, 29\*  
 PHIL 1\*, 10\*, 15\*  
 PHOT 25  
 PRSN 1\*, 2\*, 3\*, 4\*  
 SL 1\*, 2\*, 3\*, 4\*  
 SP 30/TA 30, SP 32\*/TA 32\*  
 SPAN 1\*, 2\*, 3\*, 4\*, 6\*,  
 TA 20, 22, 25, 26, 110\*

### NATURAL SCIENCES

Students will develop an appreciation and understanding of the scientific method and an understanding of the relationships between science and other human activities.

ANTH 1 and 1L\* (ANTH 1L must be taken concurrently with ANTH 1 or within one year after completing ANTH 1)  
 ASTR 20 and 25 combined  
 BIO 3A\*, 3B\*, 11\*, 15\*, BIO 19/ENV 19\*, BIO 20, 113  
 CHEM 1A\*, 3\*, 108\*  
 ENV 18, 24  
 GEOG 1 and 1L\* (GEOG 1L must be taken concurrently with GEOG 1 or within one year after completing GEOG 1)  
 GEOL 1, 20, 23/ENV 23  
 HORT 20  
 MS 4, 20  
 PHYS 2A\*, 4A\*, 20

### SOCIAL AND BEHAVIORAL SCIENCES

Courses will stimulate critical skills about the ways people act and have acted in response to their societies and will promote appreciation of how societies and social subgroups operate.

ANTH 2\*, 3\*, 4\*, 5, 8, 9, 10, 11, 17, 21\*, 42  
 BUS 1  
 CD 105\*, 107\*  
 CCS 1\*, 2\*, 10\*  
 ECON 2\*, 4\*, 20  
 ENV 1  
 GEOG 2\*, 3  
 HIST 12\*, 19, 20\*/SOC 20\*, 21\*, 27\*, 28\*, 30\*, 33\*, 61\*, 62, 63, 70\*, 71\*, 72\*, 74\*, 75\*, 80\*/PS 80\*, 81\*  
 HS 100, 120  
 JRN 1/CTVR 1  
 PS 4, 11/ECON 11; PS 12\*, 14\*  
 PSYC 1, 7\*, 16\*, 21\*  
 SOC 1, 2, 6\*, 10, 15\*, 21\*, 25\*  
 SP 20\*  
 WS 10\*, 40\*

**Total** 18

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Geographic Information Systems Certificate Program

The Geographic Information Systems (GIS) certificate program is a new technology that has applications in many fields. Successful completion of this program will prepare the student to use this new technology in his/her chosen area of specialization. GIS is an innovative way to organize large amounts of data by geographic area and to present the information in map (spatial) form. Many business organizations and governmental entities are requesting that their employees be trained in this field.

Course ID	Title	Units
CIM 2A	Business Programming I: Visual Basic	
DR 50*/ARCH 50*	Introduction to Computer-Aided Drafting	3
GIS 110*/GEOG 110*	Introduction to Geographic Information Systems (GIS)	2
GIS 211*/GEOG 211*	Intermediate Geographic Information Systems (GIS)	2
GIS 212*	Advanced Geographic Information Systems	2
GEOG 1	Physical Geography	3
GEOG 1L*	Physical Geography Lab (Taken within one year of GEOG 1)	1
	Select from Restricted Electives	3-4
<b>Total</b>		<b>19-20</b>

### Restricted Electives:

ANTH 2	Cultural Anthropology	3
ANTH 9	Introduction to Archaeology	3
BUS 135	Introduction to Marketing	3
ENV 18	Introduction to Ecology	4
ENV 23/GEOL 23	Environmental Geology	4
GEOG 2	Cultural Geography	3

GEOG 3	World Regional Geography	3
GEOG 38	California Geography	3
GEOL 1	Introduction to Physical Geology	4
GEOL 3	Geology of California	3

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

## Geography Associate Degree Program

The curriculum in the Geography Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

Course ID	Title	Units
GEOG 1	Physical Geography	3
GEOG 2	Cultural Geography	3
GEOG 3	World Regional Geography	3
	Select from Restricted Electives	9-13
	<b>Total</b>	<b>18-22</b>

### Restricted Electives:

ANTH 1, 2; GEOG 38; GEOL 1; HIST 4, 5, 32; PS 11/ECON 11, PS 14.

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Geology Associate Degree Program

The curriculum in the Geology Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment and promotion.

Course ID	Title	Units
<b>First Year—Fall Semester</b>		
CHEM 1A*	General Chemistry	5
GEOL 1	Introduction to Physical Geology	
or		4
GEOL 20	Introduction to Earth Science	
MATH 2*	Pre-Calculus (required of students unprepared for MATH 3A*)	(5)
<b>Spring Semester</b>		
CHEM 1B*	General Chemistry	5
GEOL 2*	Historical Geology	4
MATH 3A*	Analytic Geometry and Calculus	5
<b>Second Year—Fall Semester</b>		
BIO 3A*	General Biology I	5
MATH 3B*	Analytic Geometry and Calculus	5
PHYS 2A*	Introduction to Physics	
or		5
PHYS 4A*	General Physics	

### Spring Semester

GEOL 6*	Principles of Mineralogy	4
PHYS 2B*	Introduction to Physics	
or		5
PHYS 4B*	General Physics	
	<b>Total</b>	<b>47-52</b>

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

### Associate Degree

#### Associate in Science Degree

Completion of all the courses listed 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: GEOL 3, 4, 5, 7, 10, 23; DR 100 (if mechanical drafting not taken in high school).

## German Associate Degree Program

The German Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in German. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

Course ID	Title	Units
GER 1*	Elementary German	5
GER 2*	Elementary German	5
GER 3*	Intermediate German	5
GER 4*	Intermediate German	5
GER 999A*	German Language Lab	.25, .25
GER 999B*	German Language Lab	.25, .25
	Select one course from Restricted Electives:	3
	<b>Total</b>	<b>24</b>

### Restricted Electives

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3
JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin America 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Gerontology Certificate Program

A multidisciplinary approach to the study of aging, the aging population, the aging process, and society's response to the increasing population of older individuals. Biological, sociological, and psychological aspects of aging are explored. The coursework provides students with information as well as training to work in services and agencies that interact and assist older individuals.

Course ID	Title	Units
<b>Core/Required Courses</b>		
SOC 180	Introduction to Gerontology	3
SOC 125*	Sociology of Aging	3
SOC 126*	Death and Dying	3
PSYC 125*	Psychology of Aging	3
	Select from Restricted Electives	6-9
	<b>Total</b>	<b>18-21</b>

### Restricted Electives

APSY 151	Human Relationships	3
ANTH 2	Cultural Anthropology	3
CCS 2	Multicultural Identities in the United States	3
FN 50	Fundamentals of Nutrition	3
FN 54	Nutrition Issues and Controversies	3
FN 161	Nutrition for Health Occupations	2
FN 171	Sanitation and Safety	3
GEOG 3	World Regional Geography	3
HLTH 1	Contemporary Health Issues	3
HS 100	Human Services in a Changing Society	3
HS 140	Group Leadership and Group Process	3
HS 285	Ethical Issues/Clients' Rights	3
KNES 28	Yoga	3
KNES 29	Tai Chi Ch'uan	3
SE 101	Introduction to Therapy and Rehabilitation	3
SOC 2	Social Problems	3
<i>or</i>		
SOC 25	Social Stratification	3
SOC 10	Marriage and Family	3
SOC/HIST20	Ethnic Cultures in the United States	3

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

Suggested coursework not required for the major: HLTH 2; SE 102

## Graphics

The Graphics program is designed to prepare students for certificates in the Computer Graphics, Graphic Communications, Graphic Design, and Illustration fields. Training is provided in both theory and practical skills. Directed skill development is stressed in the following areas of study: Computer Graphics (computer art and layout), Graphic Communications (printing), Graphic Design (design and art production), and Illustration/Animation (advertising and editorial art).

This program will provide students with the opportunity to acquire knowledge and skills that are required for employment, Associate degree, or transfer in the related areas of design, illustration, printing, and computer graphics.

## Computer Graphics Certificate Program

This program is designed to prepare students for employment in the computer graphics fields. This program relies heavily on a basic understanding of graphic design and/or graphic communications principles as they relate to industry standards. Students are encouraged to adhere to electives noted for a rounded educational experience. Some of the careers that are found in the computer graphics field are: computer graphics artist, prepress technician, computer animator and multimedia producer.

Course ID	Title	Units
GD 144	Typography	3
GD 147	Introduction to Computer Graphics	3
GD 148*	Digital Graphic Design	3
GD 149*	Digital Illustration	3
GD 150*	Digital Animation	3
GD 151	Digital Layout and Design	3
GD 154*	Digital Pre-Press	3
	<b>Total</b>	<b>21</b>

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: GC 101, ART 140/GD 140, 141, 145.

## Graphic Communications Certificate Program

Graphic Communications Certificate Program includes electronic and traditional printing, computer graphics, screen printing, letterpress and related areas. The discipline focuses on the creation, production, and reproduction in printed and digital form. Students are encouraged to adhere to electives noted for a rounded educational experience.

Course ID	Title	Units
GC 63/ART 63	Introduction to Screen Printing	3
GC 101	Introduction to Graphic Communications	3
GC 106*	Advanced Screen Printing	3
GC 195*	Graphics Studio	3
GD 144	Typography	3
GD 147	Introduction to Computer Graphics	3
GD 151	Digital Layout and Design	3
GD 154*	Digital Pre-Press	3
GC 210	Letterpress	3
	<b>Total</b>	<b>27</b>

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: GD 140/ART 140, 141, 142.

## Graphic Design Certificate Program

This program option prepares students for careers typically found in the graphic design field, such as art director, graphic designer, production artist, package designer, or product designer. The study encompasses all phases of the design processes from origination of the idea (design, layout, and typography) through reproduction, finishing and distribution. Students are encouraged to adhere to electives noted for a rounded educational experience.

Course ID	Title	Units
GD 140/ART 140	Beginning Graphic Design	3
GD 142/ART 142	Package Design	3
GD 144	Typography	3
GD 145/ART 145	Graphic Illustration	3
GD 147	Introduction to Computer Graphics	3
GD 149*	Digital Illustration	3
GD 154*	Digital Pre-Press	3
GD 200	Photoshop Skills for Graphic Designers	3
GD 240/ART 240*	Intermediate Graphic Design	3
CWE 180*	Cooperative Work Experience: Graphics	1
<b>Total</b>		<b>28</b>

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ART 40, 41, 80, 85; GC 101.

## Illustration/Animation Certificate Program

The Illustration/Animation Certificate Program prepares students for careers in animation and in editorial illustration such as magazine, book illustration, medical illustration, and marine illustration or in advertising illustration such as product illustration, poster art, T-shirt and decal art. Students are encouraged to adhere to electives noted for a rounded educational experience.

Course ID	Title	Units
ART 80	Drawing I	3
GD 141/ART 141	Graphic Rendering Techniques	3
GD 144	Typography	3
GD 145/ART 145	Graphic Illustration	3
GD 147	Introduction to Computer Graphics	3
GD 149*	Digital Illustration	3
GD 150*	Digital Animation	3
GD 210	Motion Graphics	3
<b>Total</b>		<b>24</b>

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ART 40, 85.

## Health Sciences Associate Degree

The Health Sciences Associate Degree program is designed to provide students the opportunity to achieve an associate degree in health sciences which may include courses required for preparation for transfer to a CSU or for employment in areas such as emergency medical technician, medical assistant, medical insurance billing and coding, nursing assistant, paramedic or phlebotomist.

Transfer Health Sciences majors should complete the general education certificate to meet general education requirements (34-39 units), either the California State University General Education (CSU-GE) requirements or the Intersegmental General Education Curriculum (IGETC).

Refer to ASSIST.org or to the catalog of the intended college of transfer. Courses selected to fulfill requirements for this area of emphasis should reflect requirements of the college or university to which the student plans to transfer. Consult with a counselor for assistance in planning a transfer program in Health Sciences.

This program is not the associate degree in nursing and does not meet the State Board of Registered Nursing requirements for licensure in the state of California. Students interested in achieving a degree in Nursing should see the Nursing Associate Degree.

### Select 18 units from the following related disciplines

BIO 11\*, 12\*, 15\*, 45\*, 112\*, 113, 201  
 CHEM 1A\*, 108  
 EMT 205\* & 205L\*, 210\*, 219\*  
 HIT 200, 204, 207, 209\*, 216\*, 219\*, 221\*  
 HLTH 1, 2, 3  
 HSC 102\*, 217\*, 201, 222, 223\*, 226\*, 227\*, 228, 291, 260

MA 211A/B, 212A/B, 213A/B, 214B, 217A*/B*/C*, 218B N 160*, 161, 162*, 165, 170*, 171*, 172*, 173*, 174*, 176*, 202*, 238*, 244*, 245*, 263, 264*, 265*, 289* PHLB 240* PM 220*, 230*, 240*	<b>18</b>
<b>Total</b>	<b>18</b>

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## History Associate Degree Program

The curriculum in the History Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
HIST 4	World History to 1750	3
HIST 5	World History from 1750	3
HIST 16	History of the United States to 1876	3
HIST 17	History of the United States Since 1876	3
	Select from Restricted Electives	6
<b>Total</b>		<b>18</b>

### Restricted Electives:

ECON 2\*, 20; HIST 7, 8, 9, 11, 12, 15, 19, 20/SOC 20, HIST 21, 25, 30, 32, 33, 40, 41, 61, 62, 63, 70, 71, 72, 75, 80, 135; PS 4, 11, 12, 14, 80.

## Associate Degree.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Horticulture Certificate Program

The Horticulture program is soundly based on horticultural technology and prepares students for careers related to production and care of plants, trees, and shrubs commonly used in landscape design, retail and wholesale nurseries, and park departments. The certificate offered within the Horticulture program is outlined below.

Course ID	Title	Units
HORT 10	Plant Materials: Herbaceous Plants	3

HORT 11	Plant Materials: Trees and Shrubs	3
HORT 20	Introduction to Horticulture Science	4
HORT 112	Plant Propagation	3
HORT 113	Soils and Fertilizers	3
HORT 120	Integrated Pest Management	4
	Select one course from each Group	4-6
<b>Total</b>		<b>24-26</b>

### Group I:

HORT 7	Introduction to Landscape Design	3
HORT 115	History of Landscape Design	3

### Group II:

CWE 180*†	Cooperative Work Experience: Horticulture	1
HORT 116	Irrigation Systems	3
HORT 162	Horticulture Field Studies: Yosemite National Park	1.5
HORT 164	Horticulture Field Studies: Zion National Park	1.5
HORT 166	Ornamental Native Plants	1.5

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

†CWE 180\* should be taken after completing at least 9 units of the Horticulture Certificate.

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 1, 120, 137; CIM 1; HORT 208, 209; SPAN 1.

## General Horticulture Occupational Skills Award

General Horticulture encourages students to master skills required to propagate and maintain healthy plants, including the use of soils and fertilizers.

Course ID	Title	Units
HORT 20	Introduction to Horticultural Science	4
HORT 112	Plant Propagation	3
HORT 113	Soils and Fertilizers	3
<b>Total</b>		<b>10</b>

## Plant Identification Occupational Skills Award

Plant Identification encourages students to master skills required to identify all of the important annuals, groundcovers, vines, trees, shrubs, and native plants used in Southern California landscapes. Award holders will be able to make recommendations for the incorporation of these species into the landscape based on flower color, time of flowering, height, spread, fruit production, and known problems.

Course ID	Title	Units
HORT 10	Plant Materials—Herbaceous Plants	3
HORT 11	Plant Materials—Trees and Shrubs	3
HORT 166	Ornamental Native Plants	1.5
<b>Total</b>		<b>7.5</b>

## Human Development Associate Degree Program

The curriculum in the Human Development Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
ANTH 2	Cultural Anthropology	3
MATH 10*	Introduction to Statistics	3
PSYC 1	Introduction to Psychology	3
PSYC 7*	Developmental Psychology: Childhood through Adolescence	3
SOC 1	Introduction to Sociology	3
SOC 15*	Socialization of the Child	3
<b>Total</b>		<b>18</b>

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BIO 20; CD 120, 121.

## Human Services

The Human Services department offers the following programs of study for people who want to work with people. The curricula meet the needs of career-oriented students who wish career preparation at the Associate degree or vocational certificate levels. They will also serve as an introduction to social work, social welfare, criminal justice, counseling, mental health, and other helping professions for students planning advanced degrees in these fields. Coursework includes participation in internships and Cooperative Work Experiences at various facilities.

Saddleback College is an academic member of the International Association of Eating Disorders Professionals (IAEDP). Saddleback College does not offer a certificate for the Eating Disorders Program, however, the course is certified by IAEDP.

The Human Services department offers the four programs listed below.

## Alcohol and Drug Studies Certificate Program

The Alcohol and Drug Studies program integrates theory and practical experience in developing skills necessary to work with the alcohol and drug abuse population, as well as with families and employers of chemically dependent persons. This program option combines the Human Services behavioral core, skills training, and experiential learning in the field work settings.

The completion of the Core Courses is required for eligibility of enrollment in HS 110 and is required for the completion of the Certificate Programs. It is recommended that these courses be taken as early as possible.

A minimum grade of "C" in all courses is required to receive the certificate.

### CORE COURSES

Course ID	Title	Units
HS 100	Human Services in a Changing Society	3
HS 120	Human Development in the Social Environment	3
HS 140	Group Leadership and Group Process	3
HS 170	Alcohol and Other Drugs in Our Society	3
HS 285	Ethical Issues/Clients' Rights	3
<b>Total Core Units</b>		<b>15</b>
HS 110*	Field Instruction and Seminar I	3.5
HS 150*	Field Instruction and Seminar II	3.5
HS 171	Substance Abuse: Intervention, Treatment and Recovery	3
HS 172*	Physiological Effects and Pharmacology of Alcohol and Drugs	3
HS 174	Case Administration, Crisis Intervention and Referral	3
HS 176*	Co-occurring Disorders	3
	Select from Restricted Electives	3
<b>Total</b>		<b>37</b>

### Restricted Electives:

HS 128	Community-Based Corrections	3
HS 131	Multicultural and Diverse Populations in the United States	3
HS 175	Substance Abuse Education, Prevention and Intervention	3
HS 177	Family Dynamics of Addiction and Abuse	3
HS 182*	Substance Abuse Treatment in Children and Adolescence	3

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Corrections and Criminal Justice Certificate Program

The program in Corrections and Criminal Justice provides the student with an introduction to the Human Services behavioral core and skills with a specialized area of study in criminal justice. Students completing the program may find employment in probation, juvenile counseling settings, California Youth Authority, and half-way houses.

The completion of the Core Courses is required for eligibility of enrollment in HS 110 and is required for the completion of the Certificate Programs. It is recommended that these courses be taken as early as possible.

A minimum grade of "C" in all courses is required to receive the certificate.

### CORE COURSES

Course ID	Title	Units
HS 100	Human Services in a Changing Society	3
HS 120	Human Development in the Social Environment	3
HS 140	Group Leadership and Group Process	3
HS 170	Alcohol and Other Drugs in Our Society	3
HS 285	Ethical Issues/Clients' Rights	3
<b>Total Core Units</b>		<b>15</b>

HS 37	Introduction to Criminology	3
HS 110*	Field Instruction and Seminar I	3.5
HS 119	Introduction to the Criminal Justice System	3
HS 128	Community-Based Corrections	3
HS 150*	Field Instruction and Seminar II	3.5
HS 187	Juvenile Violence, Gangs, and Victimization	3
	Select from Restricted Electives	3
<b>Total</b>		<b>37</b>

### Restricted Electives:

HS 131	Multicultural and Diverse Populations in the United States	3
HS 174	Case Administration, Crisis Intervention and Referral	3
HS 175	Substance Abuse Education, Prevention and Intervention	3
HS 176*	Co-occurring Disorders	3
HS 177	Family Dynamics of Addiction and Abuse	3
HS 182*	Substance Abuse Treatment in Children and Adolescence	3

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Human Services Generalist Certificate Program

The Human Services Generalist program is designed to provide persons with both a historical and a current perspective of the basic issues within the human services field. It will introduce students to the growing career options within the field provide an opportunity to explore several of the program options, and generally provide the kind of information that will enable students to make informed decisions in regard to career directions.

The completion of the Core Courses is required for eligibility of enrollment in HS 110 and is required for the completion of the Certificate Programs. It is recommended that these courses be taken as early as possible.

A minimum grade of "C" in all courses is required to receive the certificate.

### CORE COURSES

Course ID	Title	Units
HS 100	Human Services in a Changing Society	3
HS 120	Human Development in the Social Environment	3
HS 140	Group Leadership and Group Process	3
HS 170	Alcohol and Other Drugs in Our Society	3
HS 285	Ethical Issues/Clients' Rights	3
<b>Total Core Units</b>		<b>15</b>

HS 110*	Field Instruction and Seminar I	3.5
HS 131	Multicultural and Diverse Populations in the United States	3
HS 150*	Field Instruction and Seminar II	3.5
HS 174	Case Administration, Crisis Intervention and Referral	3
HS 176*	Co-occurring Disorders	3
HS 177	Family Dynamics of Addiction and Abuse	3
	Select from Restricted Electives	3
<b>Total</b>		<b>37</b>

### Restricted Electives:

APSY 150	Helping Relationships	3
HS 171	Substance Abuse: Intervention, Treatment, and Recovery	3
HS 172	Physiological Effects and Pharmacology of Alcohol and Drugs	3
HS 175	Substance Abuse Education, Prevention and Intervention	3
HS 187	Juvenile Violence, Gangs, and Victimization	3
PSYC 125	Psychology of Aging	3
SOC 1	Introduction to Sociology	3
SOC 2	Social Problems	3
SOC 10	Introduction to Marriage and the Family	3
SOC 20	Ethnic Cultures of the United States	3

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Mental Health Certificate Program

The Human Service department has designed the Mental Health Worker program to educate students to understand cultural competency, skills needed for clients and family members to enter the public mental health labor force, benefits acquisitions, the recovery model, co-occurring disorders and integrated services, early identification of mental illness and evidence-based practices.

A minimum grade of "C" in all courses is required to receive the certificate.

Course ID	Title	Units
CWE 180*†	Cooperative Work Experience: Mental Health	2
HS 100	Human Services in a Changing Society	3
HS 120	Human Development in the Social Environment	3
HS 131	Multicultural and Diverse Populations in the United States	3
HS 140	Group Leadership and Group Process	3
HS 174	Case Administration, Crisis Intervention and Referral	3
HS 176*	Co-occurring Disorders	3
HS 177	Family Dynamics of Addiction and Abuse	3
HS 220*	Benefits and Entitlement	3
HS 285	Ethical Issues/Clients' Rights	3
<b>Total</b>		<b>29</b>

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

†Recommended to be taken in last semester of program.

**Associate Degree****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 qualify the student for an Associate in Science degree. A minimum of 12 units must be taken 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.

## Humanities Associate Degree Program

The curriculum in the Humanities Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors in the humanities such as language, history, literature or philosophy, earning the Associate degree would demonstrate achievement and may support attempts to gain entry-level employment.

**A minimum of 18 units from the following:**

Course ID	Title	Units
	International Language level 3 or 4	5
HIST 4	World History to 1750	3
HIST 5	World History from 1750	3
HUM 1*	Introduction to Humanities	3
HUM 2*	Origins of Western Culture in Literature	3
HUM 3*	The Culture of Medieval and Renaissance Europe	3
HUM 10A*	Culture, Science, and Society I	3
HUM 10B*	Culture, Science, and Society II	3
HUM 21*	The Search for Meaning: Ideas of Self Across Cultures	3
HUM 22*	Gods, Clocks, and Visions	3
HUM 25*	Planet Earth: Contemporary Issues and Controversies	3
PHIL 1*	Introduction to Philosophy	3

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

**Associate Degree****Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Interior Design

Saddleback College offers an interdisciplinary Interior Design curriculum providing multi-level, accredited courses that prepare students with the competencies required to enter the Interior Design profession. The Associate degree will be awarded after completion of Level III.

### Level I - Interiors Merchandising Certificate Program

The Interiors Merchandising level provides the student with a short-term certificate program leading to employment in merchandising or sales.

Course ID	Title	Units
BUS 137	Professional Selling Fundamentals	3
ID 110	Fundamentals of Interior Design	3
ID 111*	Interior Design Studio I	3
ID 112	Beginning Drafting for Interiors	3
ID 113	Interior Design Careers	2
ID 114	Applied Color and Design Theory for Interior Design	4
ID 115*	Computer-Aided Design/Drafting for Interior Design	3
ID 116	Interior Materials and Products	3
<b>Total</b>		<b>24</b>

Associate Degree will be awarded for Level III only.

### Level II - Interior Design Assistant Certificate Program

The Interior Design Assistant level meets the standards that can lead to a minimum preparation for design certification and employment as a design assistant.

Course ID	Title	Units
<b>Level I Courses</b>		
		<b>24</b>
ARCH 124A	Architectural Drawing I	4
ID 121*	Space Planning	3
ID 122	History of Interior Architecture and Furnishings I	3
ID 123*	Interior Design Illustration	3
ID 125	History of Interior Architecture and Furnishings II	3
ID 126*	Interior Design Studio II	3
ID 127*	Fundamentals of Lighting	3
ID 128*	Business and Professional Practice for Interior Design	3
ID 129*	Interior Design Internship	1
and		
CWE 180*	Cooperative Work Experience: Interior Design	1
<b>Total</b>		<b>51</b>

Associate Degree will be awarded for Level III only.

### Level III - Interior Design Professional Certificate Program

The Interior Design Professional level meets the educational standards leading to employment and certification as a professional interior designer.

Course ID	Title	Units
<b>Level I and II Courses</b>		
		<b>51</b>
ID 133*	Rendering and Rapid Visualization for Interior Design	3
ID 211	Codes and Specifications for Interior Design	3
ID 212*	Advanced Computer-Aided Design/Drafting for Interior Design	3
	Restricted Electives	6
<b>Total</b>		<b>66</b>
<b>Restricted Electives:</b>		
ID 210*	Hospitality Design	3
ID 213*	Health Care Design	3
ID 214*	Bath Design	3
ID 215*	Kitchen Design	3

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Completion of Level III as described 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 Arts 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.

## International Language Associate Degree Program

(see Arabic, Chinese, French, German, Italian, Japanese, and Spanish)

## Italian Associate Degree Program

The Italian Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in Italian. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

Course ID	Title	Units
ITA 1*	Elementary Italian	5
ITA 2*	Elementary Italian	5
ITA 3*	Intermediate Italian	5
ITA 4*	Intermediate Italian	5
ITA 999A*	Italian Language Lab	.25, .25
ITA 999B*	Italian Language Lab	.25, .25
Select one course from Restricted Electives:		3
<b>Total</b>		<b>24</b>

#### Restricted Electives

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3
JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin American 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Japanese Associate Degree Program

The Japanese Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in Japanese. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

Course ID	Title	Units
JA 1*	Elementary Japanese	5

JA 2*	Elementary Japanese	5
JA 3*	Intermediate Japanese	5
JA 4*	Intermediate Japanese	5
JA 999A*	Japanese Language Lab	.25, .25
JA 999B*	Japanese Language Lab	.25, .25
Select one course from Restricted Electives:		3
<b>Total</b>		<b>24</b>

**Restricted Electives**

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3
JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin American 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

**Associate Degree****Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

**Journalism Certificate Program**

The curriculum in the Journalism Certificate provides the range of skills necessary for work in editorial departments of newspapers, magazines, industrial in-house publications, and public relations programs in business and government.

This program provides background and experience needed by persons who may be employed as editors, staff writers, editorial and staff reporters, and photographers.

Course ID	Title	Units
JRN 1/CTVR 1	Mass Media and Society	3
JRN 2*	News Writing	3
JRN 105	Feature Writing	3
JRN 120*†	Newspaper Publication	4-4
JRN 125*†	Magazine Journalism	3-3
<b>Total</b>		<b>23</b>

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

†Must be taken twice.

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: PHOT 50, 55.

## Kinesiology Associate Degree Program

The curriculum in the Kinesiology Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
HLTH 1	Contemporary Health Issues	3
<i>or</i>		
HLTH 3	Women's Health Issues	3
HLTH 2	Responding to Emergencies/First Aid and CPR	1.5
KNES 51	Introduction to Kinesiology and Athletics	3
KNES 52	Fundamentals of Human Movement	3
<i>and</i>		
A minimum of 3 units in Training and Theory selected from the following: KNES 53, 54*, 105		
<i>and</i>		
A minimum of 6 units in Kinesiology activity skills courses from at least 4 of the following areas:		
(1) Fitness		
(2) Individual Sports		
(3) Aquatics		
(4) Dance,		
(5) Team Sports		
(6) Combative Skills		
NOTE: Intercollegiate Athletics may be applied in appropriate areas.		
<b>Total</b>		<b>19.5</b>

**Associate Degree****Associate in Arts Degree**

Complete units as described 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 Arts 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: BIO 11, 20; KNES 107; PSYC 1; SP 1 or 5.

## Athletic Training Occupational Skills Award

The Athletic Training Occupational Skills Award prepares the student for careers in Athletic Training and Physical Therapy for skills necessary for entry level positions in Physical Therapy Clinic or acceptance to an Athletic Training program at a four-year college or university.

Course ID	Title	Units
BIO 11*	Human Anatomy	4
BIO 20	Introduction to Biology	4
HLTH 2	Responding to Emergencies/First Aid and CPR	1.5
KNES 52	Fundamentals of Human Movement	3
KNES 53	Prevention and Care of Athletic Injuries	3
KNES 56	Athletic Training Fieldwork	2
<b>Total</b>		<b>17.5</b>

## Coaching Occupational Skills Award

This Occupational Skills Award is designed to prepare students for gaining employment in coaching in a scholastic setting or Sports management in youth sports at community centers, after school programs, and/or city and state sports activities. The students will gain a variety of experiences, skills and knowledge that will cover a multitude of sports.

Course ID	Title	Units
FN 164	Sports Nutrition	2
HLTH 2	Responding to Emergencies/First Aid and CPR	1.5
KNES 51	Introduction to Kinesiology and Athletics	3
KNES 53	Prevention and Care of Athletic Injuries	3
KNES 54	Principles and Fundamentals of Coaching	3
KNES 105	Mental Skills for Sports Performance	3
	Select from Restricted Electives	2
<b>Total</b>		<b>17.5</b>

### Restricted Electives:

IA 1*	Men's Football	2
IA 2*	Men's Basketball	1 or 2
IA 3*	Men's Baseball	2
IA 4*	Men's Track and Field	2
IA 5*	Men's Cross Country	2
IA 6*	Men's Golf	2
IA 7*	Men's Water Polo	2
IA 8*	Men's Swimming and Diving	2
IA 9*	Men's Tennis	2
IA 10*	Women's Volleyball	2
IA 11*	Women's Softball	2
IA 12*	Women's Basketball	1 or 2
IA 13*	Women's Tennis	2
IA 14*	Women's Swimming and Diving	2
IA 16*	Women's Track and Field	2
IA 17*	Women's Cross Country	2
IA 18*	Women's Water Polo	2
IA 19*	Women's Golf	2
IA 21*	Women's Soccer	2

## Recreation Administration Occupational Skills Award

The curriculum in Recreation Administration is designed to help students become prepared to acquire entry-level positions in the field of recreation at community centers, after school program, and/or city and state park recreation programs. The students will gain a variety of experiences, skills, and knowledge that will cover a multitude of recreational settings and activities. A baccalaureate degree or higher is recommended for employment in higher level positions in this field, but earning this award and/or associates degree may support entry-level positions and future promotion in the area of Recreation Administration.

Course ID	Title	Units
HLTH 2	Responding to Emergencies/First Aid and CPR	1.5
REC 100	Introduction to Recreation	3
REC 102	Recreation Planning and Leadership	3
REC 104	Camping and Outdoor Education	3
REC 105	Supervised Recreation Fieldwork	1
<b>Total</b>		<b>11.5</b>

## Landscape Design Certificate Program

This program is designed to train students for careers in landscape design and maintenance with municipal and county parks departments, industrial and commercial firms, and residential construction companies.

Course ID	Title	Units
HORT 7	Introduction to Landscape Design	3
HORT 10	Plant Materials: Herbaceous Plants	3
HORT 11	Plant Materials: Trees and Shrubs	3
HORT 106	Landscape CADD	3
HORT 109	Introduction to Planting Design	3
HORT 116	Irrigation Systems	3
HORT 130	Hardscape and Construction Materials	3
	Select one course from each Group	2.5-7
<b>Total</b>		<b>23.5-27</b>

### Group I:

CWE 180*†	Cooperative Work Experience: Horticulture	1
HORT 20	Introduction to Horticulture	4
HORT 113	Soils and Fertilizers	3
HORT 166	Ornamental Native Plants	1.5

### Group II:

HORT 115	History of Landscape Design	3
HORT 162	Horticulture Field Studies: Yosemite National Park	1.5
HORT 164	Horticulture Field Studies: Zion National Park	1.5
HORT 201*	Professional Practices of Residential Landscape Design	3

†CWE 180\* should be taken after completing at least 9 units of the Landscape Design Certificate Program.

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 1, 120, 137; HORT 113, 115; SPAN 1.

## General Landscape Design Occupational Skills Award

A comprehensive overview of the drawing, design, and construction materials used by the landscape designer. The skills acquired will enhance the ability to provide landscaping assistance to customers of retail and wholesale nurseries.

Course ID	Title	Units
HORT 7	Introduction Landscape Design	3
HORT 109	Planting Design	3
HORT 130	Hardscape and Construction Materials	3
<b>Total</b>		<b>9</b>

## Liberal Studies Associate Degree

The curriculum in the Liberal Studies Associate Degree program is designed for students transferring to a four-year college or university intending to pursue a Liberal Studies Major.

Students planning to transfer to California State University (CSU), the University of California (UC) or an institution which accepts certification should complete general education requirements for the associate degree by completing CSU General Education (CSU-GE) certification requirements or the Intersegmental General Education Transfer Curriculum (IGETC) (34-39 units).

Please consult with a counselor to ensure that the courses you select from the options listed below are appropriate for your particular school of transfer.

Complete 18 units as described below:

ENG 1A*	4
SP 1 or 5	3
PS 1	3

Select one of the following:

ENG 1B*, 170, PHIL 12*, SP 2*, 3*	3
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Select one of the following:

HIST 7, 8, 16, 17, 22	3
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Select one of the following:

MATH 2*, 3A*, 3B*, 3C* 7*, 8*, 9*, 10*, 11*, 24*, 26*, 124* 3-5	
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\*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Marine Science Technology

The Marine Science Technology program is designed to provide technician training for several ocean-related careers. Two program options are outlined below to orient students to the different emphases necessary for individual interest and career goals.

## Marine Science Technician Certificate Program

Rapid growth of the field of marine environmental management in Southern California brings demand for marine science technicians having the practical seamanship skills of navigation, vessel operation, marine systems and equipment maintenance, as well as scientific expertise. Flexibility in study areas of concentration allows for tailoring coursework to specific employment opportunities.

Classroom work in oceanographic disciplines is combined with seagoing laboratory experience aboard marine research vessels, both sail and power. The program is designed to develop a solid educational foundation so that graduates will be prepared to work closely with scientists, researchers, engineers, and marine survey and operations personnel as they endeavor to manage this enormous resource for the good of mankind.

Course ID	Title	Units
ENV 18	Intro to Ecology	4
or		
ENV 19*/BIO 19*	Marine Biology	4
or		
MS 4	Southern California Coastal Ecology	15
MS 20	Introduction to Oceanography	
	Select from Restricted Electives	
<b>Total</b>		<b>23</b>

### Restricted Electives:

MST 100	Aquarium Systems	3
and		
MST 101*	Aquarium Management	1.5
MST 201	Marlinspike Seamanship	2
MST 202	Marine Weather	3
MST 205	Water Quality and Toxicity of Captive Aquatic Systems	3
MST 210	Coastal Navigation	3
MST 211	Celestial Navigation	3
MST 212	Sailing, Seamanship, and Boating Safety	3
MST 214A*	Intermediate Ocean Sailing	3
MST 214B*	Advanced Cruising Under Sail	3
MST 215*	Vessel Command and Organization	3
MST 216	USCG Master License and Examination Preparation Course	3
MST 217	Sub Sea Technology: Remotely Operated Vehicle	3
MST 218*	Electronic Aids to Navigation	3
MST 219*	Marine Ecological Survey/GIS	3
MST 289	Special Topics	1

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

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: CHEM 1A, 106; CIM 1; DR 100; PHYS 2A.

## Seamanship Certificate Program

This program is designed to prepare individuals as boat operators and to take Coast Guard licensing examinations, as well as train marine technicians in the seagoing disciplines. Fieldwork is conducted throughout Southern California and the Channel Islands from Dana Point and Newport harbors. Boats include 28 to 48-foot sailing and power vessels, as well as safety sail training and introductory boating experience on Saddleback's fleet of 14-foot Capri sailboats.

Course ID	Title	Units
MST 201	Marlinspike Seamanship	2
MST 202	Marine Weather	3
MST 210	Coastal Navigation	3
MST 214B*	Advanced Cruising Under Sail	3
MST 215*	Vessel Command and Organization	3
	Select from Restricted Electives	9
<b>Total</b>		<b>23</b>

### Restricted Electives:

MST 211	Celestial Navigation	3
MST 212	Sailing, Seamanship, and Boating Safety	3
MST 214A*	Intermediate Ocean Sailing	3
MST 216	USCG Master License and Examination Preparation Course	3
MST 217	Sub Sea Technology: Remotely Operated Vehicle	3
MST 218*	Electronic Aids to Navigation	3
MST 219*	Marine Ecological Survey/GIS	3
MST 224	Channel Islands	1.5

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ET 101; DR 100, PHYS 2A.

## Mathematics Associate Degree Program

The curriculum in the Mathematics Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the Associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
<b>First Year</b>		
CS 1B*	Introduction to Programming	3
or		
CS 4A*	Introduction to Java for Computer Science	5
MATH 3A*	Analytic Geometry and Calculus	
MATH 3B*	Analytic Geometry and Calculus	
<b>Second Year</b>		
MATH 3C*	Analytic Geometry and Calculus	5
MATH 24*	Elementary Differential Equations	4
MATH 26*	Introduction to Linear Algebra	4
<b>Total</b>		<b>26</b>

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Medical Assistant

This program prepares students for employment as a medical assistant in a physician's office or clinic. The curriculum is designed to provide training in administrative (front office) and clinical (back office) medical assisting skills. Instruction is given in basic medical office procedures (including appointment scheduling, billing, and insurance), assisting with examinations, surgical and laboratory procedures (including venipuncture, pharmacology, and injections), electrocardiography, electronic health records, public relations, supervision, and practice-building techniques. An externship experience helps provide the student with the skills necessary to enter this field.

Successful completion of courses will require that a grade of "C" or better be achieved. When a student fails to achieve a "C" or better in any course, the student will be given the opportunity to repeat the failed course once on a space available basis. If a student receives a second grade of less than a "C" in any Medical Assistant course, that student will be dropped from the Medical Assistant Program and will not be eligible for re-entry into the Saddleback College Medical Assistant program. A student may not enter Clinical Experience (MA 217) until all courses are completed with a grade of "C" or better.

## Administrative Medical Assistant Certificate Program

This program prepares the student for employment as an administrative (front office) medical assistant in a physician's office or clinic. The Administrative Medical Assistant program is designed to articulate into the Health Information Technology (H.I.T.) program and prepares the student to schedule appointments, perform medical reception duties, handle financial matters (including medical collection), manage electronic health records and other medical records, and do insurance billing. The externship in the front office of a physician's office will help provide the student with the administrative experience necessary to enter the workforce. Students are required to hold a valid basic life support CPR card for healthcare providers and carry malpractice insurance while in MA 217\*.

A minimum grade of "C" in all courses is required to receive the certificate.

Course ID	Title	Units		
HSC 201	Medical Terminology	3	MA 218B	Electrocardiography for the Medical Assistant 2
INSR 260	Computer Applications/EHR in Health Care	3	MA 222	Legal and Ethical Aspects of Health Information 3
INSR 224A	Reimbursement Methodologies	3		<b>Total</b> <b>29</b>
INSR 226A	CPT/Ambulatory Care Coding	3		
INSR 228A	Fundamentals of ICD Coding	3		
MA 206	Introduction to Healthcare Systems and Delivery	3		
MA 211A	Medical Reception Techniques	2.5		
MA 212A	Medical Office Financial Procedures	2.5		
MA 213A	Medical Records Management	2.5		
MA 217A*	Medical Assisting Clinical Experience			
	Administrative	3		
MA 222	Legal and Ethical Aspects of Health Information	3		
	<b>Total</b>	<b>31.5</b>		

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: EMT 205, 205L; PHLB 240; MA 211B, 212B, 213B, 214B, 218B.

## Clinical Medical Assistant Certificate Program

This program prepares the student for employment as a clinical (back office) medical assistant in a physician's office or clinic. The program is designed to prepare the student to aid the physician by assisting with examinations and treatments, performing venipunctures and collecting other routine laboratory procedures, assisting with office surgery, giving medications including by injection, performing electrocardiograms, practicing medical and surgical asepsis, and working with electronic health records and other medical records. An externship in the back office of a physician's office will help provide the student with the clinical experience necessary to enter the workforce. Students are required to hold a valid basic life support CPR card for healthcare providers and carry malpractice insurance while in MA 217B\*.

A minimum grade of "C" in all courses is required to receive the certificate.

Course ID	Title	Units
HSC 201	Medical Terminology	3
INSR 260	Computer Applications/EHR in Health Care	3
MA 206	Introduction to Healthcare Systems and Delivery	3
MA 211B	Physical Examination Procedures	3
MA 212B	Medical Office Laboratory Procedures	3
MA 213B	Medical Asepsis and Surgical Procedures	3
MA 214B	Medication Administration for Medical Assistants	3
MA 217B*	Medical Assisting Clinical Experience—Clinical	3

MA 218B	Electrocardiography for the Medical Assistant	2
MA 222	Legal and Ethical Aspects of Health Information	3
	<b>Total</b>	<b>29</b>

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

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: PHLB 240; INSR 224A, 226A, 228A; EMT 205, 205L; MA 211A, 212A, 213A

## Comprehensive Medical Assistant Certificate Program

This program prepares the student for employment as a medical assistant in a physician's office or clinic. The curriculum is designed to provide training in both administrative and clinical procedures and practices. Instruction is given in basic medical office procedures, including appointment scheduling, billing, insurance, medical reception, medical records management, surgical and laboratory procedures, electronic health records and other medical records management, surgical and laboratory procedures, venipuncture, pharmacology, injections, electrocardiography, public relations, and practice-building techniques. An externship in a physician's office combining administrative and clinical experience helps provide the student with the clinical experience necessary to enter the workforce. Students are required to hold a valid basic life support CPR card for healthcare providers and carry malpractice insurance while in MA 217C\*.

A minimum grade of "C" in all courses is required to receive the certificate.

Course ID	Title	Units
HSC 201	Medical Terminology	3
INSR 260	Computer Applications/EHR in Health Care	3
INSR 224A	Reimbursement Methodologies	3
INSR 226A	CPT/Ambulatory Care Coding	3
INSR 228A	Fundamentals of ICD Coding	3
MA 206	Introduction to Healthcare Systems and Delivery	3
MA 211A	Medical Reception Techniques	2.5
MA 211B	Physical Examination Procedures	3
MA 212A	Medical Office Financial Procedures	2.5
MA 212B	Medical Office Laboratory Procedures	3
MA 213A	Medical Records Management	2.5
MA 213B	Medical Asepsis and Surgical Procedures	3
MA 214B	Medication Administration for Medical Assistants	3
MA 217C*	Medical Assisting Clinical Experience—Comprehensive	3
MA 218B	Electrocardiography for the Medical Assistant	2
MA 222	Legal and Ethical Aspects of Health Information	3
	<b>Total</b>	<b>45.5</b>

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

MA 206	Introduction to Healthcare Systems & Delivery	3
MA 222	Legal and Ethical Aspects of Health Information	3
<b>Total</b>		<b>57</b>

## Associate Degree

### 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.

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: PHLB 240; EMT 205, 205L.

## Health Information Technology Certificate Program

The Health Information Technician (H.I.T.) program is a two-year certificate and associate degree program that prepares the student for employment as a health information professional with the knowledge and skills to accurately code diagnoses and procedures for healthcare services provided to patients, and to collect, maintain, and analyze clinical data in electronic health records that physicians, nurses, and other healthcare staff rely on to deliver quality healthcare. The curriculum is designed to facilitate articulation from the Medical Assistant program and provides training through didactic instruction and directed practice externships. Facilities employing health information technology professionals include hospitals, ambulatory care centers, physician offices, long-term care facilities, dialysis centers, public health agencies, pharmaceutical companies, medical supply companies, rehabilitation centers, managed care organizations, behavioral and mental health facilities, law firms, and insurance firms.

Students are required to hold a valid basic life support CPR card for healthcare providers and carry professional liability insurance prior to commencing their directed practice.

A minimum grade of "C" in all courses is required to receive the certificate.

Course ID	Title	Units
BIO 113	Human Anatomy and Physiology	4
CIM 112	Microsoft Office	3
ENG 1A	Principles of Composition	4
HIT 200	Health Information Science	3
HIT 204	Quality Performance Improvement in Healthcare	3
HIT 207	Information Technology/EHR in Healthcare	3
HIT 209*	Management of Resources	3
HIT 216*	Directed Practice I	2
<i>and</i>		
CWE 180*	Cooperative Work Experience: HIT	1
HIT 219*	Directed Practice II	2
<i>and</i>		
CWE 180*	Cooperative Work Experience: HIT	1
HIT 221*	Advanced Coding with Encoder Lab	4
HSC 201	Medical Terminology	3
HSC 244*	Disease Processes for Health Science	3
INSR 224A	Reimbursement Methodologies	3
INSR 226A	CPT/Ambulatory Care Coding	3
INSR 228A	Fundamentals of ICD Coding	3
INSR 260	Computer Applications/EHR in Healthcare	3

## Associate Degree

### 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.

## Medical Insurance Coding Occupational Skills Award

Completion of the occupational skills award in Medical Insurance Coding prepares the student for employment in a medical office or as an independent consultant/contractor who specializes in medical insurance billing and coding.

Course ID	Title	Units
HSC 201	Medical Terminology	3
INSR 260	Computer Applications/EHR in Health Care	3
INSR 224A	Reimbursement Methodologies	3
INSR 226A	CPT/Ambulatory Care Coding	3
INSR 228A	Fundamentals of ICD Coding	3
<b>Total</b>		<b>15</b>

## Medical Lab Technology Certificate Program

The Medical Laboratory Technician program prepares students for employment as an MLT working in a clinical medical laboratory. Medical laboratory technicians (MLTs) perform a wide variety of routine laboratory procedures and work in both public and private laboratories serving the health care sector.

The MLT program is a two-year curriculum leading to the Associates in Science degree in Medical Laboratory Technology. Completion of prerequisite courses will be required prior to entering the program. The program course of study is a combination of instruction in principles of laboratory theory and techniques as well as clinical experience at affiliated medical laboratories. Students learn to perform routine laboratory procedures in phlebotomy, microbiology, clinical chemistry, hematology, coagulation, immunology, and urinalysis. They also will learn to operate and maintain clinical laboratory equipment.

Graduates of the program qualify for national certification examinations sponsored by the American Society of Clinical Pathologists (ASCP) Board of Registry or by the American Association of Bioanalysts (ABB) Board of Registry to become state licensed medical laboratory technicians.

### Required pre-requisites prior to Medical Lab Technician Sequence:

Course ID	Title	Units
BIO 15*	General Microbiology	5
BIO 113	Human Anatomy and Physiology	4
CHEM 108	Introduction to General, Organic, and Biochemistry	4
MATH 253*	Intermediate Algebra	5
MLT 210	Introduction to the Clinical Lab Profession	1
MLT 211*	Clinical Lab Calculations	1
PHLB 240*	Phlebotomy	4
<i>and</i>		
CWE 180*	Cooperative Work Experience: Phlebotomy	2
<b>Total</b>		<b>26</b>

Course ID	Title	Units
MLT 231*	Clinical Chemistry I	3
MLT 232*	Clinical Microbiology	3
MLT 233*	Clinical Hematology	3
MLT 234*	Clinical Coagulation	1
MLT 235*	Clinical Urinalysis	1
MLT 241*	Clinical Chemistry II	3
MLT 242*	Clinical Chemistry Practicum	3
MLT 243*	Clinical Immunology	3
MLT 244*	Clinical Hematology, Coagulation, Urinalysis Practicum	3
MLT 252*	Clinical Microbiology Practicum	3
MLT 253*	Clinical Immunology Practicum	3
<b>Total</b>		<b>32</b>

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

## Associate Degree

### 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.

## Music Associate Degree Program

The curriculum in Music is designed to provide the student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree will demonstrate commitment to the major, and attainment of a degree which can support attempts to gain entry-level employment.

The following course of study must be completed to fulfill major requirements for the Associate Degree in Music:

Course ID	Title	Units
MUS 10*	Harmony I	3
MUS 11*	Harmony II	3
MUS 50*	Applied Music: Instrumental	2.5, 2.5
or		
MUS 51*	Applied Music: Keyboard	2.5, 2.5
or		
MUS 52*	Applied Music: Voice	2.5, 2.5
	Select from: MUS 31*, 32*, 33*, 34*, 35*, 40*, 41*, 42*, 47*, 62*, 63, 64*, 66*, 75*, 148 or 297*	3-6
MUS 54A	Beginning Piano I (or proficiency exam)	(2)
MUS 54B*	Beginning Piano I (or proficiency exam)	(2)
MUS 55A*	Intermediate Piano I (or proficiency exam)	(2)
MUS 55B*	Intermediate Piano II (or proficiency exam)	(2)
MUS 92*	Musicianship I	2
MUS 93*	Musicianship II	2
	Select two courses from: MUS 20, 23, 24, 25, 26, 27, 28, 29	6
<b>Total</b>		<b>24-29</b>

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

Refer to Graduation Requirements for specific information regarding unit, scholarship, residence, and general education requirements.

## Associate Degree

### Associate in Arts Degree

Completion of the required courses in the major 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 Arts 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.

## Natural Sciences Associate Degree Programs

(SEE ASTRONOMY, BIOLOGY, CHEMISTRY, GEOLOGY, OCEANOGRAPHY, PHYSICAL SCIENCE, and PHYSICS)

## Accredited National League for Nursing Accrediting Commission (NLNAC)

### PURPOSES OF THE PROGRAM IN NURSING

The purposes of this program in Nursing are to provide the education necessary to develop competent practitioners in nursing and to provide a base for the continuing development of the student as an individual.

### ENROLLMENT PROCEDURES

Procedures for applying to the Nursing program and application packets are available in the Health Sciences and Human Services division office and on the division website. Prospective nursing students are encouraged to attend an RN Information Session. (See the Nursing website)

In order to apply, a student must complete BIO 11\* (Anatomy), BIO 12\* (Physiology), BIO 15\* (Microbiology), and ENG 1A\* (Principles of Composition 1) or their equivalents with a grade of "C" or better. BIO 12\* (Physiology) must have been completed within the past seven years.

**Note: Students will be admitted based on the total number of points they receive on the admission criteria. See the Nursing website for details about the point distribution. The admission criteria includes: previous academic degrees, work experience/certificates, GPA in the science prerequisites, completion of relevant course work towards the ADN degree, life experience, proficiency/course work in a second language, ATI-TEAS testing scores.**

Applications will be taken each semester for approximately a two week period at the end of June (for Spring admission) and a two week period at the end of February (for Fall admission).

Students qualified for application will be ranked according to their total points achieved on all of the admission criteria. Those with the highest scores will be admitted.

The Nursing Program at Saddleback College is an impacted program, therefore students who hold F-1 (student visas) will not be considered for admission to the Nursing Program.

Students may use the following resources to obtain information or to seek clarification regarding nursing issues:

California Board of Registered Nursing  
P. O. Box 944210  
Sacramento, CA 94244  
916-322-3350

National League for Nursing Accrediting Commission, Inc.  
3343 Peachtree Road, NE, Suite 500  
Atlanta, Georgia 30326  
800-669-1656

## Accredited National League for Nursing Accrediting Commission (NLNAC)

### Registered Nurse Certificate Program

Every required prerequisite and core class must be completed with a "C" or better.

Course ID	Title	Units
<b>Required prerequisites prior to Nursing Clinical Sequence:</b>		
BIO 11*	Human Anatomy	4
BIO 12*	Human Physiology	4
BIO 15*	General Microbiology	5
ENG 1A*	Principles of Composition I	4
<b>Total</b>		<b>17</b>

### Eligible for Entry into Nursing Clinical Sequence

<b>Semester I</b>		
N 165	Lifecycle I: Fundamentals of Aging	1.5
N 160*	Pharmacology	2.5
N 170*#	Nursing Process	7.75
N 171*#	Mental Health Nursing	3
<b>Total</b>		<b>14.75</b>

<b>Semester II</b>		
N 161	Growth and Development	1.5
N 172*#	Medical-Surgical Nursing	8.75
PSYC 1	Introduction to Psychology	3
<b>Total</b>		<b>13.25</b>

<b>Semester III</b>		
N 173*#	Nursing Care of Children and Families	3.5
N 174*#	Women's Health Nursing	3.5
<b>Total</b>		<b>7</b>

<b>Semester IV</b>		
N 176*#	Advanced Nursing	8
SP 1	Communication Fundamentals	3
<i>or</i>		
SP 5	Interpersonal Communication	3
<b>Total</b>		<b>11</b>

### Total units Registered Nursing Certificate **63**

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

#Clinical course.

Selected clinical experiences in various hospitals, clinics, and community agencies are provided throughout the Nursing Program.

**Upon completion of the Registered Nurse Certificate Students are eligible for RN Licensure Exam**

### Associate Degree—Nursing Program

Refer to Graduation Requirements for specific information regarding unit, scholarship, residence, and general education requirements.

## Licensed Vocational Nurse (LVN) to Registered Nurse (RN) Program

The Nursing program is designed to provide a system by which vocational nurses can continue their education and become eligible to write the State Board Exam. Procedures for application and admission packets are available in the offices of the Division of Health Sciences and Human Services. Students are admitted from a wait list.

Admission of LVNs to the Nursing program is on a space-available basis. To be placed on the wait list requires:

1. Proof of satisfactory completion of an accredited VN program or a current California VN license.
2. Completion of all the core science courses: BIO 11\*, 12, 15, and ENG 1A\* or equivalent, with a grade of "C" or better.
3. Completion of N 162\* and N 164\* with a grade of "C" or better within a maximum of two years of program entry.
4. Completion of matriculation testing.
5. Attendance at "LVN to RN" guidance session.
6. Overall GPA of 2.5 in prerequisite courses.
7. Application submitted with Director/Assistant Director of Nursing.
8. Completion of standardized Assessment Technology Institute (ATI) tests at or above designated cut scores.
9. Proof of completion of a minimum of one (1) year of direct patient care.

Consideration will be given to each applicant's prior education in determining placement into the program. All classes are challengeable. Every required prerequisite and core class must be completed with a "C" or better.

### Required Prerequisites:

Course ID	Title	Units
BIO 11*	Human Anatomy	4
BIO 12*	Human Physiology	4
BIO 15*	General Microbiology	5
ENG 1A*	Principles of Composition I	4
N 162*	Successful Transition to Professional Nursing	1.5
N 164*	LVN to RN Clinical Lab	1.5
<b>Total</b>		<b>20</b>

### Required Core Classes:

Course ID	Title	Units
N 165	Lifecycle I: Fundamentals of Aging	1.5
N 171*#	Mental Health Nursing	3
N 173*#	Nursing Care of Children and Families	3.5
N 174*#	Women's Health Nursing	3.5
N 176*#	Advanced Nursing	8
PSYC 1	Introduction to Psychology	3
SP 1	Communication Fundamentals	3
<i>or</i>		
SP 5	Interpersonal Communication	3
<b>Total</b>		<b>25.5</b>

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

#Clinical course.

## Licensed Vocational Nurse (LVN) to Registered Nurse (RN) 30-Unit Option

### BRN Rules and Regulations

#### Section 1429—Preparation Required for Licensed Vocational Nurses

- (a) An applicant who is licensed in California as a vocational nurse is eligible to apply for licensure as a registered nurse if such applicant has successfully completed the courses prescribed below and meets all the other requirements set forth in Section 2736 of the code. Such applicant shall submit evidence to the board, including a transcript, of successful completion of the requirements set forth in subsection (c) and of successful completion or challenge of courses in physiology and microbiology comparable to such courses required for licensure as a registered nurse.
- (b) The school shall offer objective counseling of this option and evaluate each licensed vocational nurse applicant for admission to its registered nursing program on an individual basis. A school's determination of the prerequisite courses required of a licensed vocational nurse applicant shall be based on an analysis of each applicant's academic deficiencies, irrespective of the time such courses were taken.
- (c) The additional education required of licensed vocational nurse applicants shall not exceed a maximum of thirty (30) semester or forty-five (45) quarter units. Courses required for vocational nurse licensure do not count toward fulfillment of the additional education requirement. However, other courses comparable to those required for licensure as a registered nurse, as specified in Section 1426, may be counted toward fulfillment of the additional education requirement.

Nursing courses shall be taken in an accredited school and shall be beyond courses equivalent to the first year of professional nursing courses. The nursing content shall include nursing intervention in acute, preventive, remedial, supportive, rehabilitative, and teaching aspects of nursing. Theory and courses with concurrent clinical practice shall include advanced medical-surgical, mental health, psychiatric nursing, and geriatric nursing. The nursing content shall include the basic standards for competent performance prescribed in Section 1443.5 of these regulations.

This option is available to all LVNs entering the Saddleback College Nursing program. Persons electing this 30-unit option will be eligible to write the State board exam but will not be graduates of the Saddleback College Nursing program.

Admission of VNs to the Nursing program is on a space-available basis. To be placed on the wait list requires:

1. Proof of satisfactory completion of an accredited VN program or a current California VN license.
2. Completion of BIO 12\*, BIO 15\*, and N 162\* with grades of "C" or better and with a GPA of 2.5 or greater.
3. Attendance at "LVN to RN" guidance session.
4. Completion of N 162\* with a grade of "C" or better within a maximum of 3 semester of program entry.
5. Applicant must commit, in writing, to the 30-unit status prior to or during application.
6. Application submitted with the Director/Assistant Director of Nursing.
7. Completion of standardized Assessment Technology Institute (ATI) tests at or above designated cut scores.
8. Proof of completion of a minimum of one (1) year of direct patient care as an LVN.

Consideration will be given to each applicant's prior education in determining placement into the program. All classes are challengeable. Every required prerequisite and core class must be completed with a "C" or better.

Courses Required for the 30-Unit Option:

#### Required Prerequisites:

Course ID	Title	Units
BIO 12*	Human Physiology	4
BIO 15*	General Microbiology	5
N 162*	Successful Transition to Professional Nursing	1.5

#### Required Core Classes:

N 165	Lifecycle I: Fundamentals of Aging	1.5
N 171*	Mental Health Nursing	3
N 173*#	Nursing Care of Children and Families	3.5
N 174*#	Women's Health Nursing	3.5
N 176*#¥	Advanced Nursing	8
<b>Total</b>		<b>30</b>

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

#Clinical course.

¥Fulfills the Management & Leadership and Advanced Medical-Surgical requirement.

## Diploma School Registered Nursing Program

This program is designed for the RN graduate of a hospital diploma program. Completion of the program listed below and completion of the graduation requirements will qualify the student for an Associate in Science Degree in Nursing.

Upon completion of the following courses, full credit will be awarded in the area of Nursing for holders of current California Registered Nursing Licenses. A minimum of 12 units must be earned at Saddleback College.

Course ID	Title	Units
ENG 1A**	Principles of Composition I	4
N 165†	Lifecycle I: Fundamentals of Aging	1.5
PSYC 1	Introduction to Psychology	3
SOC 1	Introduction to Sociology	3
SP 1	Communication Fundamentals	3
or		3
SP 5	Interpersonal Communication	3
<b>Total</b>		<b>14</b>

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

†A minimum grade of "C" is required.

Refer to Graduation Requirements for specific information regarding unit, scholarship, residence, and general education requirements.

The state universities in the area have planned curricula to dovetail with the community college programs in Orange County; therefore, it will be possible in most instances to make a smooth articulation to a baccalaureate program in Nursing.

The student will need to meet admission requirements as determined by the particular baccalaureate program he/she wishes to enter. These requirements may include courses in the natural sciences or other areas. Students should seek the necessary counseling before taking general education courses at Saddleback College as some additional courses may need to be included.

## Nutrition Certificate Program

The Nutrition program prepares students for a wide variety of employment opportunities involving the applications of fundamentals of normal nutrition. Employment possibilities include public agencies, day-care centers for the young and the elderly, food co-ops, recreation work, pregnancy clinics, education (such as preschool and elementary school), health clubs, gym and figure salons, health food stores and nutritional supplement sales, and drug abuse clinics. The program offers coursework for professional improvement, and some courses can be utilized as transfer courses for students pursuing a Bachelor's degree. Refer to the Family and Consumer Sciences/Home Economics transfer section of the Saddleback College Catalog, as well as the catalog of the intended college of transfer.

Please see a counselor for assistance in planning a transfer program.

Course ID	Title	Units
FCS 115	Consumer Issues	3
or		
FCS 142	Life Management	2
CWE 180**	Cooperative Work Experience: Foods and Nutrition	
FN 50†	Fundamentals of Nutrition	3
FN 64	Nutrition Issues and Controversies	3
FN 110*	Food Preparation Essentials	3
FN 120*	Contemporary Meals	3
FN 160	Nutrition, Weight Management, and Eating Disorders	3
FN 164	Sports Nutrition	2
FN 171	Sanitation and Safety	2
or		
FN 210	Servsafe in Food Production	1
FN 230*	Vegetarian Foods	2
or		
FN 232*	Lite Cuisine Strategies	
<b>Total</b>		<b>25-26</b>

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

† FN 50 recommended prior to CWE 180\*.

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 125, 137; FN 140, 171; HLTH 1; KNES 107; PSYC 33; SP 1.

## Oceanography Associate Degree Program

The curriculum in the Oceanography Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering majors such as marine biology, environmental science or geological sciences, the Associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
<b>First Year</b>		
CHEM 1A*	General Chemistry	5
CHEM 1B*	General Chemistry	5
GEOL 1	Introduction to Physical Geology	4
MATH 3A*	Analytic Geometry and Calculus	5
MS 20	Introduction to Oceanography	4
<b>Second Year</b>		
MATH 3B*	Analytic Geometry and Calculus	5
MATH 3C*	Analytic Geometry and Calculus	5
MATH 10*	Introduction to Statistics	3
PHYS 4A*	General Physics	5
PHYS 4B*	General Physics	5
<b>Total</b>		<b>46</b>

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

### Associate Degree

#### Associate in Science Degree

Completion of all courses listed 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.

#### Associate in Arts Degree

Completion of at least 18 units in the major including MS 20 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 Arts 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: BIO 3A or 20, 19; GEOL 2, 5, 6, 7, 20; PHYS 4C.

## Paramedic Certificate Program

The Paramedic program is designed to prepare the student for licensure as a Paramedic. It is an intense, full-time program consisting of lecture, skills lab, clinical practice, and field internship. Students must possess a current CPR-Health Care Provider Card and are also required to have a current EMT-1 certification and one-year recent work experience. Students must have or purchase malpractice insurance prior to taking PM 230\*.

Course ID	Title	Units
PM 220*†	Paramedicine Theory	14
PM 230*†	Paramedic Clinical Experience	7.5
PM 240*†	Paramedic Field Internship	12
<b>Total</b>		<b>33.5</b>

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

†A minimum grade of "B" is required.

## Associate Degree

### 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: EMT 219\*; HSC 217\*, 226\*.

## Philosophy Associate Degree Program

The curriculum in the Philosophy Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the associate degree would support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
Required courses:		
PHIL 1*	Introduction to Philosophy	3
PHIL 10*	World Religions	3
PHIL 12*	Introduction to Logic	3
Select a minimum of 9 units from the following:		
ENG 15A*	Survey of American Literature: 1620-1860	3
ENG 15B*	Survey of American Literature: 1860-Contemporary	3
<i>or</i>		
ENG 17A*	Survey of English Literature: Beowulf to Romantic Movement	3
ENG 17B*	Survey of English Literature: Romantic Movement to the Present	3
<i>or</i>		
ENG 21A*	World Literature: Ancient to the 17th Century	3
ENG 21B*	World Literature: 17th Century to Modern	3
HIST 4	World History to 1750	3
HIST 5	World History from 1750	3
HUM 1*	Introduction to Humanities	3
PHIL 15*	Introduction to Ethics	3
<b>Total</b>		<b>18</b>

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: Four college semesters, or the equivalent, of a foreign language are strongly recommended. Art history, English literature, history, interdisciplinary studies courses, MATH 9\*, and psychology or other social sciences are also recommended.

## Phlebotomist/Laboratory Assistant Occupational Skills Award

This curriculum prepares the student for employment as a Phlebotomist/Laboratory Assistant in a hospital, laboratory, or clinic. The training is designed to prepare students to collect specimens, do venipunctures, and clean and maintain medical laboratory equipment. Enrollment in CWE 180\* (two units) will provide the necessary 120 hours of clinical experience required to complete this program. Successful completion of PHLB 240\* and CWE 180\* will lead to certification as a Phlebotomist/Laboratory Assistant.

Course ID	Title	Units
PHLB 240*	Phlebotomist/Laboratory Assistant Procedures	4
CWE 180*	Cooperative Work Experience: Phlebotomist	2
<b>Total</b>		<b>6</b>

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

## Photography Associate Degree Program

The curriculum in the Photography Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
<b>First Year</b>		
PHOT 25	History of Photography	3
PHOT 50	Digital Photography I	3
PHOT 51*	Introduction to Photoshop and Digital Imaging	3
PHOT 55*	Digital Photography II	3
<b>Second Year</b>		
PHOT 152*	Intermediate Photoshop and Digital Imaging	3
<i>or</i>		
PHOT 189*	Special Topics: Photography	3
<i>or</i>		
PHOT 190*	Special Problems in Photography	3
PHOT 156*	Digital Photography III	3
PHOT 160*	Color Digital Photography	3
<b>Total</b>		<b>21</b>

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: ART 80, 189; JRN 1/CTVR 1.

## Physical Education Associate Degree Program

SEE KINESIOLOGY

## Physical Science Associate Degree

The associate degree in Physical Science may be appropriate for transfer students who are planning to major in one of the physical sciences such as astronomy, biochemistry, chemistry, environmental sciences, geological sciences, or physics or a preprofessional program requiring completion of physical science courses such as prechiropractic, pre dental, premedicine, preoptometry, and prepharmacy.

Students planning to transfer to California State University (CSU), the University of California (UC) or an institution which accepts certification should complete general education requirements for the associate degree by completing CSU General Education (CSU-GE) certification requirements or the Intersegmental General Education Transfer Curriculum (IGETC) (34-39 units).

Please consult with a counselor for assistance in selecting courses appropriate for transfer majors and/or preprofessional programs.

### Select 18 units from the following courses:

ASTR 20, 21, 25\*  
CHEM 1A\*, 1B\*, 3\*, 12A\*, 12B\*, 108  
ENV 23, 25, 30, 105\*, 106  
GEOG 1, 1L\*, 2, 3, 38, 102, 110\*  
GEOL 1, 2\*, 3, 4, 5\*, 6\*, 7, 10, 20, 21, 23, 162  
MATH 3A\*, 3B\*  
MS 4, 20  
PHYS 2A\*, 2B\*, 4A\*, 4B\*, 4C\*, 20

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Physics Associate Degree Program

The curriculum in the Physics Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering majors in engineering, biological sciences, or physics, earning the associate degree may support attempts to gain entry-level employment or promotion.

Course ID	Title	Units
<b>First Year</b>		
CS 1A	Introduction to Computer Science	3
MATH 3A*	Analytic Geometry and Calculus	5
MATH 3B*	Analytic Geometry and Calculus	5

PHYS 4A*	General Physics	5
<b>Second Year</b>		
MATH 3C*	Analytic Geometry and Calculus	5
MATH 24*	Elementary Differential Equations	4
MATH 26*	Introduction to Linear Algebra	4
PHYS 4B*	General Physics	5
PHYS 4C*	General Physics	5
<b>Total</b>		<b>41</b>

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

### Associate Degree

#### Associate in Science Degree

Completion of all the courses listed 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: CHEM 1A, 1B.

## Political Science Associate Degree Program

The curriculum in the Political Science Associate Degree program is designed to provide the transfer student the opportunity to achieve an associate degree. While a baccalaureate or higher degree is recommended for those considering majors related to this field, earning the associate degree may support attempts to gain entry-level employment in public administration or social services.

It is recommended that PS 1 be taken prior to or concurrently with a combination of courses to be selected from those listed below.

Course ID	Title	Units
PS 1	American Government	3
PS 4	Introduction to Political Science	3
PS 12	Comparative Politics and Government	3
PS 14	International Relations	3
	Select from Restricted Electives	6
<b>Total</b>		<b>18</b>

#### Restricted Electives:

ECON 2\*, 4\*, 11; HIST 16, 17; MATH 10\*, PS 10, 11, 80, SOC 1.

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Associate of Arts Degree in Psychology for Transfer

The curriculum in the Psychology Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers, earning the associate degree may support attempts to gain entry-level employment or promotion.

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major. All courses in the major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
4. Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.

Course ID	Title	Units
<b>Required Courses:</b>		
MATH 10*	Introduction to Statistics	3
PSYC 1	Introduction to Psychology	3
PSYC 2*	Research Methods in Psychology	3
<b>Select one of the following courses (4 Units)</b>		
BIO 20	Introduction to Biology	4
PSYC 3*	Biological Psychology	4
<b>Select one of the following courses or any course not selected above (3-4 Units)</b>		
PSYC 7*	Developmental Psychology: Childhood through Adolescence	3
PSYC 30*	Social Psychology	3
SOC 1	Introduction to Sociology	3
SOC 2	Social Problems	3
ENG 1A*	Principles of Composition I	4
ENG 1B*	Principles of Composition 2	3
PHIL 12	Introduction to Logic	3
<b>Select one of the following courses or any course not selected above (3-4 Units)</b>		
PSYC 5*	Psychological Aspects of Human Sexuality	3
PSYC 16*	Introduction to Cross-Cultural Psychology	3
PSYC 21	The Psychology of Women	3
PSYC 33	Psychology of Adjustment	3
PSYC 37*	Abnormal Behavior	3
PSYC 125*	Psychology of Aging	3
ANTH 1	Biological Anthropology	3
ANTH 2	Cultural Anthropology	3
ANTH 3*	Culture and Language	3
ECON 2*	Principles (Macro)	3
ECON 4*	Principles (Micro)	3
GEOG 1	Physical Geography	3
GEOG 2	Cultural Geography	3
GEOG 3	World Regional Geography	3
PHIL 1*	Introduction to Philosophy	3
PHIL 15*	Introduction to Ethics	3
<b>Sub Total</b>		<b>18-21</b>
CSU General Education or IGETC pattern		34-40
Transferable units as needed to reach 60 transferable units		—
<b>Degree Total</b>		<b>60</b>

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

## Radio/Television/Film

See Cinema/Television/Radio

## Rapid Digital Manufacturing Certificate Program

Rapid Digital Manufacturing addresses the competencies required by technical, engineering, and management professionals working in industry where products are designed and developed, with specific emphasis on mechanical/manufacturing, art/animation, medical imagery, geographic information systems, and architecture.

The program is designed to develop a solid educational foundation for graduates to work closely with engineers, designers, and professionals in multiple industries, using additive processes for product development, 3D visualization, art, entertainment, architecture, medical modeling, and geographic information systems.

Course ID	Title	Units
CIM 221	Managing Projects with Microsoft Project	3
DR 51*/ARCH 51*	Computer-Aided Drafting	3
DR 152*/ARCH 152*	Advanced Computer-Aided Drafting	3
MFG 200*	Introduction to Rapid Prototyping Technology	3
MFG 201*	Advanced CAD Model Making and Tooling	2
MFG 202*	Industrial Materials	2
MFG 203	Introduction to Manufacturing Processes	2
MFG 204*	3D Computer-aided Design - Solidworks	3
MFG 205	Silicone and Urethane Mold Making	3
MFG 206	Resin and Foam Casting	3
	Select from Restricted Electives	3-6
<b>Total</b>		<b>30-33</b>

### Restricted Electives:

MFG 289	Special Topics	3-6
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\*Course has a prerequisite, corequisite, limitation, or recommended preparation; see course description.

## Associate Degree

### 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.

## Real Estate

The Real Estate programs are designed to educate the student to become an effective real estate professional. The three programs are: Real Estate Appraisal, Real Estate Escrow, and Real Estate Sales/Broker.

### Real Estate Appraisal Certificate Program

The Real Estate Appraisal program is designed to prepare students with educational courses needed for positions within the real estate appraisal profession and to meet the California State requirements under the Department of Business, Transportation and Housing Agency for the real estate licenses of State Licensed Real Estate Property Appraiser.

REAL ESTATE APPRAISAL LICENSE and/or CERTIFICATE: Please contact the California Office of Real Estate Appraisers.

Course ID	Title	Units
RE 170	Real Estate Principles	3
RE 176A*	Real Estate Appraisal I	3
RE 176B	Real Estate Appraisal II	3
RE 178*	Real Estate Economics	3
RE 200	Uniform Standards of Professional Appraisal Practice (USPAP)	1.5
	Select from Specialty Courses	6
<b>Total</b>		<b>19.5</b>

**Specialty Courses:**

RE 174*	Legal Aspects of Real Estate	3
RE 175*	Real Estate Finance	3

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 1, 135, 137.

**Real Estate Escrow Certificate Program**

The Escrow program is designed to educate the student to become an effective escrow professional. Activities related to this field are escrow principles, practice, and professionalism. Associated courses in real estate, management, and office procedures are provided.

Course ID	Title	Units
CIM 120	Computer Literacy	1.5
CIM 121A	Keyboarding for Computers: Beginning	1.5
RE 170	Real Estate Principles	3
RE 172*	Real Estate Practice	3
RE 174*	Legal Aspects of Real Estate	3
RE 175*	Real Estate Finance	3
RE 190	Escrow	3
<b>Total</b>		<b>18</b>

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

RECOMMENDED ELECTIVES (Select two courses to meet the Educational Achievement Award requirements of the California Escrow Association): ACCT 1A, 214; BUS 12, 104, 125, 160; RE 176A, 178.

**Real Estate Sales/Broker Certificate Program**

This Real Estate program is designed to educate the student to become an effective Real Estate professional. Activities related to the program are real estate practice, law, appraisal, finance, computations, escrow, investment, exchanging, and taxation.

REAL ESTATE SALESPERSON LICENSE: RE 170, 172, and one additional elective must be completed before enrolling for the State exam. Electives list: BUS 12, RE 174\*, 175\*, 176A\* 178\*, 190, 195, 280. Please check with the California Department of Real Estate for any changes.

REAL ESTATE BROKER LICENSE: Five courses are required: RE 172\*, 174\*, 175\*, 176A\*, and 178\*. In addition, three more courses must be taken from the following list: BUS 12, RE 170, 176B, 190, 195\*, 280. Please check with the California Department of Real Estate for any changes. The 30-unit Certificate meets the Broker License examination course requirements.

Course ID	Title	Units
RE 170	Real Estate Principles	3
RE 172*	Real Estate Practice	3
RE 174*	Legal Aspects of Real Estate	3
RE 175*	Real Estate Finance	3
RE 176A*	Real Estate Appraisal I	3
RE 178*	Real Estate Economics	3
	Select from Restricted Electives	9
	Select from Specialty Course	2-3
<b>Total</b>		<b>29-30</b>

**Restricted Electives:**

RE 176B	Real Estate Appraisal II	3
RE 190	Escrow	3
RE 195*	Property Management	3
RE 280	Mortgage Loan Brokering and Lending	3

**Specialty Courses:**

BUS 137	Professional Selling Fundamentals	3
RE 202*	Computer Applications in Real Estate	3
RE 222*	Real Estate Calculations	3
RE 250*	Real Estate License Preparation	3

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

**Associate Degree****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.

**Associate in Arts Degree**

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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; BUS 12, 120, 125, 135; CIM 121A; ECON 2, 4; RE 176B, 195.

**Social Sciences Associate Degree Program**

The curriculum in the Social Sciences Associate Degree program is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers, earning the associate degree may support attempts to gain entry-level employment or promotion.

Select twelve units within a single area of emphasis which include only courses applicable to the major as noted below. 12

**Areas of Emphasis:**

- ECON 2\*, 4\*
- GEOG 1, 2, 3
- HIST 4, 5, 16, 17
- PS 1, 4, 12, 14
- PSYC 1, 2\*, 3\*, 7\*, 30\*
- SOC 1, 2, 15\*, 30\*

Select 6 additional units in a second area of emphasis as listed above

	6
<b>Total</b>	<b>18</b>

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

**Associate Degree**

**Associate in Arts Degree**

Complete 18 units as described 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 Arts 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.

**Associate of Arts Degree in Sociology for Transfer**

The curriculum in the Associate in Arts in Sociology for Transfer is designed to provide the transfer student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers, earning the Associate degree may support attempts to gain entry-level employment in social services or promotion.

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major. All courses in the major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
4. Certified completion of the California State University General

Education-Breadth pattern (CSU GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
<b>Required Courses:</b>		
SOC 1	Introduction to Sociology	3
SOC 2	Social Problems	3
MATH 10*	Introduction to Statistics	3

**Select two of the following courses (6 Units)**

SOC 15*	Socialization of the Child	3
SOC 20	Ethnic Cultures of the United States	3
SOC 21	Women in Contemporary Society	3
SOC 25*	Social Stratification	3
SOC 30*	Social Psychology	3

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

ANTH 2	Cultural Anthropology	3
ECON 2*	Principles of Economics (Macro)	3
ECON 4*	Principles (Micro)	3
PHIL 12*	Introduction to Logic	3
PS 1	American Government	3
PSYC 1	Introduction to Psychology	3
PSYC 2*	Research Methods in Psychology	3
SOC 6	Introduction to Asian Cultures in the United States	3
SOC 10	Introduction to Marriage and the Family	3
SOC 125*	Sociology of Aging	3
SOC 126*	Death and Dying	3
SOC 180	Introduction to Gerontology	3

**Sub Total** **18**

CSU General Education or IGETC pattern 34-40  
Transferable units as needed to reach 60 transferable units

**Degree Total** **60**

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

**Spanish Associate Degree Program**

The Spanish Program offers lower-division preparation for students who plan on transferring to pursue a bachelor's degree in Spanish. Students planning to transfer and/or earn this associate degree may also need to complete additional requirements or electives required by the transfer institution, as many have unique admissions and preparation-for-the-major requirements. Students should meet with a counselor to identify required courses and to develop a written plan for their targeted university.

<i>Course ID</i>	<i>Title</i>	<i>Units</i>
SPAN 1*	Elementary Spanish	5
SPAN 2*	Elementary Spanish	5
SPAN 3*	Intermediate Spanish	5
SPAN 4*	Intermediate Spanish	5
SPAN 999A*	Spanish Language Lab	.25, .25
SPAN 999B*	Spanish Language Lab	.25, .25
Select one course from Restricted Electives:		3
<b>Total</b>		<b>24</b>

**Restricted Electives**

ARAB 21*	Introduction to Arabic Culture	3
CHI 21*	Introduction to Chinese Culture and Influence in the United States	3
FR 10*	Intermediate Conversational French	3
FR 20*	Introduction to French Civilization	3
FR 21*	Introduction to French Language and Culture	3
GER 10*	Intermediate Conversational German	3
ITA 21*	Introduction to Italian Culture	3

JA 21*	Introduction to Japanese Culture	3
SPAN 10*	Intermediate Conversational Spanish	3
SPAN 20A*	Civilization of Spain through 1898	3
SPAN 20B*	Civilization of Spain 1898 to Present	3
SPAN 21A*	Civilization of Latin America Through 1900	3
SPAN 21B*	Civilization of Latin American 1900-Present	3
SPAN 21C*	Hispanic Culture and Literature in the United States	3

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.

## Speech/Communication Associate Degree Program

The curriculum in the Speech/Communication Associate Degree program is designed to provide the student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree would demonstrate commitment to the major. Attainment of an Associate degree may support attempts to gain entry-level employment.

Course ID	Title	Units
SP 1	Communication Fundamentals (meets AA Speech requirements)	3
SP 2*	Persuasion	3
SP 3*	Argumentation and Debate	3
SP 5	Interpersonal Communication	3
SP 8	Gender Communication	3
SP 20	Intercultural Communication	3
SP 30/TA 30	Introduction to Oral Interpretation	3
SP 32*/TA 32*	Interpreters' Theatre	3
<b>Total</b>		<b>24</b>

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: SP 106.

## Theatre Arts Performance and Acting Associate Degree Program

The curriculum in the Theatre Arts, Performing/Acting Associate Degree program is designed to provide the student the opportunity to achieve an Associate degree. A baccalaureate degree or higher is recommended for those considering professional career related to this field. An Associate Degree would demonstrate commitment to the major for those transferring to other institutes of higher learning and may support attempts to gain employment in the field.

Course ID	Title	Units
ETT 40	Stagecraft	4
ETT 43	Stage Make-up	1
TA 1	Acting	3
TA 2*	Beginning Scene Study	3
TA 11	Stage Movement	3
	Select from Appreciation and History	3
	Select from Rehearsal and Performance	.5-2
	Select from Acting	6
	Select from Restricted Electives	3
<b>Total</b>		<b>27.5-29</b>

### Appreciation and History:

TA 25	Theatre History: Primitive to Renaissance	3
TA 26	Theatre History: Renaissance to Contemporary	3

### Rehearsal and Performance:

ETT 142	Theatre Production	.5 or 1
TA 15	Rehearsal and Performance: Drama	1-2
TA 16	Rehearsal and Performance: Comedy	1-2
TA 17	Rehearsal and Performance: Mixed Genres	1.2
TA 18	Rehearsal and Performance: Dance	1.2
TA 19	Rehearsal and Performance: Musical Theatre	1-2

### Acting

TA 3*	Advanced Scene Study	3
TA 4*	Acting Styles: Classical	3
TA 5*	Acting Styles: Contemporary	3
TA 10	Musical Theatre Techniques	3
TA 290*	Acting for Television and Film	3

### Restricted Electives:

ETT 41*	State Lighting	3
ETT 42	Costume Design	3
ETT 45*	Scene Design	3
ETT 101*	Fundamentals of Design and Graphics for Theatre	3
ETT 102*	Stage Management	3

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

## Associate Degree

### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: TA 12, 20, 22, 30, 32, 108, 110, 113, 130.

## Theatre Arts Entertainment and Theatre Technology Associate Degree Program

The Entertainment and Theatre Technology program prepares students with the necessary skills to obtain entry level positions in the technical fields of the entertainment industries.

The Associate degree is designed to prepare students to transfer to a baccalaureate or higher degree program.

TA 240\* is a non-transferable course required by the by the Theatre Arts Department for this degree.

Course ID	Title	Units
ETT 40	Stagecraft	4
ETT 100*	Applied Technical Theatre Production	3
ETT 142	Theatre Production	2
ETT 240 *	Advanced Stagecraft	1-3
TA 1	Acting	3
	Select from Appreciation & History	3
	Select from Restricted Electives	3-6
<b>Total</b>		<b>19-24</b>

### Appreciation and History:

TA 20	Theatre Appreciation	3
TA 25	Theatre History: Primitive to Renaissance	3
TA 26	Theatre History: Renaissance to Contemporary	3

### Restricted Electives:

ETT 41*	Stage Lighting	3
ETT 42	Costume Design	3
ETT 45*	Scene Design	3
ETT 101*	Fundamentals of Design and Graphics for Theatre	3
ETT 102*	Stage Management	3
ETT 104	Costume Crafts	3
ETT 130	Theatre Management	3
ETT 144*	Theatre Scenery Painting	2

## Associate Degree

### Associate in Arts Degree

Complete 24 units as described 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 Arts 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.

## Theatre Arts Entertainment and Theatre Technology Certificate Program

The Saddleback College Entertainment and Theatre Technology certificate program provides the student with a career preparation for entry-level positions in the professional entertainment industry. A comprehensive and intensive two-year program offers students the opportunity to explore fundamentals of a wide variety of practical career opportunities. Technical theatre students participate in the hands-on experience of creating all of the technical elements of Theatre Arts Department productions as well as other live events on the Saddleback College campus.

Course ID	Title	Units
ETT 40	Stagecraft	4
ETT 100*	Applied Technical Theatre Production	3
ETT 101*	Fundamentals of Design and Graphics for Theatre	3
ETT 103	Entertainment Internship	1
ETT 142	Theatre Production	.5, .5, .5, 1
ETT 240*	Advanced Stagecraft	3
TA 1	Acting	3
TA 20	Theatre Appreciation	3
	Select from Appreciation & History	3
	Select from Restricted Electives	4-7
<b>Total</b>		<b>32.5-35.5</b>

### Appreciation and History:

ART 20	Art Appreciation	3
CTVR 3	The History and Appreciation of American Cinema	3
DANC 64	History of Dance	3
MUS 20	Music Appreciation	3
MUS 27	History Of Jazz	3
MUS 28	History of Rock	3
TA 22	Musical Theatre History and Appreciation	3

### Restricted Electives:

ETT 41*	Stage Lighting	3
ETT 42	Costume Design	3
ETT 102*	Stage Management	3
ETT 130	Theatre Management	3
ETT 144*	Theatre Scenery Painting	2
ETT 201*	Entertainment Computer Aided Drafting	2
ETT 246 *	Theatre Audio Techniques	3
MUS 118	Sound Recording	4

## Associate Degree

### 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.

## Scenic Art and Painting Occupational Skills Award

The Entertainment and Theatre Technology, Scenic Artist and Painting Occupational Skills Award is designed to prepare the student for employment as a scenic artist and painter in the entertainment industry; including theatre, theme parks, television, movies, corporate events, trade shows, sporting events, faith-based events, and all other forms of live entertainment. The program is designed to develop a solid foundation of skills so students can work closely with Designers, art directors and other professionals in the various areas that make up the Entertainment Industry as well as other industries that utilize the skills of a scenic artist. Students are required to participate as paint crew on the Department of Theatre Arts productions as well as other field work.

Course ID	Title	Units
<b>First Semester</b>		
ETT 142	Theatre Production	1
ETT 144*	Theatre Scenery Painting	2
ETT 244*	Advanced Scenery Painting	3
<b>Second Semester</b>		
ETT 142	Theatre Production	1
ETT 242*	Styles of Paint for the Entertainment Industry	3
CWE 180	Cooperative Work Experience: ETT	2
<b>Total</b>		<b>12</b>

## Travel and Tourism Certificate Program

The Travel and Tourism program is designed to prepare students for careers in the travel agency industry. The program stresses the following: ticketing and reservations, major tourist areas and resorts, fares and routes, tour promotion, and planning. The program covers all aspects of travel including air, cruise ships, rail, and car.

Course ID	Title	Units
CWE 180*	Cooperative Work Experience: Travel Agency	1
TOUR 250	Introduction to Travel and Tourism	3
TOUR 252	World Destinations/Resorts— Western Hemisphere	3
TOUR 253	World Destinations-Europe	3
TOUR 254	World Destinations-Pacific, Asia, Africa	3
TOUR 255	Travel Sales and Marketing	3
TOUR 257	Tours and Cruises	3
TOUR 259*†	Airline Computer Training	2
TOUR 260*	Advanced Airline Computer Training Operation	2
<b>Total</b>		<b>23</b>

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

†Recommended to be taken in last semester of program.

### Associate Degree

#### 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.

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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: BUS 1, 102, 125, 135, 137, 138; CIM 121A, 121B.

## Women's and Gender Studies Associate Degree Program

The curriculum in the Women's and Gender Studies Associate Degree program is designed to provide the student the opportunity to achieve an Associate degree. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree would demonstrate commitment to the major. Attainment of an Associate degree may support attempts to gain entry-level employment.

### Core Requirement

Course ID	Title	Units
WS 10	Introduction to Women's Studies	3

Majors must also select a minimum of 17 units from the following courses:

ANTH 21	Women and Culture: Cross-Cultural Perspectives	3
ART 21	Women and Art	3
CTVR 9	Women in Cinema and Television	3
ENG 50*	Women Authors	3
HIST 21	Women in United States History: A Multicultural Perspective	3
HLTH 3	Women's Health Issues	3
MUS 29	Women, Music, and Society	3
PSYC 21	The Psychology of Women	3
SOC 21	Women in Contemporary Society	3
SP 8	Gender Communication	3
WS 40	Women and Religion: In Search of the Goddess	3
WS 120	Women and Careers	3

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

### Associate Degree

#### Associate in Arts Degree

Complete a minimum of 60 units including the total number of units described above and the General Education requirements with an overall GPA of 2.0 to qualify for the Associate in Arts 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.