

# ASSOCIATE DEGREE PROGRAMS

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## ASSOCIATE DEGREE PROGRAMS CERTIFICATES OF ACHIEVEMENT CERTIFICATES OF PROFICIENCY

*Department-issued certificate which does not appear on a student's transcript.*

**Courses that satisfy a degree or certificate requirement must be completed with a letter grade of "C" or higher.**

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\* A.S. Degree  
+ A.A. Degree

• Certificate of Achievement  
◆ Certificate of Proficiency

*(Department-issued certificate which does not appear on a student's transcript.)*

Course choices for transfer and the associate degree may differ between Cuyamaca and Grossmont College. Each college strongly recommends that students visit the Counseling Centers for specific information if they plan to attend both campuses.



## ASSOCIATE IN SCIENCE IN ADMINISTRATION OF JUSTICE FOR TRANSFER (A.S.-T)

The Associate in Science in Administration of Justice for Transfer (A.S.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 18-19 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Administration of Justice for Transfer (A.S.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The Associate in Science in Administration of Justice for Transfer degree is designed for students who are planning a career in Administration of Justice and wish to transfer to a CSU to complete a bachelor's degree in Criminal Justice. A student may apply for this degree in conjunction with an Associate in Science in Administration of Justice with an emphasis in Law Enforcement, Legal Systems/Court Management, Corrections, or Forensic Technology, provided the required courses are met for those emphasis degrees. Many of the required courses for the emphasis degrees meet the requirements for the transfer degree. A student should speak with a counselor to verify if requirements for the degree have been met.

Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing the specific degree requirements in this program. Students will:

1. Demonstrate knowledge, skills, and attitudes relevant to the AOJ degree program completed.
2. Demonstrate ethical and professional behavior.
3. Communicate effectively, in written, verbal and non-verbal forms.
4. Demonstrate excellent human relations and workplace skills.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

#### Required Core

Subject & Number	Title	Units
Adm. of Justice 110*	Introduction to Administration of Justice	3
Adm. of Justice 200	Criminal Law	3
	<b>Total</b>	<b>6</b>

#### List A

Select TWO (2) of the following courses:

Adm. of Justice 125	Introduction to Corrections	3
Adm. of Justice 202	Criminal Evidence	3
Adm. of Justice 204	Criminal Trial Process	3
Adm. of Justice 206	Criminal Investigation	3
Adm. of Justice 208	Juvenile Procedures	3
Adm. of Justice 240	Community and the Justice System	3
	<b>Total</b>	<b>6</b>

#### List B

Select TWO (2) of the following courses: (minimum 6 units):

Any List A course not used above or		
Mathematics 160*	Elementary Statistics	4
or		
Anthropology / Psychology / Sociology 215*	Statistics for the Behavioral Sciences	(3)
Political Science 121*	Introduction to U.S. Government and Politics	3
Sociology 120*	Introductory Sociology	3
Sociology 130*	Contemporary Social Problems	3
	<b>Total</b>	<b>6-7</b>
	Units for the major	18-19
	Units for CSU GE or IGETC-CSU GE	37-39
	Total units required for the degree	60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

## ADMINISTRATION OF JUSTICE

Students planning careers in Administration of Justice may elect a program from the five options that follow: Law Enforcement, Corrections, Legal Systems/Court Management, Forensic Technology or Security Management. The programs are designed to meet lower division university transfer, job entry, or promotion requirements, depending on student need.

Students seeking employment with local, state or federal law enforcement agencies specialize in Law Enforcement. Students seeking careers in a jail or prison system, parole, probation or certain aspects of social work may specialize in Corrections. Students seeking careers as court clerks or other entry-level judicial systems-related personnel should specialize in Legal Systems/Court Management. Students who desire a career in scientific criminal investigation and in crime laboratories may specialize in Forensic Technology. Students interested in government, homeland defense, or corporate security, should pursue the Security Management area of emphasis.



The Administration of Justice Department also offers a Police Academy, Corrections Academy, Security Academy, and an Emergency Dispatch course.

### Career Opportunities

Adjudicator/Judge\*  
 Arson Investigator  
 Bar Examiner\*  
 Correctional Officer  
 Crime Lab/Forensic Technician  
 Dispatcher  
 District Attorney\*  
 Lawyer/Prosecutor/Public Defender\*  
 Evidence Technician/Specialist  
 Federal Law Enforcement\*  
   Border Patrol Agent\*  
   FBI\*  
   Immigration and Customs Enforcement  
   Postal Inspector  
   Transportation Security Administration Officer  
   Treasury Agent\*  
   Secret Service\*  
   U.S. Marshall\*  
 Fingerprint Examiner  
 Forensic Scientist\*  
 Forensic Specialist  
 Fraud/Forgery Investigator  
 Latent Print Examiner  
 Parole/Probation Officer  
 Police Officer/Deputy Sheriff/Highway Patrol  
 Security Director\*  
 Security Manager  
 Security Officer  
 Traffic Officer  
 \*Bachelor's Degree or higher is usually required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate knowledge, skills, and attitudes relevant to the AOJ certificate / degree program completed.
2. Demonstrate ethical and professional behavior.
3. Communicate effectively, in written, verbal and non-verbal forms.
4. Demonstrate excellent human relations and workplace skills.

### Associate Degree Major Requirements Core Curriculum

For Law Enforcement, Corrections and Legal Systems/Court Management areas of emphasis only.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Adm. of Justice 110	Introduction to Administration of Justice	3
Adm. of Justice 200	Criminal Law	3
Adm. of Justice 202	Criminal Evidence	3
Adm. of Justice 204	Criminal Trial Process	3
Adm. of Justice 230	Public Safety Communications	3
Adm. of Justice 240	Communication and the Justice System	3
	<b>Total</b>	<b>18</b>

### Area of Emphasis Law Enforcement

**Requires TWELVE (12) additional units to be selected from the list of courses below:**

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Adm. of Justice 111	Introduction to Security Management	3
Adm. of Justice 120	Community Policing and Patrol Procedures	3
Adm. of Justice 122	Traffic Law & Enforcement	3
Adm. of Justice 128	Defensive Tactics	1
Adm. of Justice 130	Firearms	1
Adm. of Justice 206	Criminal Investigation	3
Adm. of Justice 208	Juvenile Procedures	3
Adm. of Justice 210	Public Safety Administration	3
Adm. of Justice 214	Public Service Internship	2
Adm. of Justice 215	Public Service Internship	2
	<b>Total</b>	<b>12</b>
	<b>Total Required</b>	<b>30</b>
	Plus General Education and Elective Requirements	

### Area of Emphasis Corrections

**Requires ELEVEN (11) additional units to be selected from the list of courses below:**

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Adm. of Justice 111	Introduction to Security Management	3
Adm. of Justice 125	Introduction to Corrections	3
Adm. of Justice 126	Control and Supervision in Corrections	3
Adm. of Justice 128	Defensive Tactics	1
Adm. of Justice 140	Correctional Counseling and Interviewing	3
Adm. of Justice 208	Juvenile Procedures	3
Adm. of Justice 210	Public Safety Administration	3
Adm. of Justice 214	Public Service Internship	2
Adm. of Justice 215	Public Service Internship	2
	<b>Total</b>	<b>11</b>
	<b>Total Required</b>	<b>29</b>
	Plus General Education and Elective Requirements	

### Area of Emphasis Legal Systems/Court Management

**Requires TEN (10) additional units selected from the list of courses below:**

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Adm. of Justice 111	Introduction to Security Management	3
Adm. of Justice 142	Legal Systems and Court Management	3
Adm. of Justice 206	Criminal Investigation	3
Adm. of Justice 208	Juvenile Procedures	3
Adm. of Justice 210	Public Safety Administration	3
Adm. of Justice 214	Public Service Internship	2
Adm. of Justice 215	Public Service Internship	2
	<b>Total</b>	<b>10</b>
	<b>Total Required</b>	<b>28</b>
	Plus General Education and Elective Requirements	

Special Note: An associate degree is recommended for entry level judicial related employment.

## Certificate of Achievement

Any student who chooses to complete only the Administration of Justice core curriculum plus one of the areas of emphasis qualifies for a Certificate of Achievement in that area. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## Forensic Technology

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Adm. of Justice 110	Introduction to Administration of Justice	3
Adm. of Justice 148	Fingerprint Identification	3
Adm. of Justice 150	Forensic Photography	4
Adm. of Justice 200	Criminal Law	3
Adm. of Justice 202	Criminal Evidence	3
Adm. of Justice 206	Criminal Investigation	3
Adm. of Justice 218	Forensic Technology	4
Adm. of Justice 220	Advanced Forensic Technology	4
Adm. of Justice 230	Public Safety Communications	3
Adm. of Justice 252	Advanced Forensic Photography	4
Adm. of Justice 254	Advanced Fingerprint Identification	3
Biology 120	Principles of Biology	4
Chemistry 113	Forensic Chemistry	4
	<b>Total</b>	<b>45</b>
	Plus General Education and Elective Requirements	

### Recommended Electives:

Subject & Number	Title	Units
Adm. of Justice 224	Forensic Public Service Internship	2
Adm. of Justice 225	Forensic Public Service Internship	2
Biology 140	Human Anatomy	5

## Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Forensics Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## Security Management

The Security Management program leads to a Certificate of Achievement and/or Associate Degree and is designed to prepare individuals for entry level management positions in loss prevention and asset protection in government and business. Security management is one of the fastest growing public safety and business-related occupations. Career opportunities exist in a wide variety of public and private organizations including contract service, government, healthcare, homeland defense, industrial, entertainment, sports, retail, and transportation environments. Salaries for security managers are competitive with those found in public law enforcement and business management occupations.

## Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Adm. of Justice 110	Introduction to Administration of Justice	3
Adm. of Justice 111	Introduction to Security Management	3
Adm. of Justice 201	Legal Aspects of Security Management	3
Adm. of Justice 207	Investigative Techniques for Security Management	3
Adm. of Justice 210	Public Safety Administration	3
Adm. of Justice 230	Public Safety Communications	3
Adm. of Justice 260	Information Security	3
Adm. of Justice 264	Terrorism and Homeland Security	3
	<b>Total Required</b>	<b>24</b>
	Plus General Education and Elective Requirements	

## Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Security Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## Certificate of Proficiency

The following Certificate of Proficiency is designed for the student who needs to be prepared to enter an entry-level job. A department-issued certificate may be awarded upon successful completion of a prescribed course of study. This certificate will not appear on a student's transcript.

## Corrections Academy

This course addresses specific instructional and performance objectives for those seeking employment as corrections officers in local or county jails, adult probation, and community correctional facilities in California.

**Note: This course must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
AOJ 107	Corrections Academy	10.5
	<b>Total</b>	<b>10.5</b>

## AMERICAN SIGN LANGUAGE

The ASL degree is designed for students to acquire advanced expressive and receptive signing skills. It also gives students greater awareness of the Deaf culture and Deaf community. This degree is meant for the student who wants to work with Deaf people. Communicating in sign language and understanding Deafness is critical in any career where one works with Deaf and hard of hearing people. The emphasis is on paraprofessional vocations such as teacher's aid, child care worker, etc. Students completing the ASL degree may wish to transfer to a four year institution or continue their studies in interpreting.

### Career Opportunities

Case Worker  
 Certified Translator  
 Certified Terminologist  
 Education Counselor  
 Interpreter  
     ASL (American Sign Language)  
     Certified  
     Conference  
     Court  
     Educational  
     Foreign Broadcast  
     Legal  
     Literacy  
     Medical

Program Coordinator  
 Rehabilitation Counselor  
 Teacher

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Converse fluently in ASL with peers both hearing and Deaf by applying the language in conversations, ASL storytelling, or narratives.
2. Understand the grammar structures of ASL and apply them in dialogues.
3. Demonstrate knowledge of the Deaf culture heritage and Deaf values through presentations, papers, and written exams.
4. Demonstrate knowledge of local and national resources for Deaf, hard of hearing, and late Deafened adults through presentations, papers, exams, or group demonstrations.
5. Demonstrate an awareness how to work with Deaf people in a variety of settings through community service learning.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
American Sign Language 120	American Sign Language I	4
American Sign Language 121	American Sign Language II	4
American Sign Language 122	Beginning Sign Language Practicum	1
American Sign Language 140	Perspectives on Deaf Culture	3
American Sign Language 220	American Sign Language III	4
American Sign Language 221	American Sign Language IV	4

American Sign Language 222  
 Psychology 120

Intermediate Sign Language Practicum	1
Introduction to Psychology	3
Total	24
Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a certificate of Achievement in American Sign Language. An official request from the student must be filed with the Admissions and Records Office prior to the deadline stated in the yearly calendar which is listed in the class schedule and catalog.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## ARABIC

This program is designed to provide students with skills in understanding, speaking, reading, and writing Arabic. It also gives students a greater understanding of Arabic culture and civilization and prepares them for greater international and domestic career opportunities. For the suggested sequence of courses to be taken, and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of Foreign Languages.

### Career Opportunities

Advertising  
 Bilingual Aide  
 Foreign Correspondent\*  
 Foreign Broadcast Specialist\*  
 Import-Export Agent  
 In-Country Representative  
 Intelligence Specialist  
 Journalist\*  
 Manufacturer's Representative  
 Sales Person  
 Scientist Linguist  
 Teacher/Professor\*  
 Translator/Interpreter\*  
 Travel Agent  
 United Nations Guide

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health and well-being, professions and occupations, the arts, current events, and politics
2. Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city, life, health and well-being, professions and occupations, the arts, current events, and politics.
3. Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.



**Associate Degree Major Requirements**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Arabic 120	Arabic I	5
Arabic 121	Arabic II	5
Arabic 148	Language, Culture, and Literature of the Arab World	3
Arabic 220 or Arabic 122	Arabic III Arabic for the Native Arabic Speaker I	5 (5)
Arabic 221 or Arabic 123	Arabic IV Arabic for the Native Arabic Speaker II	5 (5)
Arabic 250	Conversational Arabic I	3
Arabic 251	Conversational Arabic II	3
Total Required		29
Plus General Education and Elective Requirements		

**Certificate of Achievement**

Any student who chooses to complete only the requirements listed above qualifies for a Certificate of Achievement in Arabic. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**



Associate Degree  
for Transfer™

## ASSOCIATE IN ARTS IN ART HISTORY FOR TRANSFER (A.A.-T)

The Associate in Arts in Art History for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 18 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Arts in Art History for Transfer (A.A.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The A.A.-T degree in Art History offers an engaged approach towards artistic practice and critical discourse through a variety and breadth of studio arts and art history courses, including two- and three-dimensional design, ceramics, digital art, drawing and painting, photography and sculpture.

The Visual Arts and Humanities Department fosters appreciation of culture through intellectual and practical engagement with the visual arts and humanities. Its mission is to teach artistic and critical thinking skills and an understanding of culture and history for degree, transfer and career-seeking students. The Department values excellence and empowerment through creative expression, community engagement, and respect for the diversity of culture and the human experience.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Describe the important elements in the medium of art they are studying.
2. Interpret art in the medium they are studying.
3. Evaluate art in the medium they are studying.

**Associate Degree Major Requirements**

**Note: All courses must be completed with a letter grade of "C" or higher.**

**Required Core**

Subject & Number	Title	Units
Art 124	Drawing I	3
Art 140*	History of Western Art I: Pre-Historic to 1250 A.D.	3
Art 141*	History of Western Art II: Circa 1250 A.D. to Present	3
Total		9

**List A**

Select ONE (1) of the following courses:

Art 142*	Art of Africa, Oceania and the Americas	3
Art 146*	Asian Art	3
Total		3

**List B**

Select ONE (1) of the following courses:

Art 120*	Two Dimensional Design	3
Art 129	Three-Dimensional Design	3
Total		3

**List C**

Select ONE (1) of the following:

Any List A or List B course not used above or

Art 142*	Art of Africa, Oceania and the Americas	3
Art 143*	Modern Art	3
Art 145*	Contemporary Art History: 1945-Present	3
Art 146*	Asian Art	3
Art 147*	American Art	3
	Total	3
	Units for the major	18
	Units for CSU GE or IGETC-CSU GE	37-39
	Total units required for the degree	60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

Associate Degree  
for Transfer™

## ASSOCIATE IN ARTS IN STUDIO ART FOR TRANSFER (A.A.-T)

The Associate in Arts in Studio Art for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 24 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Arts in Studio Art for Transfer (A.A.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The A.A.-T degree in Studio Art offers an engaged approach towards artistic practice and critical discourse through a variety and breadth of studio arts and art history courses, including two- and three-dimensional design, ceramics, digital art, drawing and painting, photography and sculpture.

The Visual Arts and Humanities Department fosters appreciation of culture through intellectual and practical engagement with the visual arts and humanities. Its mission is to teach artistic and critical thinking skills and an understanding of culture and history for degree, transfer and career-seeking students. The Department values excellence and empowerment through creative expression, community engagement, and respect for the diversity of culture and the human experience.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Describe the important elements in the medium of art they are studying.
2. Interpret art in the medium they are studying.
3. Evaluate art in the medium they are studying.

### Associate Degree Major Requirements

**Note: All courses must be completed with a letter grade of "C" or higher.**

**Required Core**

Subject & Number	Title	Units
Art 120*	Two Dimensional Design	3
Art 124	Drawing I	3
Art 129	Three-Dimensional Design	3
Art 141*	History of Western Art II: Circa 1250 A.D. to Present Time	3
	Total	12

**List A**

Select ONE (1) of the following courses:

Art 140*	History of Western Art I: Pre-Historic to 1250 A.D. (Recommended)	3
Art 142*	Art of Africa, Oceania and the Americas	3
Art 143*	Modern Art	3
Art 145*	Contemporary Art History: 1945 - Present	3
Art 146*	Asian Art	3
	Total	3

**List B**

Select THREE (3) of the following courses:

Art 121	Painting I	3
Art 125	Drawing II	3
Art 126*	Ceramics I	3
Art 130*	Sculpture I	3
Art 131	Jewelry Design I	3
Art 171	Introduction to Digital Art	3
Art 230	Figure Drawing I	3
Photography 150	Introduction to Photography	3
	Total	9
	Units for the major	24
	Units for CSU GE or IGETC-CSU GE	37 - 39
	Total units required for the degree	60

Complete transferable units as needed to reach 60. \* Courses that double count with CSU GE or IGETC-CSU GE.



## ART

The AA – Art degree offers an engaged approach towards artistic practice and critical discourse through a variety and breadth of studio arts and art history courses, including two- and three-dimensional design, ceramics, digital art, drawing and painting, photography and sculpture. In addition to the core requirements, students can further pursue an emphasis of studio practice specific to their area of interest, including Ceramics, Digital Art, Drawing and Painting as well as Sculpture/Public Art.

Students planning to transfer to SDSU or any other four-year institution should consult with a counselor as well as with the Visual Arts and Humanities department chair.

The Visual Arts and Humanities Department fosters appreciation of culture through intellectual and practical engagement with the visual arts and humanities. Its mission is to teach artistic and critical thinking skills and an understanding of culture and history for degree, transfer and career-seeking students. The department values excellence and empowerment through creative expression, community engagement, and respect for the diversity of culture and the human experience.

### Career Opportunities

Advertising Manager\*

Antique Dealer

Architect\*

Art Therapist\*

Ceramist

Curator\*

Cartoonist+

Designer+

Fashion

Floral

Graphic

Interior

Display Manager

Layout Artist

Museum Technician

Painter/Sculptor

Photographer

Police Artist

Set Designer

Teacher/Professor\*

Technical Illustrator

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Describe the important elements in the medium of art they are studying.
2. Interpret art in the medium they are studying.
3. Evaluate art in the medium they are studying.

### Associate Degree Major Requirements Core Curriculum

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Art 120	Two Dimensional Design	3
Art 124	Drawing I	3
Art 129	Three-Dimensional Design	3
Art 140	History of Western Art I	
or	Pre-Historic to 1250 A.D.	3
Art 141	History of Western Art II: Circa 1250 A.D. to Present Time	(3)
	Total Core	12
	Plus General Education and Elective Requirements	

### Area of Emphasis Ceramics

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Art 126	Ceramics I	3
Art 127	Ceramics II	3
Art 128	Ceramics III	3

Select ONE (1) of the following:

Art 136	Glaze Formation	3
Art 226	Ceramics IV	3
Art 227	Ceramics Exhibition and Portfolio	3
	Total	12
	Plus Core	12
	Total Required	24
	Plus General Education and Elective Requirements	

### Area of Emphasis Digital Art

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Art 171	Introduction to Digital Art	3
Art 175	Digital Imaging and Art	3

Select TWO (2) of the following:

Art 172	Interactive Media Art	3
Art 177	Digital Drawing and Painting	3
Art 184	Drawing for Animation	3
Photography 150	Introduction to Photography	3
	Total	12
	Plus Core	12
	Total Required	24
	Plus General Education and Elective Requirements	

## Area of Emphasis Drawing and Painting

**Note:** All courses must be completed with a "C" grade or higher.

Subject & Number	Title	Units
Art 121	Painting I	3
Art 125	Drawing II	3
Art 230	Figure Drawing I	3

Select ONE (1) of the following:

Art 220	Painting II	3
Art 231	Figure Drawing II	3
Art 240	Drawing the Human Head	3
	<b>Total</b>	<b>12</b>
	Plus Core	12
	<b>Total Required</b>	<b>24</b>
	Plus General Education and Elective Requirements	

## Area of Emphasis Sculpture - Public Art

**Note:** All courses must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Art 130	Sculpture I	3
Art 229	Sculpture II	3

Select TWO (2) of the following:

Art 280	Sculpture III: The Structure of Sculpture	3
Art 281	Studio Workshop in Public Sculpture	3
Art 282	Public Art Fabrication and Installation	3
	<b>Total</b>	<b>12</b>
	Plus Core	12
	<b>Total Required</b>	<b>24</b>
	Plus General Education and Elective Requirements	

## Photography

The Associate of Arts in Photography provides students an in-depth study into the practice and critical discourse of photography, photographic seeing and lens-based culture as a visual document of creative expression and communication. The fundamentals of analog and digital photography are set within a series of foundation, intermediate and advanced courses which reference the rich history of the medium as well as contemporary practice, providing students the opportunity to define his or her path whether it is transfer, career development and/or personal enrichment.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Recognize and recall the characteristics and application of photographic tools, materials and processes in the production of photographs that apply to such photographic genres as art, commercial, fashion, editorial, photojournalism and documentary.
2. Recognize, recall and demonstrate proper laboratory procedures and practices to produce photographs of optimum technical craft.
3. Recognize, discuss and appraise/analyze/criticize visual themes and concepts, aesthetic and technical considerations within photography's historical and contemporary contexts.

4. Create photographs that demonstrate the comprehension, knowledge and application of photography's visual and technical attributes in developing a personal photographic vision.

## Associate Degree Major Requirements

**Note:** All courses in the major must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Art 120	Two Dimensional Design	3
Art 124	Drawing I	3
Art 129	Three Dimensional Design	3
Art 140	History of Western Art I: Pre-Historic to 1250A.D.	3
or		
Art 141	History of Western Art II: Circa 1250A.D. to Present Time	3
Photography 150	Introduction to Photography	3
Photography 151	Personal Photographic Vision	3
Photography 152	Contemporary Photographic Practice	3
Photography 154	History of Photography	3
Photography 166	Image and Idea	3
Photography 252	Photographer's Portfolio	3
	<b>Total required</b>	<b>30</b>
	Plus General Education and Elective Requirements	

## BIOLOGICAL SCIENCES

The Biological Sciences Department offers a solid academic foundation for further study in life sciences. The primary emphasis of the biological sciences major program is to prepare students for successful transfer to baccalaureate (four-year) institutions. This course package for majors is modeled on the transfer requirements of San Diego State University and will satisfy requirements of most other California State University and University of California campuses. Students should check the catalog of the transfer school being considered for its specific requirements.

## Career Opportunities

Aquatic Biologist\*  
 Biologist\*  
 Biotechnology Lab Technician\*  
 Cytotechnologist  
 Ecologist\*  
 Environmental Engineer\*  
 Forensic Pathologist\*  
 Geneticist\*  
 Hydrologist\*  
 Laboratory Assistant  
 Microbiologist\*  
 Nuclear Medical Technician+  
 Physical Therapist\*  
 Sanitarian\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate an understanding of Evolution by Natural Selection.
2. Analyze and interpret (evaluate) experimental data in order to determine relationships between biological processes.

3. Apply the Scientific Method to experimental design and data analysis.
4. Examine the homeostatic processes within living cells and organisms.
5. Demonstrate an understanding of modern systematic principles.
6. Predict how changes in biotic and abiotic components affect ecosystem dynamics.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Biology 215	Statistics for Life Sciences	3
Biology 230	Principles of Cellular, Molecular and Evolutionary Biology	4
Biology 240	Principles of Ecology, Evolution and Organismal Biology	5
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Chemistry 231	Organic Chemistry I	5
Mathematics 180	Analytical Geometry & Calculus	5
Physics 130	Fundamentals of Physics	4
Physics 131	Fundamentals of Physics	4
Total Required		40
Plus General Education and Elective Requirements		



Associate Degree  
for Transfer™

## ASSOCIATE IN SCIENCE IN BUSINESS ADMINISTRATION FOR TRANSFER (A.S.-T)

The Associate in Science in Business Administration for Transfer (A.S.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 28-29 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Business Administration for Transfer (A.S.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or

higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The Associate in Science in Business Administration for Transfer (A.S.-T) degree is designed to provide students with the common core of lower division courses required to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. The Associate in Science in Business Administration for Transfer degree aligns with the CSU Bachelor of Science in Business Administration.

The Business Administration Department strives to impart the following Program-level Student Learning Outcomes (PSLOs) through the successful completion of the specific degree requirements in this program. Students will:

1. Demonstrate In-depth knowledge and understanding of fundamental business concepts.
2. Demonstrate the ability to identify, apply, and integrate functional business knowledge to solve problems in practical business situations involving accounting, law, and general business.
3. Demonstrate effective written and oral skills in these areas.
4. Demonstrate the ability to identify and resolve moral and ethical business issues.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

### Associate Degree Major Requirements

#### Required Core

Subject & Number	Title	Units
Business 120	Financial Accounting	4
Business 121	Managerial Accounting	4
Business 125	Business Law: Legal Environment of Business	3
Economics 120*	Principles of Macroeconomics	3
Economics 121*	Principles of Microeconomics	3
Total		17

#### List A:

Select ONE (1) of the following courses:

Math 160*	Elementary Statistics	4
Math 178*	Calculus for Business	4
Total		4

#### List B:

Select TWO (2) of the following courses:

Any List A course not used above or

Business 128	Business Communication	3
Computer Science	Principles of Information Systems	4
Information Systems 110		
Total		7-8
Units for Major		28-29
Units for CSU GE or IGETC-CSU GE		37-39
Total Units for Degree		60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.



## BUSINESS ADMINISTRATION

The Business Administration curriculum is designed to give students who choose to work toward a bachelor's degree a well-balanced introduction to a professional career in business.

The program outlined below fulfills the lower division requirements for most majors in the School of Business Administration at San Diego State University and is typical of requirements at other four-year schools. For specific requirements, transfer students should consult the four-year college or university catalog.

### Career Opportunities

Accountant\*  
Administrative Assistant  
Advertising/Marketing\*  
Banking  
Budget Analyst\*  
Business Publications  
Claim Agent  
Computer Operations  
Controller\*  
Financial Manager\*  
Insurance Agent+  
Lawyer\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate in-depth knowledge and understanding of fundamental business concepts.
2. Demonstrate the ability to identify, apply, and integrate functional business knowledge to solve problems in practical business situations involving accounting, law, and general business.
3. Demonstrate effective written and oral skills in these areas.
4. Demonstrate the ability to identify and resolve moral and ethical business issues.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 120	Financial Accounting	4
Business 121	Managerial Accounting	4
Business 125	Business Law: Legal Environment of Business	3
Business 128	Business Communication	3
Computer Science Info. Systems 110	Principles of Information Systems	4
Economics 120	Principles of Macroeconomics	3
Economics 121	Principles of Microeconomics	3
Mathematics 160	Elementary Statistics	4
Mathematics 178	Calculus for Business, Social and Behavioral Sciences	4
Total Required		32
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Business Administration. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## BUSINESS – GENERAL

The Business-General curriculum is designed to develop and foster those skills and understandings which can be utilized for employment in an increasingly challenging business environment. This major will provide the student with a broad preparation for a career in business. Business courses are included which will provide a solid background for future promotion in a chosen occupational area. This program is designed for students who do not plan to transfer to a four-year college or university.

### Career Opportunities

Administrative Assistant  
Bookkeeper  
Budget Consultant\*  
Buyer  
Conciliator+  
Credit Analyst\*  
Employment Interviewer  
Hospital Administrator\*  
Sales Agent+  
Trust Officer\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate In-depth knowledge and understanding of fundamental business concepts.
2. Demonstrate the ability to identify, apply, and integrate functional business knowledge to solve problems in practical business situations involving accounting, law, and general business.
3. Demonstrate effective written and oral skills in these areas.
4. Demonstrate the ability to identify and resolve moral and ethical business issues.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 109	Elementary Accounting	3
or		
Business 120	Financial Accounting	(4)
Business 110	Introduction to Business	3
Business 115	Human Relations in Business	3
Business 125	Business Law: Legal Environment of Business	3
Business 128	Business Communication	(3)
or		
Business Office Technology 110	Business English and Communications	3
Business 146	Marketing	3
Business 152	Business Mathematics	2
Business 195	Personal Finance	3

Business Office Technology 172	Microcomputer Software Packages	2
Economics 120	Principles of Macroeconomics	3
	Total Required	28-29
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Business-General. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Certificate of Proficiency

The following Certificate of Proficiency is designed for the student who needs to be prepared to enter an entry-level job. A department-issued certificate may be awarded upon successful completion of a prescribed course of study. This certificate will not appear on a student's transcript.

### Insurance Services

The Insurance Services Certificate of Proficiency provides students with the skills necessary to gain employment in a variety of insurance office environments. Students may choose to begin a career or update existing skills. Students successfully completing the certificate will be qualified for mid-level positions at both the company and agency level.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
BUS 228	Legal Office Procedures I	3
BUS 233	Personal Insurance	3
BUS 234	Commercial Insurance	3
BUS 235	Delivering Insurance Services	3
	Total	12

## BUSINESS OFFICE TECHNOLOGY

The Business Office Technology curriculum prepares students for employment and advancement in today's technology intensive office. The curriculum has been planned to accommodate a variety of needs and career paths. In addition to traditional office skills, students will acquire proficiency in using computers and current software to perform a variety of essential administrative functions. Graduates of the program will be prepared to work with management in all types of business environments.

Students wishing to earn a certificate or degree in Business Office Technology select an area of emphasis in either Administrative Assistant or Executive Assistant. The Administrative Assistant curriculum is designed for students who wish to acquire the skills necessary for entry to mid-level administrative support position. The Executive Assistant curriculum is designed for students who wish to prepare themselves for a mid to upper level administrative support position. The Executive Assistant curriculum also prepares students to take the Microsoft Office User Specialist (MOUS) certification examination. With additional training at a baccalaureate level college or university, students may prepare for a position in business education or business management.

Note: If certain required proficiencies can be demonstrated, alternate courses may be substituted subject to department approval.

Students wishing to earn a certificate of achievement should complete all courses listed in their chosen area of emphasis. Students wishing to earn a degree should complete all courses listed in their chosen area of emphasis plus 30 units of general education courses and electives to total a minimum of sixty units.

### Career Opportunities

Office Coordinator  
Budget Manager  
Event Coordinator  
Quality Controller  
Account Assistant  
Human Resources Analyst  
Legal Assistant  
Word Processor  
Desktop Publishing Specialist  
Secretary:  
Executive, Medical, Educational, Financial, Government, Technical, Insurance, Small Business

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate knowledge, skills, and abilities relevant to BOT certificates / degree programs completed.
2. Demonstrate ethical and professional behavior.
3. Demonstrate appropriate human relations and workplace skills.

### Associate Degree Major Requirements

#### Area of Emphasis

#### Administrative Assistant

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 102	Intermediate Keyboarding/ Document Processing	3
or		
Business Office Technology 102A and	Intermediate Keyboarding/ Document Processing I	(1.5)
Business Office Technology 102B	Intermediate Keyboarding/ Document Processing II	(1.5)
Business Office Technology 104	Filing and Records Management	1
Business Office Technology 106	Effective Job Search	1
Business Office Technology 107	Office Systems and Procedures	2
Business Office Technology 108	Using Calculators to Solve Business Problems	1
Business Office Technology 110	Business English and Communication	3
Business Office Technology 120 and 121 and 122	Comprehensive Word, Levels I and II and III	3
Business Office Technology 115	Essential Excel	1
or		
Business Office Technology 123 and 124 and 125	Comprehensive Excel, Levels I and II and III	(3)

Business Office Technology 116 or Business Office Technology 126 and 127 and 128 Business Office Technology 117 or Business Office Technology 129 and 130 and 131 Business Office Technology 118	Essential Access Comprehensive Access, Levels I and II and III Essential PowerPoint Comprehensive PowerPoint, Levels I and II and III Integrated Office Projects Total	1 (3) 1 (3) 1 18-24
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Select ONE (1) of the following courses:

Subject & Number	Title	Units
Business Office Technology 223 or Business Office Technology 224 or Business Office Technology 225	Office Work Experience Office Work Experience Office Work Experience Total	1 (2) (3) 19-27

Select a minimum of THREE (3) units from the following courses:

Subject & Number	Title	Units
Business Office Technology 103 A or B or C	Building Keyboarding Skills I or II or III	.5 - 1.5
Business Office Technology 105	Data Entry Skills	1
Business Office Technology 109	Elementary Accounting	3
Business Office Technology 150	Using Microsoft Publisher	1
Business Office Technology 151	Using Microsoft Outlook	1
Total		3
Total Required		22-30
Plus General Education and Elective Requirements		

### Area of Emphasis Executive Assistant

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 110 or Business Office Technology 120 and Business Office Technology 121 and Business Office Technology 122 or Computer Science Info. Systems 173	Business English and Communication Business Communication Comprehensive Word, Level I Comprehensive Word, Level II Comprehensive Word, Level III Microsoft Word	3 (3) 1 1 1 (3)

Business Office Technology 123 and Business Office Technology 124 and Business Office Technology 125 or Computer Science Info. Systems 175 Business Office Technology 126 and Business Office Technology 127 and Business Office Technology 128 or Computer Science Info. Systems 174 Business Office Technology 129 and Business Office Technology 130 and Business Office Technology 131 or Computer Science Info. Systems 177 Business Office Technology 151 Business Office Technology 201 Business Office Technology 203	Comprehensive Excel, Level I Comprehensive Excel, Level II Comprehensive Excel, Level III Microsoft Excel Comprehensive Access, Level I Comprehensive Access, Level II Comprehensive Access, Level III Microsoft Access Comprehensive PowerPoint, Level I Comprehensive PowerPoint, Level II Comprehensive PowerPoint, Level III Microsoft PowerPoint Using Microsoft Outlook Advanced Keyboarding/ Document Processing Office Project Coordination Total	1 1 1 (3) 1 1 1 (3) 1 1 1 17-20
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Select a minimum of THREE (3) units from the following courses:

Subject & Number	Title	Units
Business Office Technology 109	Elementary Accounting	3
Business 110	Introduction to Business	3
Business 115	Human Relations in Business	3
Business 120	Financial Accounting	4
Business 125	Business Law	3
Business 250	Introduction to International Business	3
Total		3

Select a minimum of ONE (1) unit from the following courses:

Subject & Number	Title	Units
Business Office Technology 103B	Building Keyboarding Skills II	.5
Business Office Technology 103C	Building Keyboarding Skills III	.5
Business Office Technology 150	Using Microsoft Publisher	1
Business Office Technology 280 A-B-C	Preparing for Performance Examinations in Microsoft Word	.5
Business Office Technology 281 A-B-C	Preparing for Performance Examinations in Microsoft Excel	.5



Business Office Technology 282 A-B-C	Preparing for Performance Examinations in Microsoft Access	.5
Business Office Technology 283 A-B-C	Preparing for Performance Examinations in Microsoft PowerPoint	.5
Computer Science Info. Systems 274 A-B-C-D	Advanced Database Packages	2
Computer Science Info. Systems 275 A-B-C-D	Advanced Electronic Spreadsheet Packages	2
Total		1
Total Required		21-25
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who completes the preceding major requirements for Administrative Assistant or Executive Assistant qualifies for a Certificate of Achievement in Business Office Technology. An official request must be filed with the Admissions and Record Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Certificate of Proficiency

The following Certificates of Proficiency are designed for the student who needs to be prepared to enter an entry-level job. A department-issued certificate may be awarded upon successful completion of a prescribed course of study. These certificates will not appear on a student's transcript.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Account Clerk

This certificate prepares a beginning student to work in a job that requires bookkeeping skills as well as an ability to provide account clerk support using accounting software. Many jobs at the entry level are available for someone who has training in these two areas.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 101	Keyboarding/ Document Processing	3
or Business Office Technology 101A and Business Office Technology 101B	Keyboarding/ Document Processing	(1.5)
Business Office Technology 109	Elementary Accounting	3
Business Office Technology 176	Computerized Accounting Applications	2
Business Office Technology 179	Microcomputer Accounting Lab	1
Total		9

### Front Office/ Receptionist

The BOT Front Office/ Receptionist certificate would provide an entry-level employment opportunity for a completer that finishes the courses below. These skills are aimed at a student who is seeking a front office/ receptionist related position in an office. This Certificate of Proficiency prepares a beginning student to work in a job that requires basic keyboarding skills, a basic knowledge of filing, and basic office procedures necessary for meeting and greeting the public in person, by telephone, and electronically.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject and Number	Title	Units
Business Office Technology 100	Basic Keyboarding	1
or Business Office Technology 103A and Business Office Technology 103B	Building Keyboarding Speed	(.5)
Business Office Technology 104	Building Keyboarding Speed	(.5)
Business Office Technology 107	Filing and Records Management	1
Business Office Technology 120	Office Systems and Procedures	2
or Business Office Technology 114	Comprehensive Word, Level I	1
Business Office Technology 151	Essential Word	(1)
	Using Microsoft Outlook	1
Total		6

### Medical Office Assistant

The Medical Office Assistant Certificate of Proficiency provides students with the skills necessary to gain employment in a variety of medical office environments. Students may choose to begin a new career or update existing job skills. Students successfully completing the certificate will be qualified to seek employment as: medical office receptionists, assistants, medical clerical workers, hospital admitting clerks, medical insurance billers, medical insurance coders, and insurance claims processors.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 161	Medical Terminology	3
Business Office Technology 165	Medical Insurance Billing	4.5
Business Office Technology 167	Medical Coding	4
Business Office Technology 170	Medical Office Procedures	6
Total		17.5

**Office Assistant, Level I**

This Certificate of Proficiency prepares a beginning student to work in a job that requires keyboarding skills, a basic knowledge of filing, and basic computer skills. It is designed for a student who has not had any computer training and lacks general office background and experience. Students who complete this program would qualify for positions as data entry clerks or entry level office clerical positions.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 100	Basic Keyboarding	1
Business Office Technology 101	Keyboarding/ Document Processing	3
or		
Business Office Technology 101A	Keyboarding/ Document Processing	(1.5)
and		
Business Office Technology 101B	Keyboarding/ Document Processing	(1.5)
Business Office Technology 104	Filing and Records Management	1
Business Office Technology 105	Data Entry Skills	1
Business Office Technology 106	Effective Job Search	1
	<u>Total</u>	<u>7</u>

**Office Assistant, Level II**

This Certificate of Proficiency is designed for the student who has completed the Office Assistant, Level I Certificate of Proficiency or has the equivalent in keyboarding and computer skills. It prepares students to advance in an office career ladder in which knowledge of Microsoft Office applications is necessary. It is a certificate that leads to the full college certificate for the Administrative Assistant certificate and degree.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 102	Intermediate Keyboarding/ Document Processing	3
or		
Business Office Technology 102A	Intermediate Keyboarding/ Document Processing I	(1.5)
and		
Business Office Technology 102B	Intermediate Keyboarding/ Document Processing II	(1.5)
Business Office Technology 107	Office Systems and Procedures	2
Business Office Technology 114	Essential Word	1
Business Office Technology 115	Essential Excel	1
Business Office Technology 116	Essential Access	1
Business Office Technology 117	Essential PowerPoint	1
	<u>Total</u>	<u>9</u>

**Office Professional**

This Certificate of Proficiency is designed for the first level position in a broad spectrum of office environments. The program provides the basic skills necessary to be a productive employee. It provides the foundation for further study and advancement in the clerical field, which is one of the largest employment areas in our information processing society.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 100	Basic Keyboarding	1
or		
Business Office Technology 101	Keyboarding/ Document Processing	(3)
or		
Business Office Technology 101A	Keyboarding/ Document Processing	(1.5)
and		
Business Office Technology 101B	Keyboarding/ Document Processing	(1.5)
or		
Business Office Technology 102	Intermediate Keyboarding/ Document Processing	(3)
or		
Business Office Technology 102A	Intermediate Keyboarding/ Document Processing I	(1.5)
and		
Business Office Technology 102B	Intermediate Keyboarding/ Document Processing II	(1.5)
Business Office Technology 106	Effective Job Search	1
Business Office Technology 107	Office Systems and Procedures	2
Business Office Technology 110	Business English and Communication	3
or		
Business Office Technology 112	Business Office Correspondence and Office Professionalism	(3)
Business Office Technology 114	Essential Word	1
Business Office Technology 115	Essential Excel	1
	<u>Total</u>	<u>9-11</u>

**Office Software Specialist, Level I**

This certificate is designed for the student who is interested in working in an administrative support capacity and needs working knowledge of word processing, electronic spreadsheet, database, and presentation software. These courses may also be applied to the Office Assistant Level II Certificate of Proficiency.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 100	Basic Keyboarding	1
Business Office Technology 114	Essential Word	1
or		
Business Office Technology 120	Comprehensive Word, Level I	(1)
and		
Business Office Technology 121	Comprehensive Word, Level II	(1)

Business Office Technology 115 or Business Office Technology 123 and Business Office Technology 124 Business Office Technology 116 or Business Office Technology 126 and Business Office Technology 127 Business Office Technology 117 or Business Office Technology 129 and Business Office Technology 130	Essential Excel Comprehensive Excel, Level I Comprehensive Excel, Level II Essential Access Comprehensive Access, Level I Comprehensive Access, Level II Essential PowerPoint Comprehensive PowerPoint, Level I Comprehensive PowerPoint, Level II	1 (1) (1) 1 (1) (1) 1 (1) (1) Total
		5 - 9

### Office Software Specialist, Level II

This Certificate of Proficiency is designed for the student who is interested in working in an administrative support capacity and needs thorough knowledge of word processing, electronic spreadsheet, database, and presentation software as well as software integration techniques. Students who complete this proficiency certificate may continue taking courses and earn the Executive Assistant Certificate of Proficiency.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 100	Basic Keyboarding	1
Business Office Technology 118	Integrated Office Projects	1
Business Office Technology 120 or Business Office Technology 114	Comprehensive Word, Level I	1
Business Office Technology 121	Essential Word	(1)
Business Office Technology 122	Comprehensive Word, Level II	1
Business Office Technology 123	Comprehensive Word, Level III	1
Business Office Technology 123 or Business Office Technology 115	Comprehensive Excel, Level I	1
Business Office Technology 124	Essential Excel	(1)
Business Office Technology 125	Comprehensive Excel, Level II	1
Business Office Technology 126	Comprehensive Excel, Level III	1
Business Office Technology 126 or Business Office Technology 116	Comprehensive Access, Level I	1
Business Office Technology 127	Essential Access	(1)
	Comprehensive Access, Level II	1

Business Office Technology 129 or Business Office Technology 117 Business Office Technology 130	Comprehensive PowerPoint, Level I Essential PowerPoint Comprehensive PowerPoint, Level II	1 (1) 1
	Total	12

### Virtual Office Assistant

This Certificate of Proficiency prepares students to create and run a virtual office business. More specifically, the certificate prepares a student to act as an entrepreneur specializing in administrative services provided to clients in a virtual environment.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business Office Technology 100	Basic Keyboarding	1
Business Office Technology 103A	Building Keyboarding Skill I	.5
Business Office Technology 103B	Building Keyboarding Skill II	.5
Business Office Technology 111	Virtual Assistant	2
Business Office Technology 115	Essential Excel	1
Business Office Technology 120	Comprehensive Word, Level I	1
Business Office Technology 121	Comprehensive Word, Level II	1
Business Office Technology 150	Using Microsoft Publisher	1
Business 141	Entrepreneurship: Managing a New Business	3
Business 146	Marketing	3
	Total	14

## CARDIOVASCULAR TECHNOLOGY (CVTE)

See page 9 for special admission procedures and criteria. In addition to the college application, a special application for Cardiovascular Technology (CVTE) is required. Applications and instructions are available at the CVTE website: <http://www.grossmont.edu/cvt/>

The Cardiovascular Technology Program at Grossmont College is a two-year course of study leading to an Associate in Science Degree. Graduates of the program enter the health care profession as Cardiovascular Technologists.

Students accepted to the Cardiovascular Program are required to undergo a background check and urine drug screening before being starting the program and being placed at any clinical site. The cost of these procedures may be \$65 to \$120. The student will be responsible for paying these fees. Failure to pass either of these procedures may interfere with clinical placement and/or acceptance to the program. Any prior conviction of a misdemeanor or felony may also influence eligibility for registry exams and employment with healthcare agencies. Applicants with prior convictions are urged to contact the Program Director of the Cardiovascular Technology Program for confidential advisement and planning prior to applying to the program.



Cardiovascular Technology students are educated in the theory and clinical application of diagnostic tests used in the diagnosis and treatment of cardiovascular disease.

The first year of the program is composed of a core curriculum of courses which encompass physics, mathematics, cardiovascular anatomy, physiology and pathophysiology, medical instrumentation, and the application of clinical cardiovascular techniques.

After the first semester, students select one of three subspecialties for concentrated study, which includes lecture, laboratory and clinical experience courses.

#### **Subspecialties include:**

##### **Invasive Cardiovascular Technology**

Invasive Cardiovascular Technologists work in cardiac catheterization laboratories where they assist the invasive cardiologist in performing diagnostic and interventional procedures such as cardiac catheterization, balloon angioplasty, electrocardiographic monitoring, and stent and pacemaker placement. The technologist assists the physician during the catheterization, providing the appropriate instruments, operates various pieces of electronic medical equipment and calculates clinical information for interpretation by the physician.

##### **Adult Echocardiography**

Adult Echocardiographers perform cardiac ultrasound studies and specialized electrocardiographic procedures. The information obtained from these clinical studies is used by the cardiologist to evaluate patients for cardiovascular disease and designing comprehensive treatment plans. These technologists perform the studies, operate various electronic instruments, prepare preliminary reports and calculate clinical information for interpretation by the physician.

##### **Vascular Technology**

Vascular Technologists perform ultrasound and other diagnostic studies to evaluate arterial and venous obstructions, malformations, or diseases which may put the patient at risk for a stroke, or for loss of circulation in their extremities. The information obtained from these clinical studies is used by vascular surgeons and neurologists to establish a diagnosis, assess the severity of existing disease, and to design comprehensive treatment plans. The vascular technologist performs the studies, operates various medical instruments, prepares preliminary reports and calculates clinical information for interpretation by the physician.

##### **Career Opportunities**

Coronary Interventional Specialist  
Cath Lab Specialist  
Echocardiographer  
Echocardiographer  
Vascular Technologist  
Peripheral Vascular Specialist  
Department Lead, Supervisor, or Manager  
Equipment Sales Representative  
Pacemaker Representative  
Surgical and Endovascular Equipment Sales  
With additional training, Nursing, Physicians Assistant or Surgical Assistant

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree requirements in this program. Students will:

1. All graduates will develop and maintain a professional attitude as a Cardiovascular Technologist, striving for excellence in skills and knowledge, sharing knowledge and skills with others, caring for self, caring for and supporting patients, and protecting patients' rights, privacy and dignity. Continue life-long learning habits and professional growth.
2. Students of INVASIVE CARDIOLOGY will apply principles of cardiovascular anatomy, physiology, pathophysiology and medical instrumentation to perform and interpret diagnostic and interventional studies in the cardiac catheterization laboratory.
3. Students of INVASIVE CARDIOLOGY will set up, calibrate and operate diagnostic and interventional instrumentation in the Cardiac Catheterization Laboratory: hemodynamic monitoring systems, electrocardiographs, contrast dye injectors, oximeters, cardiac pacemakers, cardiac output computers and electrophysiology simulators.
4. Students of ADULT ECHOCARDIOGRAPHY will apply principles of cardiovascular anatomy, physiology, pathophysiology and medical instrumentation to perform, analyze and interpret diagnostic studies: M-Mode, Two-Dimensional, Doppler and Transesophageal cardiac ultrasound studies.  
Students of ADULT ECHOCARDIOGRAPHY will perform diagnostic cardiac ultrasound studies using standard and Doppler ultrasound instruments equipped with surface and transesophageal transducers. Calculate prescribed hemodynamic function indices for interpretation by the physician.
6. Students of VASCULAR TECHNOLOGY will apply principles of vascular anatomy, physiology, pathophysiology and medical instrumentation to perform and interpret diagnostic studies: cerebrovascular, peripheral vascular and abdominal vascular.
7. Students of VASCULAR TECHNOLOGY will perform vascular diagnostic studies using duplex ultrasound, continuous-wave Doppler, arterial and venous plethysmography and photoplethysmography, for testing of cerebrovascular, peripheral vascular and abdominal vascular systems.

#### **General Education Requirements for Cardiovascular Technology Majors**

**All Allied Health and Nursing students adhere to the graduation requirements outlined in the college catalog for the academic year in which they enter the program.**

##### **Competency Requirement**

- A. Competency in reading, writing, expression shown by achieving a "C" grade or higher or "Pass" in courses listed under Area A, Section 1 – Written Communication.
- B. Competency in Mathematics shown by either
  1. Earning a grade of "C" or better or "Pass" in Math 103 or a higher numbered mathematics course or
  2. Assessing into Math 120 or higher through the mathematics placement process. (Students meeting competency through assessment must still take an Area A3 course.)

**Area A - Language and Rationality**

Three courses (a minimum of nine units) are required in written communication, oral communication, and analytical thinking. At least ONE course must be taken from EACH of the following three sections:

**1. Written Communication**

*Must be completed with a "C" grade or higher to satisfy the competency requirement.*

English 120, 124

**2. Oral Communication**

Communication 120, 122

**3. Analytical Thinking**

*Competency in Mathematics shown by either*

- Earning a grade of "C" or better or "Pass" in Math 103 or a higher numbered mathematics course or*
- Assessing into Math 120 or higher through the mathematics placement process. (Students meeting competency through assessment must still take an Area A3 course.)*

Anthropology 215

Biology 215

Economics 215

Geography 104

Mathematics 103, 110, 120, 125, 126, 150, 160, 170,

175, 176, 178, 180, 245, 280, 281, 284, 285

Philosophy 125, 130

Psychology 215

Sociology 215

**Area B - Natural Sciences**

Two natural science courses (a minimum of seven units) are required. One course must contain a laboratory.

**Courses with an asterisk are laboratory only. Courses not containing a laboratory component are underlined.**

Anthropology 130, 131\*

Astronomy 110, 112\*, 120

Biology 105, 110, 112, 114, 118, 120, 140, 141, 142\*, 144, 145, 152, 180, 230, 240

Chemistry 102, 110, 113, 115, 116, 120, 141, 142, 231, 232

Geography 120, 121\*, 140

Geology 104, 110, 111\*, 121, 210, 220, 230

Oceanography 112, 113\*

Physical Science 100, 110, 111\*

Physics 110, 130, 131, 140, 240, 241

Science 110

**Area C - Humanities**

One humanities course (a minimum of three units) is required.

American Sign Language 120, 121, 140, 220, 221, 250

Arabic 120, 121, 122, 123, 148, 220, 221, 250, 251

Art 100, 120, 124, 126, 129, 140, 141, 142, 143, 145, 146, 147, 171, 189

Chinese 120, 121, 220, 221, 250, 251

Communication 135, 137, 144, 145

Cross-Cultural Studies 122, 123, 126, 134, 144, 147, 149, 152, 236, 237, 238

Dance 110

English 112, 118, 122, 126, 134-135-136-137, 201, 203, 215, 217, 218, 219, 221, 222, 231, 232, 234, 235, 236, 237, 238, 241, 242, 275, 276, 277

French 120, 121, 152, 220, 221, 250, 251

German 120, 121, 220, 221, 250, 251

Health Education 155, 158

History 100, 101, 103, 105, 106, 113, 126, 135, 136, 137, 138

Humanities 110, 120, 125, 130, 135, 160, 170

Italian 120, 121, 220, 221, 250, 251

Japanese 120, 121, 149, 220, 221, 250, 251

Media Communications 111, 189

Music 110, 111, 115, 116, 117, 189

Philosophy 110, 111, 112, 114, 116, 118, 140, 141, 145, 150, 155

Photography 150, 154

Religious Studies 120, 130, 140, 150

Russian 120, 121, 220, 221, 250, 251

Spanish 120, 121, 122, 123, 141, 145, 220, 221, 250, 251

Theatre Arts 101, 110, 130, 143, 144, 189

**Area D - Social Sciences**

One social science course (a minimum of three units) is required.

Administration of Justice 110

Anthropology 120, 140

Child Development 115, 125, 131, 134, 145, 153

Communication 124, 128

Cross-Cultural Studies 114, 124, 125, 128, 130, 131, 132, 133, 135, 145, 153, 154, 155

Economics 110, 120, 121

Family Studies 115, 120

Geography 106, 130, 170

Health Education 120, 155, 158, 201

Health Science 110

History 108, 109, 114, 115, 118, 119, 122, 123, 124, 130, 131, 154, 155, 180, 181

Media Communications 110

Political Science 120, 121, 124, 130, 140, 150, 160

Psychology 120, 125, 130, 132, 134, 138, 170

Sociology 114, 120, 125, 130, 138, 140

**Area E – Fitness/Wellness**

Two courses involving physical exercise and/or dance are required. They can be chosen from the exercise science and/or dance courses listed below:

**Dance** 068, 071A, 071B, 072A, 072B, 074A, 074B, 078 A, 078B, 080A, 080B, 080C, 080D, 081A, 081B, 081C, 081D, 082A, 082B, 084A, 084B, 084C, 084D, 088A, 088B, 088C, 088D, 094A, 094B, 094C, 094D, 099A, 099B, 099C, 116

**Exercise Science** 001, 002, 003, 004A, 004B, 004C, 005A, 005B, 005C, 006A, 006B, 006C, 007A, 007B, 007C, 009A, 009B, 009C, 017A, 017B, 017C, 021A, 021B, 021C, 023A, 023B, 023C, 024A, 024B, 024C, 027, 028A, 028B, 028C, 029, 030, 035, 037A, 037B, 037C, 039, 040A, 040B, 040C, 041, 043A, 043B, 043C, 044A, 044B, 044C, 060A, 060B, 060C, 076A, 076B, 076C, 121, 125A, 125B, 125C, 130A, 130B, 130C, 155A, 155B, 155C, 170A, 170B, 170C, 171A, 171B, 171C, 172A, 172B, 172C, 175A, 175B, 175C, 180, 185A, 185B, 185C

## Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

### Core Curriculum

All students complete the following core courses in the first year of the program:

Subject & Number	Title	Units
Cardiovascular Technology 100	Physical Principles of Medicine I	2
Cardiovascular Technology 101	Cardiovascular Physiology I	4
Cardiovascular Technology 102	Medical Instrumentation I	3
Cardiovascular Technology 103	Laboratory Practicum and Proficiency Testing I	2
Cardiovascular Technology 111	Cardiovascular Physiology II	4
Cardiovascular Technology 113	Introduction to Clinical Practicum II	1
Cardiovascular Technology 114	Cardiovascular Pharmacology	2
	<b>Total</b>	<b>18</b>

### Area of Emphasis Invasive

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Cardiovascular Technology 109	X-Ray Physics and Radiation Safety	3
Cardiovascular Technology 116	Introduction to Invasive Cardiology	4
Cardiovascular Technology 122	Clinical Practicum I: Invasive Cardiology	2
Cardiovascular Technology 222	Diagnostic Procedures, Invasive Cardiology	5
Cardiovascular Technology 232	Clinical Practicum II: Invasive Cardiology	5
Cardiovascular Technology 252	Interventional Procedures II: Invasive Cardiology	5
Cardiovascular Technology 262	Clinical Practicum III: Invasive Cardiology	5
	<b>Total</b>	<b>29</b>
	<b>Total Required</b>	<b>47</b>
	Plus General Education and Elective Requirements	

### Area of Emphasis Adult Echocardiography

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Cardiovascular Technology 110	Physical Principles of Medicine II	3
Cardiovascular Technology 115	Introduction to Adult Echocardiography	4
Cardiovascular Technology 121	Clinical Practicum I: Adult Echocardiography	2
Cardiovascular Technology 221	Diagnostic Procedures I: Adult Echocardiography	5
Cardiovascular Technology 231	Clinical Practicum II: Adult Echocardiography	5
Cardiovascular Technology 251	Diagnostic Procedures II: Adult Echocardiography	5

Cardiovascular Technology 261

Clinical Practicum III: Adult Echocardiography	5
<b>Total</b>	<b>29</b>
<b>Total Required</b>	<b>47</b>
Plus General Education and Elective Requirements	

### Area of Emphasis Vascular Technology

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Cardiovascular Technology 110	Physical Principles of Medicine II	3
Cardiovascular Technology 117	Introduction to Vascular Technology	4
Cardiovascular Technology 123	Clinical Practicum I: Vascular Technology	2
Cardiovascular Technology 223	Diagnostic Procedures I: Vascular Technology	5
Cardiovascular Technology 233	Clinical Practicum II: Vascular Technology	5
Cardiovascular Technology 253	Diagnostic Procedures II: Vascular Technology	5
Cardiovascular Technology 263	Clinical Practicum III: Vascular Technology	5
	<b>Total</b>	<b>29</b>
	<b>Total Required</b>	<b>47</b>
	Plus General Education and Elective Requirements	

### Telemetry / ECG Technician Certificate of Achievement

**All Allied Health and Nursing students adhere to the graduation requirements outlined in the college catalog for the academic year in which they enter the program.**

The Telemetry/ECG Technician Certificate of Proficiency provides students with the skills necessary to gain employment as an ECG Technician, Exercise Treadmill Technician, Holter Monitor Technician, Pacemaker Technician, or Telemetry Technician. Students may choose to begin a career or update existing skills. Students successfully completing the certificate are employable at hospitals and healthcare facilities throughout the country.

**All classes must be completed with a "C" grade or higher.**

Subject & Number	Title	Units
Cardiovascular Technology 104	Electrocardiographic Theory	3
Cardiovascular Technology 105	Electrocardiographic Technique	2
Cardiovascular Technology 106	Advanced Electrocardiographic Studies	5
Cardiovascular Technology 108	Advanced Cardiac Monitoring	2
	<b>Total</b>	<b>12</b>



## CHEMISTRY

The chemistry major prepares students to transfer to four-year institutions for continued study in the field of chemistry. The program outlined below fulfills the lower division requirements recommended by the American Chemical Society and is typical of requirements at four-year transfer institutions. Students should consult the catalog of the transfer institution for specific requirements. Assistance in planning a course of study is available at the Counseling Center or from the Department of Chemistry faculty. The department recommends that students take one year of Russian or German (or high school equivalency) for credit under Humanities Area C, Section 2 of the associate degree general education requirements.

### Career Opportunities

Analytical Chemist\*  
 Biochemist\*  
 Biotechnologist\*  
 Chemistry Teacher\*  
 Dentist\*  
 Environmental Technician+  
 Forensic Specialist\*  
 Industrial Health Engineer\*  
 Laboratory Technician  
 Pharmacist\*  
 Physician\*  
 Research Chemist\*  
 Safety Manager  
 Sanitarian+  
 Veterinarian\*  
 Water-quality Analyst

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Analyze and interpret (evaluate) experimental data in order to identify trends and communicate results in a laboratory report.
2. Predict physical and chemical properties and changes of matter.
3. Analyze relationships between equilibrium, kinetics and the flow of energy.
4. Employ a microscopic view of matter to explain macroscopic phenomena.
5. Identify substances from qualitative analyses and spectroscopic methods.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Chemistry 231	Organic Chemistry I	5
Chemistry 232	Organic Chemistry II	5
Total		20

Select SIXTEEN (16) units from the following courses:

Subject & Number	Title	Units
Mathematics 180	Analytic Geometry & Calculus I	5
Mathematics 280	Analytic Geometry & Calculus II	4
Mathematics 281	Multivariable Calculus	4
Mathematics 285	Linear Algebra and Differential Equations	3
Physics 140	Mechanics of Solids	4
Physics 240	Electricity, Magnetism & Heat	4
Physics 241	Light, Wave Motion and Modern Physics	4
Total		16
Total Required		36
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who wishes to complete only the requirements listed above qualifies for a Certificate of Achievement in Chemistry. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## CHILD DEVELOPMENT

These courses are also appropriate for family child care providers, parents, administrators, health care professionals, and others working with children.

Courses are designed to partially meet lower division course preparation for students planning a bachelor's degree in Child Development.

### Career Opportunities

Adoption Counselor\*  
 Child Psychologist\*  
 Childcare Specialist  
 Day Camp Counselor\*  
 Development Specialist\*  
 Family Child Care Provider  
 Infant/Toddler Teacher+  
 Parent Educator\*  
 Planned Parenthood Worker  
 School Age Child Care Teacher/Site Supervisor  
 Preschool Teacher/Director+  
 Recreation Specialist\*  
 Social Service Specialist\*  
 \*Bachelor's Degree or higher required.  
 +Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Analyze and apply principles of scientific research to the study of human development; integrate and apply current theory and research to the observation, documentation and unbiased analysis of human behaviors.
2. Formulate practical applications of theory and research to developmentally appropriate practice in varying contexts: personal, classroom, agency and community.
3. Critically examine societal and personal attitudes, beliefs, values and assumptions towards the diverse contexts of child and human development including: ethnicity, gender, language, family structure, socio-economic status, age and ability.

4. Compare and examine differing social, economic, political, historical, cultural and family contexts and their effect on human development; demonstrate effective advocacy techniques related to current social issues pertaining to children, adults, and families.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

### Child Development Master Teacher

Subject & Number	Title	Units
Child Development 106	Practicum: Beginning Observation and Experience	1
Child Development 121	The Arts and Creativity for Young Children	3
Child Development 123	Principles and Practices of Programs and Curriculum For Young Children	3
Child Development 125	Child Growth and Development	3
Child Development 127	Science and Mathematics for Child Development	3
Child Development 129	Language and Literature for Child Development	3
Child Development 130	Curriculum: Design and Implementation	3
Child Development 131	Child, Family and Community	3
Child Development 132	Observation and Assessment: Field Experience Seminar	3
Child Development 133	Practicum - Field Experience: Student Teaching	2
Child Development 134	Health, Safety & Nutrition of Young Children	3
Child Development 141	Working with Children with Special Needs	3
Child Development/ Cross Cultural Studies 153	Teaching in a Diverse Society	3
Child Development/ Family Studies 115 or	Changing American Family	*3
Child Development 136	Adult Supervision	**3
	Total Required	39
	Plus General Education and Elective Requirements	

\*CD/FS 115 is required for transfer to SDSU

\*\*CD 136 is required for the Master Teacher Permit through California Teacher Credentialing

### Certificate of Achievement

Any student who completes the Child Development major requirement for Master Teacher qualifies for a Certificate of Achievement in Child Development. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses in the certificate must be completed with a letter grade of "C" or higher.**

### California Commission on Teacher Credentialing Child Development Permit

Any student who completes the above requirements and 16 units of GE from English/Communication, Humanities, Social Sciences and Math or Science may apply for a permit from the California Commission on Teacher Credentialing (CTC). There is an added work experience component. For full requirements go to [www.ctc.ca.gov](http://www.ctc.ca.gov) to contact the Child Development Department.

### Child Development Site Supervisor

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Child Development 106	Practicum: Beginning Observation and Experience	1
Child Development 121	The Arts and Creativity for Young Children	3
Child Development 123	Principles and Practices of Programs and Curriculum for Young Children	3
Child Development 125	Child Growth and Development	3
Child Development 127	Science and Mathematics for Child Development	3
Child Development 129	Language and Literature for Child Development	3
Child Development 130	Curriculum: Design and Implementation	3
Child Development 131	Child, Family and Community	3
Child Development 132	Observation and Assessment: Field Experience Seminar	3
Child Development 133	Practicum - Field Experience: Student Teaching	2
Child Development 134	Health, Safety & Nutrition of Young Children	3
Child Development 136	Adult Supervision	**3
Child Development 137	Administration of Child Development Programs I	3
Child Development 138	Administration of Child Development Programs II	3
Child Development 141	Working with Children with Special Needs	3
Child Development 153	Teaching in a Diverse Society	3
Child Development/ Family Studies 115	Changing American Family	*3
	Total Required	48
	Plus General Education and Elective Requirements	

\*CD/FS 115 is required for transfer to SDSU

\*\*CD 136 is required for the Master Teacher Permit through California Teacher Credentialing

### Certificate of Achievement

Any student who completes the Child Development major requirements for Master Teacher or Site Supervisor qualifies for a Certificate of Achievement in Child Development. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses in the certificate must be completed with a letter grade of "C" or higher.**

### California Commission on Teacher Credentialing Child Development Permit

Any student who completes the above requirements and 16 units of GE from English/Communication, Humanities, Social Sciences and Math or Science may apply for a permit from the California Commission on Teacher Credentialing (CTC). There is an added work experience component. For full requirements go to [www.ctc.ca.gov](http://www.ctc.ca.gov) to contact the Child Development Department.

### Certificate of Proficiency

The following Certificate of Proficiency is designed for the student who needs to be prepared to enter an entry-level job. A department-issued certificate may be awarded upon successful completion of a prescribed course of study. These certificates will not appear on a student's transcript.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Associate Teacher Certificate of Proficiency

The Associate Teacher is an entry level position in the child care and early education field. This certificate meets the educational requirements for a teacher for the State of California, Community Care Licensing and the California Commission on Teacher Credentialing Associate Teacher level Permit. The course includes approximately 15 days of the 50 day experience requirements for these positions.

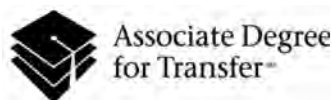
**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Child Development 106	Practicum: Beginning Observation and Experience	1
Child Development 123	Principles and Practices of Programs and Curriculum for Young Children	3
Child Development 125	Child Growth and Development	3
Child Development 131	Child, Family and Community	3
	<b>Total</b>	<b>10</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Child Development 121	The Arts and Creativity for Young Children	3
Child Development 127	Science and Mathematics for Child Development	3
Child Development 129	Language and Literature for Child Development	3
Child Development 143	Responsive Planning for Infant/Toddler Care	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>13</b>

Any student who completes this Certificate of Proficiency and 50 days of experience in an early childhood program may apply to the California Teachers Credentialing Office for an Associate Teacher Permit. For further information contact the Child Development department and [www.ctc.ca.gov](http://www.ctc.ca.gov).



## ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR TRANSFER (A.A.-T)

The Associate in Arts in Communication Studies for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 18 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Arts in Communication Studies for Transfer (A.A.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The Communication Studies degree is designed to provide the student with a broad base of communication classes that will provide training for entry into occupations in which verbal skills are important.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Exhibit the ability to listen actively.
2. Critically evaluate oral and written messages in order to assess credibility and validity.
3. Practice perspective-taking so as to display other-centered communication within and across diverse communities.
4. Appraise the strengths, limitations, and consequences of the use of various communication methods.
5. Demonstrate confident and competent use of language and nonverbal communication.



## Associate Degree Major Requirements

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Required Core

Subject & Number	Title	Units
Communication 122*	Public Speaking	3

### List A

Select TWO (2) of the following courses:

Communication 120*	Interpersonal Communication	3
Communication 137*	Critical Thinking in Group Communication	3
Communication 145*	Argumentation	3
	<b>Total</b>	<b>6</b>

### List B

Select TWO (2) of the following courses:

Any List A course not used above or		
Communication 123*	Advanced Public Speaking	3
Communication 124*	Intercultural Communication	3
Communication 135	Oral Interpretation of Literature	3
Communication 240	Speech and Debate Competition III	3
	<b>Total</b>	<b>6</b>

### List C

Select ONE (1) of the following courses:

Any List A or List B course not used above or		
Communication 128*	Global Communication	3
Communication 136*	Readers Theatre	3
Communication 144*	Communication Studies: Race and Ethnicity	3
	<b>Total</b>	<b>3</b>
	Units for the major	18
	Units for CSU GE or IGETC-CSU GE	37-39
	<b>Total units required for the degree</b>	<b>60</b>

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

## COMMUNICATION

(Formerly Speech Communications)

This program is designed to provide the student with a broad base of communication classes that will provide training for entry into occupations in which verbal skills are important. Major requirements for the four-year degree in Communication vary from institution to institution. Students should consult the catalog of the transfer institution for specific requirements.

### Career Opportunities

Advertising Assistant  
Announcer  
Arts Administrator\*  
College Professor\*  
Journalist\*  
Lawyer\*  
Lobbyist\*  
Narrator  
Politician  
Proofreader  
Public Relations Assistant  
Researcher\*  
Sales Manager  
Teacher/Instructor\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Exhibit the ability to listen actively.
2. Critically evaluate oral and written messages in order to assess credibility and validity.
3. Practice perspective-taking so as to display other-centered communication within and across diverse communities.
4. Appraise the strengths, limitations and consequences of the use of the various communication methods.
5. Demonstrate confident and competent use of language and nonverbal communication.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Communication 120	Interpersonal Communication	3
Communication 122	Public Speaking	3
Communication 137	Critical Thinking in Group Communication	3
Communication 145	Argumentation	3
	<b>Total</b>	<b>12</b>

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Communication 124	Intercultural Communication	3
Communication 128	Global Communication	3
Communication 144/ Cross Cultural Studies 144	Communication Studies: Race and Ethnicity	3
Media		
Communication 110	Mass Media and Society	3
	<b>Total</b>	<b>6</b>

Select THREE (3) units of the following courses:

Subject & Number	Title	Units
Communication 123	Advanced Public Speaking	3
Communication 135	Oral Interpretation of Literature	3
Communication 136	Readers Theatre	3
Communication 238	Speech and Debate Competition I	1
Communication 239	Speech and Debate Competition II	2
Communication 240	Speech and Debate Competition III	3
Communication 241	Speech and Debate Competition IV	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>21</b>
	<b>Plus General Education and Elective Requirements</b>	

All courses are not offered each semester. Check the class schedule for current offerings.

## COMPUTER SCIENCE INFORMATION SYSTEMS

The Computer Science Information Systems curricula provides a foundation in computing and information systems serving the diverse goals of the Grossmont community: employment in various phases of the computing industry, transfer to a baccalaureate institution for continued study in the computer and information sciences, training in selected topics for application in other professions or for personal enrichment, and advanced study for returning computing professionals. Throughout, emphasis is placed on blending fundamental theory and technique with practical applications in business, scientific and academic computing. A guiding principle is the use of intense hands-on instruction with state-of-the-art computer technology.

Five related but distinct areas of emphasis designed to provide corresponding job entry points are available as two-year curricula: Computer Programming, Small Computer Specialist, Local-Area Network (LAN) Support Specialist, Web Design and Software Engineering. Completion of the Computer Science Information Systems core courses or their equivalent plus any one area of emphasis satisfies the major requirements for the Associate Degree.

### Career Opportunities

Computer Support Specialist  
Communications Technician  
Computer Maintenance Technician  
Computer Systems Analysts\*  
Database Administrators\*  
Information Specialist\*  
LAN (Local Area Network) Administrator  
Network Systems & Data Communication Analysts  
Office Administrators  
Programmer  
Software Engineers\*  
Software Technician  
Systems Analyst\*  
Technical Support Representative  
\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcome (PSLOs) below is an outcome that students will achieve after completing specific degree/certificate requirements in this program.  
Students will transfer, enter the workforce and promote life-long learning.

### Equivalent Course List

The following Grossmont and Cuyamaca College courses are considered similar enough to be treated as equivalent. No Modification of Major forms will be required for the departments to accept these courses from Cuyamaca College.

Grossmont Course	Similar Cuyamaca Course
CSIS 110	CIS 110
CSIS 112	CIS 190
CSIS 113	CIS 191
CSIS 114	CIS 120
CSIS 119	CS 119
CSIS 133	CIS 212
CSIS 134	CIS 211
CSIS 135	CIS 215
CSIS 136	CIS 216
CSIS 137	GD 222
CSIS 165	CS 289
CSIS 172	CIS 105
CSIS 174	CIS 140
CSIS 190	CIS 221
CSIS 213	CIS 291
CSIS 276	CIS 240
CSIS 288	CS 180 A-B-C-D
CSIS 289	CS 280 A-B-C-D
CSIS 293	CS 182
CSIS 294	CS 282
CSIS 296	CS 181
CSIS 297	CS 281

### Associate Degree Major Requirements

#### Area of Emphasis

#### Computer Programming

An area of emphasis intended for the two-year vocational student who plans to gain entry level employment as a programmer for systems. Students who complete the sequence successfully are able to write or maintain code for program modules from design documents and specifications prepared by senior programmers or analysts.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Computer Science Info. Systems 112	Windows Operating Systems	3
or Computer Science Info. Systems 113	Introduction to Linux	(3)
Computer Science Info. Systems 119	Introduction to Computer Programming	3
Computer Science Info. Systems 280	Job Search Assistance and Retention	2
Computer Science Info. Systems 281	Directed Work Experience	2
or Computer Science Info. Systems 282	Directed Work Experience	(3)
	Total	10-11

Select TWO (2) of the following sequences:

Subject & Number	Title	Units
Computer Science Info. Systems 288 and Computer Science Info. Systems 289 or Computer Science Info. Systems 290 and Computer Science Info. Systems 291 or Computer Science Info. Systems 293 and Computer Science Info. Systems 294	Introduction to Visual Basic Programming	(4)
	Intermediate Visual Basic Programming	(4)
	Introduction to C# Programming	(4)
	Intermediate C# Programming	(4)
	Introduction to Java Programming	(4)
	Intermediate Java Programming and Fundamental Data Structures	(4)
or Computer Science Info. Systems 296 and Computer Science Info. Systems 297	Introduction to C++ Programming	(4)
	Intermediate C++ Programming	(4)
	Total	16

Select ONE (1) of the following courses (the course cannot be part of the prior sequence):

Subject & Number	Title	Units
Computer Science Info. Systems 165	Assembly Language and Machine Architecture	4
Computer Science Info. Systems 220	Software Engineering I	3
Computer Science Info. Systems 270	Advanced Computer Programming	3
Computer Science Info. Systems 276	Introduction to SQL	3
Computer Science Info. Systems 288	Introduction to Visual Basic Programming	4
Computer Science Info. Systems 290	Introduction to C# Programming	4
Computer Science Info. Systems 293	Introduction to Java Programming	4
Computer Science Info. Systems 295	Android Application Development with Java	4
Computer Science Info. Systems 296	Introduction to C ++ Programming	4
	Total	3-4
	Total Required	29-31
	Plus General Education and Elective Requirements	

### Area of Emphasis Local Area Network (LAN) Support Specialist

An area of emphasis leading to an entry level position which specializes in the planning, installation, development, operation and maintenance of local area networks (LANs). Students completing this sequence will be expected to assist LAN managers in large and medium-sized organizations. Advanced students may be assigned as the sole LAN support person in a smaller firm.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Computer Science Info. Systems 110	Principles of Information Systems	4
Computer Science Info. Systems 112	Windows Operating System	3
Computer Science Info. Systems 113	Introduction to Linux	3
Computer Science Info. Systems 114	Small Computer Systems	3
Computer Science Info. Systems 119	Introduction to Computer Programming	3
Computer Science Info. Systems 140	Introduction to Local Area Network (LAN) Management	4
Computer Science Info. Systems 142	Introduction to Networking	2
Computer Science Info. Systems 143	Local Area Networks	2
Computer Science Info. Systems 144	Wide Area Networks	2
Computer Science Info. Systems 145	Introduction to TCP/IP	2
Computer Science Info. Systems 280	Job Search Assistance and Retention	2
Computer Science Info. Systems 281	Directed Work Experience	2
or Computer Science Info. Systems 282	Directed Work Experience	(3)
	Total	32-33

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Business 120	Financial Accounting	4
Business 128	Business Communication	3
Computer Science Info. Systems 146	Network Security	3
Computer Science Info. Systems 147	Internet Marketing	3
Computer Science Info. Systems 276	Introduction to SQL	3
	Total	3-4
	Total Required	35-36
	Plus General Education and Elective Requirements	

### Area of Emphasis Small Computer Specialist

An area of emphasis aimed at preparing students for positions involving direct use of computers for business administration, decision support, and financial applications. Students who complete this sequence are qualified to enter careers in which they function as end users, application developers and computer support technicians.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Computer Science Info. Systems 100	Basic Keyboarding	1
Computer Science Info. Systems 112	Windows Operating System	3



Computer Science Info. Systems 172	Introduction to Microcomputer Applications	2
or		
Computer Science Info. Systems 110	Principles of Information Systems	(4)
Computer Science Info. Systems 173	Microsoft Word	3
Computer Science Info. Systems 174	Microsoft Access	3
Computer Science Info. Systems 175	Microsoft Excel	3
Computer Science Info. Systems 177	Microsoft Power Point	3
	<b>Total</b>	<b>18-20</b>

Select ONE (1) of the following:

<b>Subject &amp; Number</b>	<b>Title</b>	<b>Units</b>
Computer Science Info. Systems 113	Introduction to Linux	3
Computer Science Info. Systems 114	Small Computer Systems	3
Computer Science Info. Systems 132	Introduction of Web Development	3
Computer Science Info. Systems 147	Internet Marketing	3
Computer Science Info. Systems 176	Computerized Accounting Applications	2
Computer Science Info. Systems 281	Directed Work Experience	2
	<b>Total</b>	<b>2-3</b>
	<b>Total Required</b>	<b>20-23</b>
	Plus General Education and Elective Requirements	

### Recommended Electives:

<b>Subject &amp; Number</b>	<b>Title</b>	<b>Units</b>
Business 110	Introduction to Business	3
Business 120	Financial Accounting	4
Business 121	Managerial Accounting	4
Business 125	Business Law	3
Business 128	Business Communication	3
Communication 122	Public Speaking	3

### Area of Emphasis Web Design

An area of emphasis in preparing students for entry-level positions creating websites. The curriculum provides the student with practical experience using state of the art software and hardware typically found in the field of professional web design.

**Note: All courses must be completed with a letter grade of "C" or higher.**

<b>Subject &amp; Number</b>	<b>Title</b>	<b>Units</b>
Computer Science Info. Systems 110	Principles of Information Systems	4
or		
Computer Science Info. Systems 105	Introduction to Computing	(3)
Computer Science Info. Systems 112	Windows Operating Systems	3
Computer Science Info. Systems 132	Introduction to Web Development	3
	<b>Total</b>	<b>9-10</b>

Select THREE (3) of the following courses:

<b>Subject &amp; Number</b>	<b>Title</b>	<b>Units</b>
Computer Science Info. Systems 133	Intermediate Web Development	3
Computer Science Info. Systems 135	JavaScript Programming	3
Computer Science Info. Systems 136	Dynamic Web Applications	4
Computer Science Info. Systems 137	Introduction to Flash	3
Computer Science Info. Systems 147	Internet Marketing	3
Computer Science Info. Systems 151	Introduction to Photoshop	3
or		
Computer Science Info. Systems 152	Introduction to 3D Animation Applications	(3)
Computer Science Info. Systems 190/		
Multimedia 190	Digital Multimedia	4
Computer Science Info. Systems 293	Introduction to Java Programming	4
	<b>Total</b>	<b>9-12</b>
	<b>Total Required</b>	<b>18-22</b>
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only the requirements for one of the areas of emphasis plus the Computer Science Information Systems core curriculum qualifies for a Certificate of Achievement in:

- Computer Science Information Systems – Computer Programming
- Computer Science Information Systems – Small Computer Specialist
- Computer Science Information Systems – Web Design
- Computer Science Information Systems – Local Area Network (LAN) Support Specialist

An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## CROSS-CULTURAL STUDIES

The Cross-Cultural Studies major prepares students to transfer to four-year institutions for continued study in African American Studies, Mexican American/Latino Studies, Asian American Studies, American Indian Studies, or Women's Studies. The program outlined below partially fulfills lower division requirements in those areas. For special requirements, transfer students should consult the catalog of the transfer institution for specific requirements. Cross-cultural classes in general are helpful for further studies in such diverse fields as history, sociology, ethnic studies, third world studies and political science.

### Career Opportunities

Curator\*  
Diplomat Corps\*  
Foreign Officer\*  
Import/Export Agent+  
Lawyer\*  
Law Enforcement\*  
Museum Technician

Sociologist\*  
Social Worker\*  
Teacher\*  
Travel Agent  
Writer

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Define and appreciate cultural diversity.
2. Contrast past forms of history with the history of inclusiveness.
3. Analyze the sources/causes of inequality and discrimination.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Cross-Cultural Studies 114/ Sociology 114	Introduction to the Sociology of Minority Group Relations	3
Cross-Cultural Studies 115	Cross-Cultural Awareness	3
	<b>Total</b>	<b>6</b>

Select SIX (6) units consisting of ONE (1) complete sequence from the following:

Subject & Number	Title	Units
Cross-Cultural Studies 118/ History 118 and Cross-Cultural Studies 119/ History 119 or Cross-Cultural Studies 130/ History 130 and Cross-Cultural Studies 131/ History 131 or Cross-Cultural Studies 180/ History 180 and Cross-Cultural Studies 181/ History 181	U.S. History: Chicano/ Chicana Perspectives I  U.S. History: Chicano/ Chicana Perspectives II  U.S. History and Cultures: Native American Perspectives I  U.S. History and Cultures: Native American Perspectives II  U.S. History: Black Perspectives I  U.S. History: Black Perspectives II	3  3  (3) (3)  (3)  (3)
	<b>Total</b>	<b>6</b>

Select SIX (6) units from any other Cross-Cultural Studies courses.

<b>Total</b>	<b>6</b>
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### Additional Requirements:

At least one semester of a college level foreign language (3 to 5 units). The department recommends exposure to a foreign language other than a student's native language.

Total	3-5
Total Required	21-23
Plus General Education and Elective Requirements	

## CULINARY ARTS

The Culinary Arts Associate Degree program focuses on the development of flexible skills and knowledge essential for success in a cooking career. Modern food service is evolving rapidly thus providing a tremendous variety of workplaces from the exclusive dining room to the school cafeteria, from small intimate restaurants to the large hotel restaurants and catering facilities. Other opportunities include catering and personal chef. The associate degree will enable the student to understand the workings of food and the interplay among ingredients, cooking methods, cost factors, nutrition and a satisfying dining experience.

This program is also offered for Barona Resort and Casino employees participating in the Barona Institute Apprenticeship Program.

### Career Opportunities

Baker  
Banquet Chef  
Boucher  
Breakfast Cook  
Cafeteria Manager  
Cake Decorator  
Catering Manager  
Cook  
Cook's Assistant  
Cookbook Author  
Dining Room Manager  
Executive Chef  
Food and Beverage Manager  
Food Researcher  
Food Server/Wait Person  
Food Stylist  
Garde Manager Chef  
Kitchen Manager  
Master Chef  
Menu Consultant  
Menu Planner  
Pantry Cook  
Pastry Chef  
Personal Chef  
Private Chef  
Purchasing Steward  
Recipe Developer  
Recipe Tester  
Restaurant Critic  
Restaurant Manager  
Restaurant Owner  
Sous Chef

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate critical thinking in the food service environment.
2. Demonstrate appropriate behaviors in the work place environment.
3. Apply job acquisition skills.

**Associate Degree Major Requirements**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Culinary Arts 160	Quantity Food Preparation and Production	3
Culinary Arts 163	Food Purchasing for Culinary Arts	1
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 166	Menu Management	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 171	Intermediate Culinary Skills	3
Culinary Arts 172	Principles of Soup, Stock and Sauce Preparation	3
Culinary Arts 173	Principles of Buffet and Catering	3
Culinary Arts 174	Principles of Baking and Pastry Making	3
Culinary Arts 175	Healthy Lifestyle Cuisine	3
Culinary Arts 178	Fruits, Vegetables, Ice Carving and Competition	3
Culinary Arts 180	Advanced Food Preparation for Fine Dining	3
Culinary Arts 280	Seminar for Work Experience for Culinary Arts	1
Culinary Arts 281	Work Experience in Culinary Arts	2
Culinary Arts 282	Advanced Work Experience in Culinary Arts	2
	<b>Total</b>	<b>35</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Health Education 155	Realities of Nutrition	3
Culinary Arts 164	International Cooking	3
Culinary Arts 167	Wines of the World	3
Culinary Arts 170	Introduction to Catering Management	3
Culinary Arts 176	Advanced Baking and Pastry Arts	3
Culinary Arts 177	Commercial Baking	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>38</b>
	Plus General Education and Elective Requirements	

**Certificate of Achievement**

Any student who chooses to complete only the requirements listed above for the major qualifies for a Certificate of Achievement in Culinary Arts. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

**Baking and Pastry****Associate Degree Major Requirements**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Culinary Arts 160	Quantity Food Preparation and Production	3
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 171	Intermediate Culinary Skills	3
Culinary Arts 174	Principles of Baking and Pastry	3
Culinary Arts 176	Advanced Baking and Pastry	3
Culinary Arts 177	Commercial Baking	3
Culinary Arts 180	Advanced Food Preparation for Fine Dining	3
Culinary Arts 183	Pastry Skills in Bread Baking	3
Culinary Arts 184	Pastry Skills in Chocolate Preparation	3
Culinary Arts 185	Sugar Work and Decorative Centerpieces	3
Culinary Arts 186	Pastry Skills in Cake Decorating	3
Culinary Arts 280	Seminar for Work Experience for Culinary Arts	1
Culinary Arts 281	Work Experience in Culinary Arts	2
Culinary Arts 282	Advanced Work Experience in Culinary Arts	2
	<b>Total</b>	<b>39</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Culinary Arts 164	International Cooking	3
Culinary Arts 175	Healthy Lifestyle Cuisine	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>42</b>
	Plus General Education and Elective Requirements	

**Certificate of Achievement**

Any student who chooses to complete only the requirements listed above for the major qualifies for the Certificate of Achievement in Baking and Pastry. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

**Culinary Entrepreneurship**

Students who plan to prepare for a career in the culinary field as a manager or owner of a business will find that success is contingent on both expertise in culinary arts and a basic business foundation. Careers are available in a wide spectrum of enterprises such as:

- Fine dining restaurants and hotels
- Food service in the regional casinos
- Bed and breakfast enterprises
- Catering businesses
- Personal chef

This hybrid program combines the basics of culinary arts with the fundamental business skills that prepare students to enter a career that has unlimited potential for the future.



## Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 109	Elementary Accounting	3
Business 146	Marketing	3
Business 148	Customer Relations Management	1.5
Business 156	Principles of Management	3
Business 158	Introduction to Hospitality and Tourism Management	3
Business Office Technology 172	Introduction to Microcomputer Applications	2
Culinary Arts 160	Quantity Food Preparation and Production	3
Culinary Arts 163	Food Purchasing for Culinary Arts	1
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 166	Menu Management	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 171	Intermediate Culinary Skills	3
	<b>Total</b>	<b>27.5</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Business 115	Human Relations in Business	3
Business 140	Entrepreneurship: Developing a Business Plan	3
Cross-Cultural Studies 115	Cross-Cultural Awareness	3
Cross-Cultural Studies 170	American Indian Tribal Governments and Indian Sovereignty	3
Culinary Arts 170	Introduction to Catering Management	3
Culinary Arts 173	Principles of Buffet and Catering	3
	<b>Total</b>	<b>3</b>
	<b>Total Required Plus General Education and Elective Requirements</b>	<b>30.5</b>

## Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Culinary Entrepreneurship. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## Line Cook

### Certificate of Achievement

The Line Cook certificate prepares the student who has no exposure to the field and those with limited experience to immediately enter any Food Service operation in a line cook entry-level position with greater opportunity for advancement. The Food Service industry offers unlimited career opportunities and valuable experience. The foundation courses that can be completed in one or two semesters may lead to a Certificate of Achievement in Culinary Arts or with general education courses, an Associate of Science Degree in Culinary Arts.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 171	Intermediate Culinary Skills	3
Culinary Arts 172	Principles of Soup, Stock and Sauce Preparation	3
Culinary Arts 180	Advanced Food Preparation for Fine Dining	3
	<b>Total</b>	<b>13</b>

## Banquet Cook

### Certificate of Achievement

The Banquet Cook certificate prepares the student who has no exposure to the field and those with limited experience to immediately enter any Food Service banquet operation in a banquet cook entry-level position with greater opportunity for advancement. The Food Service industry offers unlimited career opportunities and valuable experience. The foundation courses that can be completed in one or two semesters may lead to a Certificate of Achievement in Culinary Arts or with general education courses, an Associate of Science Degree in Culinary Arts.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Culinary Arts 160	Quantity Food Preparation and Production	3
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 171	Intermediate Culinary Skills	3
Culinary Arts 172	Principles of Soup, Stock and Sauce Preparation	3
	<b>Total</b>	<b>13</b>

## Pastry Cook

### Certificate of Achievement

The Pastry Cook certificate prepares the student who has no exposure to the field and those with limited experience to immediately enter any food service operation (bakery, pastry department) in a pastry cook entry-level position with greater opportunity for advancement. The food service industry offers unlimited career opportunities and valuable experience in bakery and pastry department settings. The foundation courses that can be completed in one or two semesters may lead to a Certificate of Achievement in Culinary Arts or with general education courses, an Associate of Science Degree in Culinary Arts.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 174	Principles of Baking and Pastry Making	3
Culinary Arts 176	Advanced Baking and Pastry Arts	3
Culinary Arts 177	Commercial Baking	3
	<b>Total</b>	<b>13</b>

## Prep Cook Certificate of Achievement

The Prep Cook certificate prepares the student who has no exposure to the field and those with limited experience to immediately enter any food service operation in a prep cook entry-level position with greater opportunity for advancement. The food service industry offers unlimited career opportunities and valuable experience. The foundation courses that can be completed in one or two semesters may lead to a Certificate of Achievement in Culinary Arts or with general education courses, an Associate of Science Degree in Culinary Arts.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Culinary Arts 160	Quantity Food Preparation and Production	3
Culinary Arts 165	Sanitation for Food Service	1
Culinary Arts 169	Essential Skills for Culinary Arts	3
Culinary Arts 172	Principles of Soup, Stock and Sauce Preparation	3
Culinary Arts 180	Advanced Food Preparation for Fine Dining	3
Total		13

## DANCE

The associate degree dance program is designed to provide a broad base of dance classes that will provide training for transfer to similar programs at four-year institutions and will prepare students for employment in a variety of areas of dance.

### Career Opportunities

Choreographer\*  
Dance Director  
Dance Historian\*  
Dancer  
Dance Teacher\*  
Dance Therapist\*  
Fitness/Aerobics Instructor  
Movement Notator  
Performer  
Reconstructor  
Recreation Leader

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate an awareness of the concept of artistic expression through movement.
2. Identify and practice proper body alignment for dance.
3. Demonstrate a working knowledge of vocabulary as related to dance.
4. Develop aesthetic values as they relate to dance. Based upon these values; will critically think about and analyze dance as an art form.

## Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Dance 080A	Modern I	1.5
Dance 080B	Modern II	1.5
Dance 084A	Jazz I	1.5
Dance 084B	Jazz II	1.5
Dance 088A	Ballet I	1.5
Dance 088B	Ballet II	1.5
Dance 094A or B or C or D	American Street Dance I or II or III or IV	1.5
Dance 110	Dance History	3
Dance 118A	Pilates I	1.5
Dance 205	Choreography and Improvisation I	2
Total		17

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Dance 080C	Modern III	1.5
Dance 080D	Modern IV	1.5
Dance 084C	Jazz III	1.5
Dance 084D	Jazz IV	1.5
Dance 088C	Ballet III	1.5
Dance 088D	Ballet IV	1.5
Total		3

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Dance 201	Dance Theatre Performance I	1
Dance 202	Dance Theatre Performance II	1.5
Dance 203	Dance Theatre Performance III	2
Dance 223	Student Choreography for Production I	2.5
Dance 224	Student Choreography for Production II	2.5
Dance 225	Student Choreography for Production III	2.5
Dance 227	Performance Ensemble I	1
Dance 228	Performance Ensemble II	1.5
Dance 229	Performance Ensemble III	2
Dance 230	Performance Ensemble III	2.5
Total		2-5

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Dance 071 A or B	Studio Workshop in Tap Dance I or II	1
Dance 072 A or B	Studio Workshop in Modern Dance I or II	1
Dance 074 A or B	Studio Workshop in Jazz Dance I or II	1
Dance 078 A or B	Studio Workshop in Ballet I or II	1
Dance 081 A or B or C or D	Tap I or II or III or IV	1.5
Dance 082 A or B	Social and Ballroom Dance I or II	1.5
Dance 094 A or B or C or D	American Street Dance I or II or III or IV	1.5
Dance 099 A or B or C	Studio Workshop in Pointe I or II or III	1
Dance 118 B or C or D	Pilates II or III or IV	1.5
Dance 206	Choreography and Improvisation II	2
Total		2-3.5
Total Required		24-28.5
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above qualifies for a Certificate of Achievement in Dance. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## DISABILITY SERVICES MANAGEMENT

This program is designed to prepare the student to provide support to individuals with disabilities in a variety of home, work, school and recreation environments. Emphasis is placed on students applying their skills in increasingly complex systems of support. The program is structured to encourage transfer to four-year institutions. Health Sciences 110 and 150 plus certification in CPR and First Aid meet the minimum requirements for the California State Department of Developmental Services Residential Services Specialist (RSS) Certificate.

### Career Opportunities

Counselor\*  
Group-Home Manager  
Occupational Therapist\*  
Psychologist\*  
Recreational Therapist  
Speech Pathologist\*  
Social Worker\*  
Special Education Teacher\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Apply principles of inclusion for people with disabilities in a variety of environments including home, work, school, community and recreation.
2. Gain an understanding of the factors impacting quality of life for persons with disabilities.
3. Implement a variety of training techniques that will enhance a person with a disability in daily life and independence.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 156	Principles of Management	3
Family Studies 120	Human Development	3
Health Education 120	Personal Health and Lifestyles	3
Health Sciences 110	Disability and Society	3
Health Sciences 150	Techniques for Developmental Disabilities Specialist	3
Health Sciences 205	Alternative/Augmentative Communication and Assistive Technology for People with Disabilities	3
Health Sciences 206	Behavior Management and Training Techniques	3
Psychology 120	Introductory Psychology	3
	<b>Total</b>	<b>24</b>

Select FOUR (4) units using any combination of the following courses:

Subject & Number	Title	Units
Health Sciences 152 A-B	Work Experience for Disability Services Management	2
Health Sciences 154	Work Experience for Disability Services Management	4
	<b>Total</b>	<b>4</b>

Select any TWO (2) of the following courses (minimum of 4.5 units):

Subject & Number	Title	Units
Biology 120	Principles of Biology	4
Biology 140	Human Anatomy	5
Biology 144	Human Anatomy and Physiology I	4
Business 115	Human Relations in Business	3
Child Development 141	Working with Children with Special Needs	3
Communication 120	Interpersonal Communication	3
or		
Communication 122	Public Speaking	(3)
Exercise Science 290A	Beginning Teaching Techniques and Methods in Exercise Science	1.5
or		
Exercise Science 290B	Intermediate Teaching Techniques and Methods in Exercise Science	(1.5)
or		
Exercise Science 290C	Advanced Teaching Techniques and Methods in Exercise Science	(1.5)
Health Education 155	Realities of Nutrition	3
Psychology 134	Human Sexuality	3
Sociology 120	Introductory Sociology	3
Sociology 125	Marriage, Family, and Alternate Life Styles	3
	<b>Total</b>	<b>4.5-9</b>
	<b>Total Required</b>	<b>32.5-37</b>
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only the courses required for the above major and who has CPR and First Aid certification qualifies for a Certificate of Achievement in Disability Services Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**



## ECONOMICS

Economics is the study of how a society chooses to use its limited resources to produce, exchange, and consume goods and services. The study is divided into two broad areas - macroeconomics and microeconomics. Macroeconomics deals with broad, economy-wide issues such as economic growth, inflation, unemployment, and depression. Microeconomics focuses on choices and behavior of individual participants in the economy - producers, workers, employers and consumers - and on issues involving competition, monopoly, and inequality in income and wealth. Microeconomics can also provide insights in such areas as family relationships, crime, and discrimination of many sorts.

The associate degree program with a major in economics will prepare students to transfer to four-year institutions where they can complete baccalaureate degrees in economics and other disciplines. It is important to understand that economics is an impacted major at most University of California campuses and at several California State University campuses. It is recommended, therefore, that students consult the catalog of the transfer institution for specific requirements. By and large, jobs for economists in teaching, government, or large corporations require a graduate degree in the field, while a bachelor's degree in economics will qualify students for the same kinds of jobs available for holders of general business degrees or general liberal arts degrees.

### Career Opportunities

Auditor\*  
Claim Adjuster+  
Claim Examiner+  
Computer Systems Engineer\*  
Credit Analyst\*  
Employment Interviewer  
Financial Planner\*  
Fund Raiser\*  
Hospital Insurance Representative  
Market Research Analyst  
Statistician\*  
Treasurer\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Employ their discipline knowledge and skills in service to the community; for example, present themselves and interact with others in a professional manner, communicate economic concepts orally, convey economic ideas in a variety of written forms.
2. Demonstrate knowledge of micro- and macroeconomic theories.

### Associate Degree Major Requirements

**All courses in the major must be completed with a "C" grade or higher.**

Subject & Number	Title	Units
Economics 110	Economic Issues and Policies	3
Economics 120	Principles of Macroeconomics	3
Economics 121	Principles of Microeconomics	3

Economics 215	Statistics for Business & Economics	3
or		
Mathematics 160	Elementary Statistics	(4)
Business 120	Financial Accounting	4
Computer Science	Principles of Information Systems	4
Information Systems 110		
Political Science 121	Introduction to U.S. Government and Politics	3
	<b>Total</b>	<b>23-24</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Political Science 130	Introduction to International Relations	3
Sociology 120	Introductory Sociology	3
	<b>Total</b>	<b>3</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Mathematics 178*	Calculus for Business, Social and Behavioral Sciences	4
Mathematics 180*	Analytic Geometry and Calculus I	5
	<b>Total</b>	<b>4-5</b>
	<b>Total Required Plus General Education and Elective Requirements</b>	<b>30-32</b>

\*Students planning to transfer to four-year institutions to complete a bachelor's degree in economics should be aware that the major at such institutions often requires a three-semester sequence in calculus equivalent to Mathematics 180-280-281.

## ENGLISH

The English major fulfills lower division requirements at most four-year colleges and universities and thus provides a broadbased foundation for transfer. For particular requirements, transfer students should consult the catalog of the transfer institution for specific requirements.

The study of English gives life-long pleasures to students in exploring and understanding how language works to express human ideas and feelings. English course work also helps people succeed in such diverse fields as teaching, writing, editing, journalism, advertising, public relations, law, insurance, communications, film and video work, politics, business, and medicine.

### Career Opportunities

Advertising Manager\*  
Announcer (Radio and TV)  
Clergy Member  
College English Professor\*  
Fiction/Nonfiction Writer  
Foreign Service Officer  
Freelance Writer\*  
Fund Raiser\*  
Media Planner\*  
Reporter\*  
Researcher\*  
\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Understand the uses of language to express ideas in a variety of texts.
2. Develop reading efficiency and appreciation in order to critically engage, analyze, and evaluate multiple genres of texts.
3. Make effective choices that demonstrate their autonomy as expository and/or creative writers.
4. Critically analyze, assess, contextualize, and synthesize sources within their writing.
5. Recognize, appreciate, and evaluate multiple cultural perspectives.
6. Participate in various communities, such as academic, artistic, civic, and professional.

### Associate Degree Major Requirements Core Curriculum

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
English 120	College Composition and Reading	3
English 122	Introduction to Literature	3
English 124	Advanced Composition: Critical Reasoning and Writing	3
English 126	Creative Writing	3
	<b>Total</b>	<b>12</b>

Select SIX (6) units from the following:

Subject & Number	Title	Units
English 221	British Literature I	3
English 222	British Literature II	3
English 231	American Literature I	3
English 232	American Literature II	3
English 241	Literature of the Western World I	3
English 242	Literature of the Western World II	3
	<b>Total</b>	<b>6</b>

Select THREE (3) units from the following:

Subject & Number	Title	Units
English 215	Mythology	3
English 236	Chicano Literature	3
or		
Cross-Cultural Studies 236	Chicano Literature	(3)
English 237	American Indian Literature	3
or		
Cross-Cultural Studies 237	American Indian Literature	(3)
English 238	Black Literature	3
or		
Cross-Cultural Studies 238	Black Literature	(3)
	<b>Total</b>	<b>3</b>

Select THREE (3) units from the following:

Subject & Number	Title	Units
History 100	Early World History	3
History 101	Modern World History	3
History 105	Early Western Civilization	3
History 106	Modern Western Civilization	3
Humanities 120	European Humanities	3

Humanities 170	World Humanities	3
Philosophy 112	The Classical Mind	3
Philosophy 114	The Medieval Mind	3
Philosophy 116	The Modern Mind	3
Philosophy 118	The Contemporary Mind	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>24</b>
	Plus General Education and Elective Requirements	

### Recommended Electives:

Students planning to transfer to four-year institutions to complete a bachelor's degree in English are STRONGLY urged to take the following courses, depending on the requirements at those schools.

TWO (2) sequential semesters of a single foreign language	<b>Units</b>
	10
<b>Total</b>	<b>10</b>

### Certificate of Achievement

Any student who chooses to complete only those courses required for the above major (i.e., 24 units) qualifies for a Certificate of Achievement in English. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

### Area of Emphasis Creative Writing

**Note: All courses must be completed with a letter grade of "C" or higher.**

Select SIX (6) additional units from the following:

Subject & Number	Title	Units
English 130	Short Fiction Writing I	3
English 131	Short Fiction Writing II	3
English 132	Short Fiction Writing III	3
English 133	Short Fiction Writing IV	3
English 134	Creative Nonfiction Writing I	3
English 135	Creative Nonfiction Writing II	3
English 136	Creative Nonfiction Writing III	3
English 137	Creative Nonfiction Writing IV	3
English 140	Poetry Writing I	3
English 141	Poetry Writing II	3
English 142	Poetry Writing III	3
English 143	Poetry Writing IV	3
English 145	The Acorn Review: Editing and Production I	3
English 146	The Acorn Review: Editing and Production II	3
English 147	The Acorn Review: Editing and Production III	3
English 148	The Acorn Review: Editing and Production IV	3
English 160	Drama Writing I	3
English 161	Drama Writing II	3
English 162	Drama Writing III	3
English 163	Drama Writing IV	3
English 175	Novel Writing I	3
English 176	Novel Writing II	3
English 177	Novel Writing III	3
English 178	Novel Writing IV	3
	<b>Total</b>	<b>6</b>
	<b>Total Required</b>	<b>30</b>
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only those courses required for the above major (i.e., 30 units) qualifies for a Certificate of Achievement in English – Creative Writing. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## EXERCISE SCIENCE AND WELLNESS

The Department of Exercise Science and Wellness (formerly the Department of Physical Education) offers a solid academic foundation for further study in the field of exercise science, kinesiology and/or physical education. The primary emphasis of the Exercise Science and Wellness major program is to prepare students for successful transfer to baccalaureate (four-year) institutions as well as for entry-level jobs within the fitness industry. The course package for majors is modeled on the preparation for major at San Diego State University, and allows for an emphasis either in Fitness, Nutrition and Health in line with SDSU. The package may also satisfy many requirements for most other California State University institutions as well, but students should check the catalog of the school being considered for its specific requirements.

This department also offers a Fitness Specialist Certificate program which is designed to prepare students to take nationally recognized certification examinations offered throughout the fitness industry. Courses required for the certificate are on page 82. For more details, contact the Exercise Science Department.

### Career Opportunities

Athletic Trainer\*

Fitness Professional (personal trainer, aerobic dance instructor, fitness club instructor, etc.)

Physical Therapy\*

Recreational Sports Coach\*

Secondary School Coach\*

Teacher\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate knowledge, skills and appreciation of exercise science principles.
2. Identify the basic principles for maintaining an active and healthy lifestyle.

### Associate Degree Major Requirements Core Curriculum

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Exercise Science 005A or B or C	Beginning, or Intermediate or Advanced Aerobic Fitness and Weight Training	1.5
Exercise Science 250	Introduction to Kinesiology	3
Exercise Science 255	Care and Prevention of Athletic Injuries	3

Exercise Science 290A or B or C	Beginning, or Intermediate, or Advanced Teaching Techniques and Methods in Exercise Science	1.5
Biology 140	Human Anatomy	5
Chemistry 115 or Chemistry 120	Fundamentals of Chemistry	4
Communication 122	Preparation for General Chemistry	(4)
Health Education 158 or Health Education 255	Public Speaking	3
Psychology 120	Nutrition for Fitness and Sports	3
Sociology 120	Science of Nutrition	(3)
	Introductory Psychology	3
	Introductory Sociology	3
	<b>Total</b>	<b>30</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Biology 215	Statistics for Life Sciences	3
Psychology 215	Statistics for the Behavioral Sciences	3
Sociology 215	Statistics for the Behavioral Sciences	3
Mathematics 160	Elementary Statistics	4
	<b>Total</b>	<b>3-4</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Exercise Science 006A or B or C	Beginning or Intermediate or Advanced Total Body Fitness	1
Exercise Science 009A or B or C	Beginning or Intermediate or Advanced Aerobic Dance Exercise	1
Exercise Science 023A or B or C	Beginning or Intermediate or Advanced Weight Training	1
Exercise Science 043A or B or C	Beginning or Intermediate or Advanced Swimming	1
Exercise Science 060A or B or C	Beginning or Intermediate or Advanced Badminton	1
Exercise Science 076A or B or C	Beginning or Intermediate or Advanced Tennis	1
Exercise Science 125A or B or C	Beginning or Intermediate or Advanced Golf	1-1.5
Exercise Science 130A or B or C	Beginning or Intermediate or Advanced Gymnastics	1-1.5
Exercise Science 171A or B or C	Beginning or Intermediate or Advanced Softball	1
Exercise Science 175A or B or C	Beginning or Intermediate or Advanced Volleyball	1
	<b>Total</b>	<b>1-1.5</b>
	<b>Total Required</b>	<b>34-35.5</b>
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only those courses required for the above major (i.e. 34 – 35.5 units) qualifies for a Certificate of Achievement in Exercise Science and Wellness. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**



### Area of Emphasis Athletic Training

In addition to completion of the core curriculum the following courses must be completed:

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Biology 230	Principles of Cellular, Molecular and Evolutionary Biology	4
Biology 240	Principles of Ecology, Evolution and Organismal Biology	5
Chemistry 116	Introductory Organic Chemistry	4
Chemistry 141	General Chemistry I	5
Computer Science Info. Systems 110	Principles of Information Systems	4
	Total	22
	Total Required	55.5-56
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only those courses required for the above major (i.e. 55.5 - 56 units) qualifies for a Certificate of Achievement in Exercise Science and Wellness with an emphasis in Athletic Training. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Fitness Specialist Certification

The Exercise Science and Wellness Department offers a Fitness Specialist Certificate. Designed as a 1-year program with sequenced courses, this certificate prepares students to successfully pass national fitness certification exams as well as work in the fitness industry. The courses for the Fitness Specialist Certification are different than those required for transfer to 4-year institutions in Exercise Science or Kinesiology; courses are intended as vocational preparation rather than a step for a baccalaureate degree. For more details, contact the ES department chair at (619) 644-7400.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Exercise Science 255	Care and Prevention of Athletic Injuries	3
Exercise Science 291	Anatomy and Kinesiology For Fitness Specialists	3
Exercise Science 292	Exercise Physiology for Fitness Specialists	3
Exercise Science 293	Strength Training/ Fitness Assessments for Fitness Specialists	2
Exercise Science 294	Exercise Program Design and Special Populations	3
Exercise Science 196	Community Service Learning for Fitness Specialists	1
Exercise Science 296	Internship Seminar for Fitness Specialists	.5
Health Education 158	Nutrition for Fitness and Sport	3
	Total	18.5

## FRENCH

This program is designed to provide students with skills in understanding, speaking, reading, and writing French. It also gives students a greater understanding of French culture and civilization and prepares them for greater international and domestic career opportunities.

For the suggested sequence of courses to be taken, and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of Foreign Languages.

### Career Opportunities

Customs Agent/Inspector  
Diplomatic Officer\*  
Fashion Coordinator+  
Foreign Broadcast Specialist\*  
Foreign Correspondent\*  
Immigration Inspector  
Journalist\*  
Teacher/Professor\*  
Travel Agent+  
United Nations Guide

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.
2. Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city, life, health and well-being, professions, and occupations, the arts, current events, and politics.
3. Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
French 120	French I	5
French 121	French II	5
French 220	French III	5
French 221	French IV	5
French 250	Conversational French I	3
French 251	Conversational French II	3
History 106	Modern Western Civilization	3
or		
Humanities 120	European Humanities	(3)
	Total Required	29
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who wishes to complete only the requirements listed above qualifies for a Certificate of Achievement in French. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## General Studies AA - Humanities and Fine Arts

Minimum 18 units required. Minimum 6 units from Humanities and 6 units from Fine Arts. The remaining 6 units can be taken from either category.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Courses in this emphasis are designed to cultivate intellect, imagination, sensibility and sensitivity. Students will study great works of the human imagination and will examine their own esthetic and creative experience. Awareness and appreciation of humanistic disciplines will be explored and encouraged. Students will be exposed to the study of human culture from a variety of perspectives.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Examine their own esthetic and creative experience.
2. Develop an awareness and appreciation of humanistic disciplines.
3. Analyze the study of human culture from a variety of perspectives.

### Humanities

ASL 120, 121, 130, 140, 160, 220, 221, 250  
 ARBC 120, 121, 122, 123, 220, 221, 250, 251  
 CHIN 120, 121, 220, 221, 250, 251  
 COMM 124, 137, 144, 145  
 CCS 122, 123, 144, 147, 149, 152, 236, 238  
 ENGL 112, 118, 122, 201, 215, 217, 218, 219, 221, 222, 225, 226, 227, 228, 231, 232, 236, 237, 238, 241, 242  
 FREN 120, 121, 152, 220, 221, 250, 251  
 GERM 120, 121, 220, 221, 250, 251  
 HIST 100, 101, 103, 105, 106, 126, 135, 136, 137, 148  
 HUM 110, 120, 125, 130, 135, 160, 170  
 ITAL 120, 121, 220, 221, 250, 251  
 JAPN 120, 121, 149, 220, 221, 250, 251  
 PHIL 110, 111, 112, 114, 116, 118, 140, 141, 145, 150, 155  
 RELG 120, 130, 140, 150  
 RUSS 120, 121, 220, 221, 250, 251  
 SPAN 120, 121, 122, 123, 141, 145, 220, 221, 250, 251

### Fine Arts

ART 100, 120, 121, 124, 125, 126, 127, 129, 130, 131, 132, 140, 141, 142, 143, 145, 146, 147, 171, 172, 189  
 CCS 126, 134  
 DANC 110  
 ENGL 126  
 MCOM 111, 189  
 MUS 110, 111, 115, 116, 117, 189  
 PHOT 150, 151, 154  
 THTR 101, 110, 130, 131, 143, 144, 189

## General Studies AS - Science and Quantitative Reasoning

Minimum 18 units required. Minimum 6 units from Science and 6 units from Analytical Thinking and Quantitative Reasoning. The remaining 6 units can be taken from any category.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

This emphasis is intended to involve inquiry into the physical universe and its life forms with consideration of facts and principles which form the foundations of living and non-living systems. Students will explore scientific methodologies as investigative tools, the acquisition and use of evidence, and the past and present influences of science on world civilizations. Understanding and analysis of basic mathematical and quantitative reasoning including analytical thinking concepts will be explored.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Explore scientific methodologies as investigative tools.
2. Acquire and analyze evidence.
3. Distinguish past and present influences of science on world civilizations.
4. Identify and analyze basic mathematical and quantitative reasoning concepts.

### Science

ANTH 130, 131  
 ASTR 110, 112, 120  
 BIO 105, 110, 112, 114, 118, 120, 140, 141, 141L, 142, 144, 145, 150, 152, 180, 230, 240  
 CHEM 102, 110, 113, 115, 116, 120, 141, 142, 231, 232  
 GEOG 120, 121, 140, 150  
 GEOL 104, 110, 111, 121, 150, 210, 220, 230  
 OCEA 112, 113, 150  
 PSC 100, 110, 111  
 PHYC 110, 130, 131, 140, 240, 241  
 SCI 110

### Analytical Thinking and Quantitative Reasoning

ANTH 215  
 BIO 215  
 CSIS 119, 165, 293, 294, 296, 297  
 ECON 215  
 GEOG 104  
 MATH 120, 125, 126, 150, 160, 170, 175, 176, 177, 178, 180, 245, 280, 281, 284, 285  
 PHIL 125, 130  
 PSY 215  
 SOC 215

## General Studies AA - Social and Behavioral Sciences

Minimum 18 units required. Minimum 6 units from Social Sciences and 6 units from Behavioral Sciences. The remaining 6 units can be taken from either category.

**Note: All courses in the major must be completed with a letter grade of “C” or higher.**

These courses prepare students for a better understanding of the interrelationships of people and institutions and the complex world of cultures in which we live, a world that involves the dynamic patterns of social, political, economic and human factors by examining them in a scientific manner within their proper historical context. Students focus on people as members of society; develop an awareness of the method of inquiry used by the social and behavioral sciences. It shall be designed to stimulate critical thinking about the ways people act and have acted in response to their societies and should promote appreciation of how societies and social subgroups operate.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Identify and apply methods of inquiry used by social and behavioral sciences.
2. Critically interpret the ways people act and have acted in response to their societies.
3. Distinguish and critique how societies and social subgroups operate.

### Social Sciences

AOJ 110, 200, 240  
CCS 114, 118, 119, 124, 127, 128, 130, 131, 132, 133, 135, 143, 144, 145, 153, 154, 155, 170, 172, 174, 176, 178, 180, 181  
CD 115, 145, 153  
COMM 144  
COUN 120  
ECON 110, 120, 121, 261  
FS 115  
GEOG 106, 130, 170  
HESC 110  
HIST 100, 101, 103, 105, 106, 108, 109, 113, 114, 115, 118, 119, 122, 123, 124, 130, 131, 136, 148, 154, 155, 180, 181  
MCOM 110  
POSC 120, 121, 124, 130, 135, 140, 150, 160  
SOC 114

### Behavioral Sciences

ANTH 120, 140  
CD 115, 125, 153  
COMM 124, 128  
CCS 115, 125, 153  
FS 115, 120  
HED 120, 155, 201  
PSY 120, 125, 130, 132, 134, 138, 140, 150, 170, 180, 220  
SOC 120, 125, 130, 138, 140

## General Studies AA - Wellness and Self-Development

Minimum 18 units required. Minimum 6 units from Wellness and 6 units from Self Development. The remaining 6 units can be taken from either category. A maximum of 3 units of credit allowed for ES/DANC activity courses.

**Note: All courses in the major must be completed with a letter grade of “C” or higher.**

This emphasis is designed to equip students with information and tools for lifelong wellness and self-development as integrated beings. Students will be acquainted with the vast landscape of wellness and self-development, taking into account the psychological, biological, developmental, physical factors, and they will be able to make effective decisions about optimizing their own wellness, lifestyle, and performance.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Identify the psychological, biological, developmental and physical factors that make up wellness and self development.
2. Recognize and demonstrate effective decisions about optimizing their own wellness, lifestyle and performance.

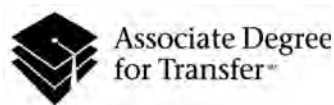
### Wellness

BIO 118  
ES 250, 255  
HED 101, 105, 120, 155, 158, 201, 255  
**Activity:** DANC 080A-D, 081A-D, 082A-B, 084A-D, 088A-D, 094A-D, 099A-C, 118A-D  
**Activity:** ES 001, 002, 003, 004A-C, 005A-C, 006A-C, 007A-C, 009A-C, 021A-C, 023A-C, 024A-C, 027, 028A-C, 029, 030, 035, 037A-C, 039, 040A-C, 041, 043A-C, 044A-C, 060A-C, 076A-C, 125A-C, 130A-C, 155A-C, 170A-C, 171A-C, 172A-C, 175A-C, 180, 185A-C

### Self Development

BIO 112  
BUS 195  
CCS 115, 153  
CD 125, 153  
CHEM 110  
COMM 128  
COUN 110, 120, 130  
ENGL 219  
FS 110, 120, 129  
HESC 110  
LIR 110  
PSY 130, 132, 134, 140, 150, 180, 220  
SOC 125





## ASSOCIATE IN SCIENCE IN GEOGRAPHY FOR TRANSFER (A.S.-T)

The Associate in Science in Geography for Transfer (A.S.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 19 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Geography for Transfer (A.S.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

Geography is the study of spatial aspects of the physical environment, human activities and landscapes, and the nature of their interactions. Geographers draw upon theories from both the physical and social sciences. As physical scientists, they study the processes and resulting features of the earth's surface, such as vegetation, climate, soils, landforms, and resources. As social scientists, geographers explore such topics as the arrangement of societies on the earth's surface, land use patterns, urbanization, resources and energy usage, and environmental conservation. Therefore, geography includes a wide range and variety of academic disciplines in both the physical and social sciences. It is truly an integrating discipline.

The Earth Sciences Department strives to impart the following Program-level Student Learning Outcomes (PSLOs) through the successful completion of the specific degree requirements in this program. Students will:

1. Apply the scientific method
2. Demonstrate spatial literacy
3. Analyze special information and patterns
4. Evaluate relationships between humans and the environment
5. Employ geoscience technology for spatial data management

### Associate Degree Major Requirements

**Note:** All courses must be completed with a letter grade of "C" or higher.

#### Required Core

Subject & Number	Title	Units
Geography 120*	Elements of Physical Geography	3
Geography 121*	Physical Geography Laboratory	1
Geography 130*	Human and Cultural Geography	3
	<b>Total</b>	<b>7</b>

#### List A:

Geography 104	Introduction to Geographic Information Science	3
Geography 170*	The Geography of California	3
	<b>Total</b>	<b>6</b>

#### List B

Geography 140*	Introduction to Meteorology	3
Geography 150	Field Study of Natural History of the Greater San Diego Region	3
	<b>Total</b>	<b>6</b>
	Units for the major	19
	Units for CSU GE or IGETC-CSU GE	37-39
	<b>Total units required for the degree</b>	<b>60</b>

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

## GEOGRAPHY

Geography is the study of spatial aspects of the physical environment, human activities and landscapes, and the nature of their interactions. Geographers draw upon theories from both the physical and social sciences. As physical scientists, they study the processes and resulting features of the earth's surface, such as vegetation, climate, soils, landforms, and resources. As social scientists, geographers explore such topics as the arrangement of societies on the earth's surface, land use patterns, urbanization, resources and energy usage, and environmental conservation. Therefore, geography includes a wide range and variety of academic disciplines in both the physical and social sciences. It is truly an integrating discipline.

The associate degree program with a major in geography will prepare students to transfer to four-year institutions where they can complete baccalaureate degrees in geography and other disciplines. It is recommended, however, that students consult the catalog of the transfer institution for specific requirements. Many university geography graduates enter teaching professions at all levels. Multiple federal, city, county and state governments, as well as private companies, hire geographers in the fields of resource management, geographic information systems, urban planning, and environmental planning because of their broad training. For example, the U.S. Geologic Survey traditionally hires geographers in map making, air photo interpretation, satellite image analysis, and land use mapping.

### Career Opportunities

Aerial Photograph Interpreter  
 Computer Mapping (G.I.S.)\*  
 Demographer\*  
 Ecologist\*  
 Environmental Analyst\*  
 Geographer\*  
 Land Planner\*  
 Meteorologist\*  
 Satellite Image Processor\*  
 Site Planner\*  
 Spatial Analyst\*  
 Surveyor  
 Teacher/Professor\*  
 Water Resources Manager\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Apply the scientific method.
2. Demonstrate spatial literacy.
3. Analyze spatial information and patterns.
4. Evaluate relationships between humans and the environment.
5. Employ geoscience technology for spatial data management.

### Associate Degree Major Requirements

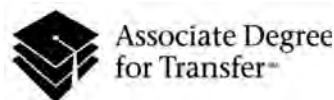
**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Geography 104	Introduction to Geographic Information Science	3
Geography 120	Elements of Physical Geography	3
Geography 121	Physical Geography Laboratory	1
Geography 130	Human and Cultural Geography	3
Geography 140	Introduction to Meteorology	3
Geography 150	Field Study of the Natural History of the Greater San Diego Region	3
Geography 170	The Geography of California	3
Geology 110	Planet Earth	3
	Total Required	22
	Plus General Education and Elective Requirements	

### Recommended Electives:

Subject & Number	Title	Units
Geography 172	Field Exploration: Colorado Plateau	3
Geography 173	Field Exploration: Cascade Range/Modoc Plateau	3
Geography 174	Field Exploration: Basin and Range Province	3
Geography 175	Field Exploration: California Coastal Mountains	3
Geography 176	Field Exploration: Sierra Nevada	3

Mathematics 150	Introduction to Computer Programming Applications in Mathematics	3
Mathematics 160	Elementary Statistics	4
	Three semesters of a foreign language or high school equivalency	15



## ASSOCIATE IN SCIENCE IN GEOLOGY FOR TRANSFER (A.S.-T)

The Associate in Science in Geology for Transfer (A.S.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 27 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Geology for Transfer (A.S.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

Geology is the scientific study of the planet earth. Geologists study the origin and evolution of the earth and various life forms, the composition of the earth, its structure, and the many processes that modify the earth's crust. Geology is an interdisciplinary science with many applied aspects including: the study of natural resources such as water, petroleum, and minerals; the mitigation of earth's hazards such as earthquakes, landslides, and volcanoes; and land use planning. Students who are curious about our planet and its environment, and want to meet the challenges presented by the interaction of humans with the earth should consider geology as a major.

The Earth Sciences Department strives to impart the following Program-level Student Learning Outcomes (PSLOs) through the successful completion of the specific degree requirements in this program. Students will:

1. Recognize and explain the role of fundamentals geologic principles, such as plate tectonic theory and deep time, in the interpretation of observed geologic phenomena.
2. Research, evaluate, and cite scientific information in order to formulate coherent summaries of earth processes.
3. Define the scientific method and apply it to observed geologic phenomena.
4. Interpret geologic processes using underlying chemical properties and physical laws. Measure, manipulate, and interpret scientific data.

### Associate Degree Major Requirements

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Geology 110*	Planet Earth	3
Geology 111*	Planet Earth Laboratory	1
Geology 121*	Earth History	4
Chemistry 141*	General Chemistry I	5
Chemistry 142*	General Chemistry II	5
Math 180*	Analytic Geometry & Calculus I	5
Math 280*	Analytic Geometry & Calculus II	4
Units for the major		27
Units for CSU GE or IGETC-CSU GE		37-39
Total units required for the degree		60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

## GEOLOGY

Geology is the scientific study of the planet earth. Geologists study the origin and evolution of the earth and various life forms, the composition of the earth, its structures, and the many processes which modify the earth's crust. Geology is an interdisciplinary science with many applied aspects including: the study of natural resources such as water, petroleum, and minerals; the mitigation of earth's hazards such as earthquakes, landslides, and volcanoes; and land use planning. Students who are curious about our planet and its environment, and want to meet the challenges presented by the interaction of humans with the earth should consider geology as a major.

The curriculum leads to the Associate in Science degree in Geology and will prepare students for upper division coursework at a baccalaureate institution. However, it is recommended that students consult the catalog of the transfer institution for specific course requirements.

### Career Opportunities

Engineering Geologist\*  
 Environmental Geologist\*  
 Geochemist\*  
 Geology Assistant  
 Geophysicist\*  
 Hydrogeologist\*  
 Marine Geologist\*  
 Mineralogist\*  
 Oceanographer\*  
 Paleobotanist/Paleontologist\*

Petroleum Geologist\*

Petrologist\*

Seismologist\*

Soils Technician

Teacher/Professor\*

Volcanologist\*

Waste Management Geologist\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Recognize and explain the role of fundamental geologic principles, such as plate tectonic theory and deep time, in the interpretation of observed geologic phenomena.
2. Research, evaluate, and cite scientific information in order to formulate coherent summaries of earth processes.
3. Define the scientific method and apply it to observed geologic phenomena.
4. Interpret geologic processes using underlying chemical properties and physical laws.
5. Measure, manipulate, and interpret scientific data.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Geology 110	Planet Earth	3
Geology 111	Planet Earth Laboratory	1
Geology 121	Earth History	4
Mathematics 180	Analytic Geometry & Calculus I	5
Total		23

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Biology 120	Principles of Biology	4
Mathematics 280	Analytic Geometry & Calculus II	4
Physics 140	Mechanics of Solids	4
Physics 240	Electricity, Magnetism & Heat	4
Total		8

Select a minimum of SIX (6) units from the following:

Subject & Number	Title	Units
Geography 104	Introduction to Geographic Information Science (GIS)	3
Astronomy 110	Descriptive Astronomy	3
Geography 120	Elements of Physical Geography	3
Geography 140	Introduction to Meteorology	3
Geology 150	Field Study of the Natural History of the Greater San Diego Region	3
Geology 162	Geologic Field Studies: Southern California Mountain Areas	1
Geology 163	Geologic Field Studies: Mojave Desert and Adjacent Areas	1
Geology 164	Geologic Field Studies: Southern California Coastal Areas	1



Geology 165	Geologic Field Studies: Colorado Desert/Salton Trough Area	1
Geology 172	Field Exploration: Colorado Plateau	3
Geology 173	Field Exploration: Cascade Range/ Modoc Plateau	3
Geology 174	Field Exploration: Basin and Range Province	3
Geology 175	Field Exploration: California Coastal Mountains	3
Geology 176	Field Exploration: Sierra Nevada	3
Geology 210	Geology of California	4
Geology 220	Geology of National Parks	4
Geology 230	Natural Disasters	3
Oceanography 112	Introduction to Oceanography	3
Oceanography 113	Oceanography Laboratory	1
Total		6
Total Required		37
Plus General Education and Elective Requirements		

## GERMAN

This program is designed to provide students with skills in understanding, speaking, reading, and writing German. It also gives students a greater understanding of German culture and civilization and prepares them for greater international and domestic career opportunities. For the suggested sequence of courses to be taken, and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of Foreign Languages.

### Career Opportunities

Diplomatic Officer\*  
Foreign Correspondent\*  
Foreign Exchange Clerk  
Foreign Service Officer  
Intelligence Specialist\*  
Interpreter/Translator\*  
Immigration Inspector  
Journalist\*  
Teacher/Professor\*  
Public Relations Specialist\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.
2. Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city, life, health and well-being, professions, and the arts, current events, and politics.
3. Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

## Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
German 120	German I	5
German 121	German II	5
German 220	German III	5
German 221	German IV	5
German 250	Conversational German I	3
German 251	Conversational German II	3
History 106	Modern Western Civilization	3
or		
Humanities 120	European Humanities	3
Total Required		29
Plus General Education and Elective Requirements		

## Certificate of Achievement

Any student who wishes to complete only the requirements listed above qualifies for a Certificate of Achievement in German. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**



Associate Degree  
for Transfer™

## ASSOCIATE IN ARTS IN HISTORY FOR TRANSFER (A.A.-T)

The Associate in Arts in History for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the statewide Academic Senate. A total of 18-20 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog).

History is the study of the human past. As a discipline, history remains a chief foundation within the humanities and social sciences. Its broad and interdisciplinary approach offers many theoretical and practical applications for interpreting and understanding human society. The study of history emphasizes reading, writing, critical thinking, research, thesis formulation, and debate. The history major prepares students to transfer to a four-year institution for continued and advanced study in the field of history or its related disciplines. In turn, a major in history provides knowledge and training for planning careers in history, education, law, archival work, historic sites and museums, library studies, journalism, research, documentary filmmaking, government, non-profit organizations, record and information management.

The following requirements must be met to be awarded an Associate Degree in History for Transfer (A.A.-T):

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will be able to:

1. Analyze and synthesize primary and secondary source documents in response to an historical thesis or question.
2. Explain relationships between the causes of historical events and their effects.
3. Describe historical actors and events and explain their significance in historical and historiographical context.

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

## Associate Major Degree Requirements

### Required Core

Subject & Number	Title	Units
History 108*	Early American History	3
History 109*	Modern American History	3
	Total	6

### List A:

Select TWO (2) of the following courses:

History 100*	Early World History	3
or		
History 105*	Early Western Civilization	(3)
and		
History 101*	Modern World History	3
or		
History 106*	Modern Western Civilization	(3)
	Total	6

### List B:

Select ONE (1) course from GROUP 1 and ONE (1) course from GROUP 2

#### Group 1

A foreign language course which is articulated as fulfilling CSU GE Area C2 (3-5 units)

or

Select ONE (1) of the following diversity courses (or History 100 or History 101 if not used in the Required Core)

Subject & Number	Title	Units
History 103*	Twentieth Century World History	3
History 114*	Comparative History of the Early Americas	3
History 115*	Comparative History of the Modern Americas	3
History 118*	U.S. History: Chicano/ Chicana Perspectives I	3

History 119*	U.S. History: Chicano/ Chicana Perspectives II	3
History 122*	Women in Early American History	3
History 123*	Women in Modern American History	3
History 130*	U.S. History and Cultures: Native American Perspectives I	3
History 131*	U.S. History and Cultures: Native American Perspectives II	3
History 137*	History of East Asia	3
History 148*	Emergence of the Modern Middle East	3
History 154*	Early History of Women in World Civilization	3
History 155*	Modern History of Women in World Civilization	3
History 180*	U.S. History: Black Perspectives I	3
History 181*	U.S. History: Black Perspectives II	3

#### Group 2

Select ONE (1) course not already used in the Required Core or List A.

Subject & Number	Title	Units
History 103*	Twentieth Century World History	3
History 105*	Early Western Civilization	3
History 106*	Modern Western Civilization	3
History 112*	American History: 1945-Present	3
History 113*	American Military History	3
History 114*	Comparative History of the Early Americas	3
History 115*	Comparative History of the Modern Americas	3
History 118*	U.S. History: Chicano/ Chicana Perspectives I	3
History 119*	U.S. History: Chicano/ Chicana Perspectives II	3
History 122*	Women in Early American History	3
History 123*	Women in Modern American History	3
History 124*	History of California	3
History 126*	History of Mexico	3
History 130*	U.S. History and Cultures: Native American Perspectives I	3
History 131*	U.S. History and Cultures: Native American Perspectives II	3
History 135*	Ancient History of Western Civilization	3
History 136*	Survey of Medieval History	3
History 137*	History of East Asia	3
History 148*	Emergence of the Modern Middle East	3
History 154*	Early History of Women in World Civilization	3
History 155*	Modern History of Women in World Civilization	3
History 180*	U.S. History: Black Perspectives I	3

History 181*	U.S. History:	
	Black Perspectives II	3
	Units for the major	18-20
	Units for CSU GE or IGETC-CSU GE	37-39
	Total units required for the degree	60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

## HOSPITALITY AND TOURISM MANAGEMENT

The Hospitality and Tourism Management major provides students with a solid undergraduate program emphasizing basic business management principles and their specific application to the hospitality and tourism industry. Students completing the program are prepared to transfer to a Bachelor of Science program at a four-year institution.

### Career Opportunities

Airline Reservation Agent  
Executive Housekeeper  
Flight Attendant +  
Front Office Manager +  
Golf/Country Club Manager \*  
Hotel Manager/Supplier \*  
Public Relations Specialist \*  
Restaurant Manager \*

\*Bachelor's Degree or higher required.

+Bachelor's Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Identify the many market segments of the tourism and hospitality industry and discuss the key management issues related to the industry.
2. Apply best business management practices in ethical decision making in the hospitality and tourism industry workplace.
3. Describe and apply total quality management principles in the hospitality and tourism industry situations.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 120	Financial Accounting	4
Business 121	Managerial Accounting	4
Business 125	Business Law: Legal Environment of Business	3
Business 128	Business Communication	3
Business 158	Introduction to Hospitality and Tourism Management	3
Business 160	Hospitality Managerial Accounting and Controls	3
Computer Science Info. Systems 110	Principles of Information Systems	4
Economics 120	Principles of Macroeconomics	3
Economics 121	Principles of Microeconomics	3
Mathematics 160	Elementary Statistics	4
Mathematics 178	Calculus for Business, Social and Behavioral Science	4
	Total Required	38
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Hospitality Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## INTERNATIONAL BUSINESS

The International Business program is designed to prepare students with the background and technology necessary to work in a business engaged in international trade. The curriculum is also of value to the individual who is planning to start his/her own import/export business. Internships in local international trade organizations are an important part of the program.

### Career Opportunities

Broker  
Customs Broker  
Freight Forwarder  
Import-Export Agent  
Import-Export Specialist  
International Finance & Accounting  
International Law  
International Planning & Management  
International Purchasing & Management

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Evaluate and decide international business courses of action by applying academic and practical knowledge/skills acquired in international business, international marketing, international finance and international logistic courses.
2. Compose a successful marketing plan by the correct analysis of quantitative and qualitative international economic and market indicators.
3. Select the most cost effective and timely methods of international product delivery utilizing contemporary logistic to achieve profitability and customer satisfaction.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 120	Financial Accounting	4
Business 250	Introduction to International Business	3
Business 251	Import/Export Procedures	2
Business 252	Global Sourcing, Buying and Manufacturing	1.5
Business 253	International Marketing: Expanding Exports	3
Business 256	International Financial Transactions	2
Business 257	International Transportation	1.5
Business 258	The Cultural Dimension in International Business	3
	Total	20



Select TWO (2) of the following courses:

Subject & Number	Title	Units
Business 121	Managerial Accounting	4
Business 140	Entrepreneurship: Developing a Business Plan	3
Business 146	Marketing	3
Business 265A-B-C-D or	Internship in International Business	1
Business 266 or	Internship in International Business	(2)
Business 267	Internship in International Business	(3)
	<b>Total</b>	<b>4-7</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Communication 124	Intercultural Communication	3
French 152	The French Speaking World: A Cultural Perspective	3
Geography 130	Human and Cultural Geography	3
History 137	History of East Asia	3
History 147	Middle East History and Culture	3
Humanities 130	East Asian Humanities	3
Spanish 141	Spanish & Latin American Culture	3
or		
ONE (1) course in any foreign language		3-5
	<b>Total</b>	<b>3-5</b>
	<b>Total Required</b>	<b>27-32</b>
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who wishes to complete only the requirements listed above qualifies for a Certificate of Achievement in International Business. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## JAPANESE

This program is designed to provide students with skills in understanding, speaking, reading, and writing Japanese. It also gives students a greater understanding of Japanese culture and civilization and prepares them for greater international and domestic career opportunities. For the suggested sequence of courses to be taken, and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of World Languages.

### Career Opportunities

Advertising  
Bilingual Aide  
Foreign Correspondent\*  
Foreign Broadcast Specialist\*  
Import-Export Agent  
In-Country Representative  
Intelligence Specialist  
Journalist\*  
Manufacturer's Representative  
Sales Person  
Scientist Linguist  
Teacher/Professor\*

Translator/Interpreter\*

Travel Agent

United Nations Guide

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.
2. Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city, life, health and well-being, professions, and occupations, the arts, current events, and politics.
3. Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Japanese 120	Japanese I	5
Japanese 121	Japanese II	5
Japanese 220	Japanese III	5
Japanese 221	Japanese IV	5
Japanese 250	Conversational Japanese I	3
Japanese 251	Conversational Japanese II	3
	<b>Total</b>	<b>26</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Cross-Cultural Studies 149	Japanese Culture and Civilization	3
or		
Japanese 149	Japanese Culture and Civilization	(3)
History 137	History of East Asia	3
	<b>Total Required</b>	<b>29</b>
	Plus General Education and Elective Requirements	

## MANAGEMENT

The management curriculum is designed to provide the student with the skills necessary for success as a manager in today's demanding organizational climate. The program is of benefit to the man or woman who aspires to a mid-level or higher management position in any type of organization including business, government and service organizations. Since much of the curriculum is transferable to four-year institutions, the program not only provides readily usable management skills for the two-year student, but it also provides a base for those students who later wish to undertake more advanced study in business.

### Career Opportunities

Claim Adjuster+  
Employment Interviewer  
Inventory Manager  
Management Analyst\*  
Management Consultant\*  
Management Trainee  
Operations Manager  
Office Manager+

Production Controller+  
Trust Officer, Bank\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Recognize the effects of globalization on the functions of management such as planning, organizing, leading and controlling.
2. Discuss and explain the issues affecting businesses today ethics, diversity, time management, the global economy, communications and group dynamics.
3. Identify and apply ways to positively initiate change in today's diverse and challenging work environment while focusing on core competencies.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 115	Human Relations in Business	3
Business 120	Financial Accounting	4
Business 125	Business Law: Legal Environment of Business	3
Business 128	Business Communication	3
Business 155	Human Resources Management	3
Business 156	Principles of Management	3
Communication 122	Public Speaking	3
Total		22

Select FOUR (4) units from the following courses:

Subject & Number	Title	Units
Business 176	Computerized Accounting Applications	2
Business Office Technology 172	Introduction to Microcomputer Applications	2
Computer Science Info. Systems 110	Principles of Information Systems	4
Computer Science Info. Systems 175	Microsoft Excel	3
Total		4

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Business 118	Retail Management	3
Business 121	Managerial Accounting	4
Business 142	Personal Selling & Persuasion	3
Business 144	Advertising	3
Business 146	Marketing	3
Business 159A-B-C-D	Management Internship	3
Economics 120	Principles of Macroeconomics	3
Total		3-4
Total Required		29-30
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who wishes to complete only the requirements listed above qualifies for a Certificate of Achievement in Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## MARKETING

Marketing consists of all the activities that direct the flow of goods and services from producer to consumer. This may include market research, physical distribution, wholesaling, advertising, personal selling, and retailing. Although most jobs are in wholesale and retail trade, this broad field offers many employment opportunities. The internship experience is an important feature of the program.

### Career Opportunities

Account Executive\*  
Advertising Manager\*  
Booking Agent  
Claim Adjustor+  
Consumer Affairs Director\*  
Financial Planner\*  
Import-Export Agent+  
Internal Revenue Investigator\*  
Management Trainee  
Marketing Manager+  
Purchasing Agent  
Retail Manager  
Securities Trader\*  
Stockbroker\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize marketing analysis and strategy to identify marketing opportunities.
2. Define ideal target markets for broad industries as well as specific products and services, utilizing demographic and psychographic descriptions.
3. Develop effective promotional mix strategies for specific products and services, and their related target markets.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 120	Financial Accounting	4
Business 125	Business Law: Legal Environment of Business	3
Business 128	Business Communication	3
Business 146	Marketing	3
Business 156	Principles of Management	3
Business Office Technology 172	Introduction to Microcomputer Applications	2
Total		18

Select THREE (3) of the following courses:

Subject & Number	Title	Units
Business 118	Retail Management	3
Business 142	Personal Selling and Persuasion	3
Business 144	Advertising	3
Business 252	Global Sourcing, Buying and Manufacturing	1.5
Business 253	International Marketing: Expanding Exports	3
Total		7.5-9

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Business 115	Human Relations in Business	3
Business 137 A-B-C-D	Marketing Internship	3
Business 140	Entrepreneurship: Developing a Business Plan	3
Business 250	Introduction to International Business	3
Business 258	The Cultural Dimension of International Business	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>28.5-30</b>
	<b>Plus General Education Requirements</b>	

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above qualifies for a Certificate of Achievement in that area. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**



Associate Degree  
for Transfer™

## ASSOCIATE IN SCIENCE IN MATHEMATICS FOR TRANSFER (A.S.-T)

The Associate in Science in Mathematics for Transfer (A.S.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the statewide Academic Senate. A total of 19-20 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Mathematics for Transfer (A.S.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

Mathematics has become essential and pervasive in the workplace. The study of mathematics provides a

foundation for problem solving and logical reasoning skills. In today's highly technological society, the study of mathematics has become increasingly important. The Associate in Science degree in Mathematics offers a solid foundation for further study in mathematics and other mathematics-related fields. The primary emphasis of the mathematics major program is to prepare students for transfer to four-year institutions. Students should consult the catalog of the transfer school being considered for its specific requirements.

The Mathematics Department strives to impart the following Program-level Student Learning Outcomes (PSLOs) through the successful completion of the degree requirements. Students will:

1. Use appropriate theorems, formulas, and algorithms to solve mathematical problems from algebra, trigonometry, calculus and geometry.
2. Use appropriate technology to solve problems requiring mathematics.
3. Formulate, analyze, and differentiate mathematical functions numerically, graphically and symbolically and transition between these representations.
4. Communicate the mathematical process and assess the validity of the solution.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Associate Degree Major Requirements

#### Required Core:

Subject & Number	Title	Units
Mathematics 180*	Analytic Geometry and Calculus I	5
Mathematics 280*	Analytic Geometry and Calculus II	4
Mathematics 281*	Multivariable Calculus	4
	<b>Total</b>	<b>13</b>

#### List A:

Mathematics 284*	Linear Algebra	3
	<b>Total</b>	<b>3</b>

#### List B:

Select ONE (1) course from the following:

Mathematics 160*	Elementary Statistics	4
Mathematics 245*	Discrete Mathematics	3
Mathematics 285*	Differential Equations	3
Physics 140*	Mechanics of Solids	4
Computer Science	Introduction to Java	
Information Systems 293	Programming	4
Computer Science	Introduction to C++	
Information Systems 296	Programming	4
	<b>Total</b>	<b>3-4</b>
	<b>Units for the major</b>	<b>19-20</b>
	<b>Units Required for CSU</b>	
	<b>GE or IGETC-CSU GE</b>	<b>37-39</b>
	<b>Total units required for the degree</b>	<b>60</b>

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.



## MATHEMATICS

The mathematics major offers a foundation for further study in mathematics and other mathematics-related fields. The emphasis of the program is to prepare the students for transfer to four-year institutions.

### Career Opportunities

Accountant\*  
 Actuary\*  
 Budget Analyst\*  
 Data Processing Manager  
 Department Head, College\*  
 Economist\*  
 Engineer\*  
 Financial Planner\*  
 Insurance Agent/Broker+  
 Loan Officer  
 Management Trainee  
 Market Research Analyst\*  
 Mathematical Biologist, Bioinformatics\*  
 Operations Research Analyst\*  
 Mathematician\*  
 Securities Trader\*  
 Statistician\*  
 Surveyor  
 Teacher\*

\*Bachelor's Degree or higher required.

+Bachelor Degree normally recommended.

The Associate in Science degree in Mathematics-offers a solid foundation for further study in mathematics and other mathematics-related fields. The primary emphasis of the mathematics major program is to prepare the students for transfer to four-year institutions. Students should consult the catalog of the transfer school being considered for its specific requirements.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Use appropriate theorems, formulas, and algorithms to solve mathematical problems from algebra, trigonometry, calculus and geometry.
2. Use appropriate technology to solve problems requiring mathematics.
3. Formulate, analyze, and differentiate mathematical functions numerically, graphically and symbolically and transition between these representations.
4. Communicate the mathematical process and assess the validity of the solution.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Mathematics 180	Analytic Geometry & Calculus I	5
Mathematics 280	Analytic Geometry & Calculus II	4
Mathematics 281	Multivariable Calculus	4
Mathematics 284	Linear Algebra	3
	<b>Total</b>	<b>16</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Mathematics 160	Elementary Statistics	4
Mathematics 245	Discrete Math	3
Mathematics 285	Differential Equations	3
Physics 140	Mechanics of Solids	4
Computer Science	Introduction to Java	
Information Systems 293	Programming	4
Computer Science	Introduction to C++	
Information Systems 296	Programming	4
<b>Total</b>		<b>3-4</b>
<b>Total Required</b>		<b>19-20</b>
<b>Plus General Education and Elective Requirements</b>		

## MEDIA COMMUNICATIONS

The Department of Media Communications curriculum serves two purposes:

1. The Media Communications curriculum brings to the student an awareness of the impact of communications technology and programming in our daily lives and on society as a whole. We are experiencing a revolution in information availability and the expertise of media in manipulating that information. Most members of society remain unaware of the pervasive nature of this influence even though it has become a constant in their lives. The Department of Media Communications aims to make students more thoughtful consumers of mass media.
2. The courses offered in Media Communications are also designed to give students a working knowledge of the concepts, values, theoretical understanding, operational skills, rapidly developing technology, and experience necessary to succeed as competent professional communicators in the fields represented by the curriculum: Audio Production, Video Production, and Cross-Media Journalism.

The Department of Media Communications at Grossmont College enjoys a statewide and national reputation for excellence. The faculty, both full-time and adjunct, have been carefully chosen for their many years of experience both in their fields and in the classroom. The career opportunities for majors in this department include positions in newspapers, news agencies, public relations, commercial and non-commercial television, radio, business and industry non-broadcast applications, videoconferencing, video production studios, education, and the burgeoning fields of digital communications and multi-media, to name but a few.

Students may elect a program from these three areas: Audio Production, Video Production, or Cross-Media Journalism. The programs are designed to meet lower division transfer requirements or job entry requirements, depending on the goals of the student.

### Career Opportunities

Anchorperson/Newscaster  
 Audiovisual Specialist  
 Camera Operator  
 Cinematographer\*  
 Engineering Technician  
 Instructional Media Specialist  
 Lighting Director  
 News Director\*  
 Print Journalist\*

Production Assistant\*

Technical Director\*

Videographer

World Wide Web Journalist

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcome (PSLOs) below is an outcome that students will achieve after completing specific degree/certificate requirements in this program. Students will analyze the functions and roles of mass media in US society.

### Associate Degree Major Requirements Core Curriculum

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Media Communications 105	Introduction to Radio and Television	3
Media Communications 110	Mass Media and Society	3
Media Communications 112	Media News Writing	3
Media Communications 116	Introduction to Audio Production	3
Media Communications 117	Television Studio Operations	4
Total		16

**Note: Students must choose at least one area of emphasis.**

### Area of Emphasis Audio Production

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Media Communications 113	Media Announcing	3
Total		3

Select THREE (3) units from the following courses:

Media Communications 151	Electronic Media Internship	1
Media Communications 153	Electronic Media Internship	2
Media Communications 155	Electronic Media Internship	(3)
Total		3

Select ONE of the following sequences:

Subject & Number	Title	Units
Media Communications 119A	Fundamentals of Radio Broadcasting	3
Media Communications 119B	Fundamentals of Radio Broadcasting	3
Media Communications 119C	Fundamentals of Radio Broadcasting	3
Media Communications 119D	Fundamentals of Radio Broadcasting	3
or		
Media Communications 216A	Audio Multitrack Production	(3)
Media Communications 216B	Audio Multitrack Production	(3)

Media

Communications 216C Audio Multitrack Production (3)

Media

Communications 216D Audio Multitrack Production (3)

Total 12

Total Required 34

Plus General Education and Elective Requirements

### Recommended Electives:

Subject & Number	Title	Units
Media Communications 111	Motion Picture Film Analysis	4
Media Communications 118	Media Script Writing	3

### Area of Emphasis Cross-Media Journalism

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Media Communications 113	Media Announcing	3
Media Communications 118	Media Script Writing	3
Media Communications 119A	Fundamentals of Radio Broadcasting	3
Total		9

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Media Communications 132A	Campus Newspaper Production	3
Media Communications 132B	Campus Newspaper Production	(3)
Media Communications 132C	Campus Newspaper Production	(3)
Media Communications 132D	Campus Newspaper Production	(3)
Total		3

Select THREE (3) units from the following courses:

Subject & Number	Title	Units
Media Communications 151	Electronic Media Internship	1
Media Communications 153	Electronic Media Internship	2
Media Communications 155	Electronic Media Internship	(3)
Total		3
Total Required		31
Plus General Education and Elective Requirements		

### Recommended Electives:

Subject & Number	Title	Units
Media Communications 111	Motion Picture Film Analysis	4
Media Communications 115	Basic Professional Editing Principles	3

## Area of Emphasis Video Production

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Media Communications 111	Motion Picture Film Analysis	4
Media Communications 115	Basic Professional Editing Principles	3
Media Communications 118	Media Script Writing	3
Media Communications 120	Basic Video Cinematography	3
	<b>Total</b>	<b>13</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Media Communications 220A	Digital Electronic Field Production I	3
Media Communications 220B	Digital Electronic Field Production II	(3)
Media Communications 230A	Digital Film Production I	(3)
Media Communications 230B	Digital Film Production II	(3)
	<b>Total</b>	<b>3</b>

Select THREE (3) units from the following courses:

Subject & Number	Title	Units
Media Communications 151	Electronic Media Internship	1
Media Communications 153	Electronic Media Internship	2
Media Communications 155	Electronic Media Internship	(3)
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>35</b>
	Plus General Education and Elective Requirements	

### Recommended Electives:

Subject & Number	Title	Units
Theatre 110	Intro to the Theatre	3
Theatre 120	History of the Theatre	3
Theatre 121	History of the Theatre	3

## Certificate of Achievement

Any student who chooses to complete only the requirements for one of the areas of emphasis plus the Media Communications core curriculum qualifies for a Certificate of Achievement in:

- Media Communications – Audio Production
- Media Communications – Cross-Media Journalism
- Media Communications – Video Production

An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## MULTIMEDIA

This interdisciplinary program meets the needs of students desiring to enter the multimedia field. Students completing the requirements in the major will be prepared to assume multimedia jobs in the following areas: visual effects and entertainment, business, education, and software and web development. All students, whether their goal is a degree or a certificate, will take an interdisciplinary, introductory multimedia course, followed by a series of courses in an area of emphasis. The program of study will conclude with an interdisciplinary multimedia course that is team-based and project oriented. Students will be required to complete an internship along with the final multimedia course. Students will become multimedia specialists in one or more areas of emphasis: software development, video, visual design, and web development.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Function as part of a multimedia development team.
2. Produce/author DVDs utilizing audio, video, graphic and typographic content.
3. Understand the specific language needed to communicate with all professional aspects represented in the Multimedia field.

## Associate Degree Major Requirements Core Curriculum

**Note: All courses in the major must be completed with a "C" grade or higher.**

Subject & Number	Title	Units
Multimedia 190	Digital Multimedia I	4
Multimedia 192	Digital Multimedia II	4
Multimedia 196	Multimedia Internship	2
or		
Multimedia 197	Multimedia Internship	(3)
	<b>Total</b>	<b>10-11</b>

## Area of Emphasis Software Development

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Computer Science Info. Systems 114	Small Computer Systems	3
Computer Science Info. Systems 119	Introduction to Computer Programming	3
Computer Science Info. Systems 293	Introduction to Java Programming	4
Computer Science Info. Systems 296	Introduction to C++ Programming	4
Computer Science Info. Systems 297	Intermediate C++ Programming	4
	<b>Total</b>	<b>18</b>
	<b>Total Required</b>	<b>28-29</b>
	Plus General Education and Elective Requirements	



## Area of Emphasis Video

**Note:** All courses must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Media Communications 117	Television Studio Operations	4
Media Communications 118	Media Script Writing	3
Media Communications 120	Basic Video Cinematography	3
Media Communications 217	Television and Video Producing and Directing	3
Total		13
Total Required		23-24
Plus General Education and Elective Requirements		

## Area of Emphasis Visual Design

**Note:** All courses must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Art 100	Art Appreciation	3
Art 124	Drawing I	3
Art 171	Introduction to Digital Art	3
Art 175	Digital Imaging and Art	3
Photography 150	Introduction to Photography	3
Total		15

Select One (1) of the following courses:

Art 172	Interactive Media Art	3
Art 177	Digital Drawing and Painting	3
Art 184	Drawing for Animation	3
Total		3
Total		18
Total Required		28-29
Plus General Education and Elective Requirements		

## Web Authoring

**Note:** All courses must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Computer Science Info. Systems 132	Web Development Fundamentals	3
Computer Science Info. Systems 133	Introduction to Dreamweaver	3
Computer Science Info. Systems 135	Javascript Programming	3
Computer Science Info. Systems 136	Dynamic Web Applications	3
Computer Science Info. Systems 151	Introduction to Photoshop	3
Total		15
Total Required		25-26
Plus General Education and Elective Requirements		

## Certificate of Achievement

Any student who chooses to complete only the Multimedia core curriculum plus one of the areas of emphasis qualifies for a Certificate of Achievement in the area. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note:** All courses must be completed with a letter grade of "C" or higher.

# MUSIC

The music major offers a secure foundation for further study in music. The primary emphasis of the program is to prepare students for transfer to four-year institutions. In addition to the required and elective courses, music students are expected to participate in at least one performing organization each semester.

## Career Opportunities

Arranger\*  
Conductor\*  
Critic\*  
Instrumentalist  
Music Director\*  
Music Instructor\*  
Music Therapist\*  
Performer, Vocalist  
Piano Tuner  
Recording Engineer\*  
Teacher/Professor\*  
\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Apply the terminology associated with the language of music.
2. Correlate significant events and trends in music history with significant events and trends in world history.

## Associate Degree Major Requirements

**Note:** All courses in the major must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Music 105	Music Theory & Practice I	4
Music 106	Music Theory & Practice II	4
Music 132	Class Piano I	3
Music 133	Class Piano II	3
Total		14

## Area of Emphasis Classical Studies

**Note:** All courses must be completed with a letter grade of "C" or higher.

Subject & Number	Title	Units
Music 190	Performance Studies	1
Music 191	Performance Studies	1
Music 205	Music Theory and Practice III	4
Music 206	Music Theory and Practice IV	4
Music 232	Class Piano III	3
Music 233	Class Piano IV	3
Music 290	Performance Studies	1
Music 291	Performance Studies	1
Total		18

Select FOUR (4) units from any other music courses:

Total	4
Total Required	36
Plus General Education and Elective Requirements	

## MUSICAL THEATRE

The primary focus of the Musical Theatre Program is to provide technical and practical musical theatre training in all aspects of Musical Theatre and to assist students in completing lower division requirements in preparation for transfer to baccalaureate level institutions. Secondly the curriculum prepares students for entry-level employment in professional and community theatre as they pursue their degree objectives.

### Career Opportunities

Actor/Actress\*

Dancer+

Director of Audience Development\*

Musician+

Performers\*

Production Assistant\*

Song Writers+

Sound Technician\*

Theatrical Agent\*

\*Bachelor's Degree or higher required.

+Bachelor's Degree normally recommended.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate an appreciation of learning and create a diverse aesthetic for Musical Theatre and its place in culture and society.
2. Participate in high quality, accessible musical theatre productions and present them at a reasonable cost for our students and the community at large.
3. Understand the proper artistic conduct in all academic and professional musical theatre environments.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Dance 080A or B or C or D	Modern I or II or III or IV	1.5
Dance 081A	Tap I	1.5
Dance 084A or B or C or D	Jazz I or II or III or IV	1.5
Dance 088A or B or C or D	Ballet I or II or III or IV	1.5
Dance 095	Musical Theatre Dance	1.5
Dance 205 or 206	Modern Dance Improvisation and Choreography I or II	2
Music 105 or 106	Music Theory and Practice I or II	4
Music 132 or 133	Class Piano I or II	3
Music 170	Class Voice	2
Music 171	Class Voice	2
Theatre 110	Introduction to the Theatre	3
Theatre 122A or B or C or D	Theatre Workshop Laboratory: Acting I or II or III or IV	1
Theatre 123A or B or C or D	Theatre Workshop Laboratory: Construction I or II or III or IV	1
Theatre 124A or B or C or D	Theatre Workshop Laboratory: Production Crew I or II or III or IV	1
Theatre 130	Acting I	3
Theatre 131	Acting II	3
Theatre 234 A or B	Fundamentals of Musical Theatre – Performance I or II	3

Theatre 235 A or B	Fundamentals of Musical Theatre – Scene and Song I or II	3
Total		38.5

Select TWO (2) of the following courses:

Theatre 102A or B or C or D	Theatre Production Practicum: Costumes I or II or III or IV	2
Theatre 103A or B or C or D	Theatre Production Practicum: Sets I or II or III or IV	2
Theatre 104A or B or C or D	Theatre Production Practicum: Lighting/Sound I or II or III or IV	2
Theatre 111A or B or C or D	Rehearsal and Performance: Acting I or II or III or IV	2
Theatre 112A or B or C or D	Rehearsal and Performance: Stage Management I or II or III or IV	2
Theatre 113A or B or C or D	Rehearsal and Performance: Production Crew I or II or III or IV	2
Total		4
Total Required		42.5
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above under Musical Theatre core curriculum qualifies for a Certificate of Achievement. An official request must be filled with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## NURSING

See page 10 for special admission procedures and criteria.

As defined by the American Nurses Association, professional nursing is the diagnosis and treatment of human responses to actual and high-risk health problems. The Associate Degree Registered Nursing program at Grossmont College prepares men and women for national licensure to practice professional nursing in critical, acute, chronic, ambulatory and home health-care settings. For students without previous nursing education, the nursing courses cover four semesters plus the prerequisite courses required to apply. Nursing didactic is coordinated with laboratory experience in local hospitals and health agencies under the supervision of nursing faculty members. In addition to the nursing courses, the major requires selected general education courses from the natural, behavioral and social sciences.

### Admission Information:

Students are admitted to the Nursing Program based on a multi-criteria selection process. The multi-criteria selection includes the following criteria: GPA in the required sciences and general education Nursing major requirements, previous degrees or certifications, life experiences, proficiency in a California State Chancellor's office approved second language, and the individual composite score for the Test of Essential Academic Skills exam. A 2.5 GPA is the minimum requirement for the science and general education courses.

California Licensed Vocational Nurses are eligible to apply for a 3-semester LVN-RN Transition Program beginning every spring. Upon successful completion of Nursing 130, LVN-RN transition students will receive 8 units of credit for Nursing Fundamentals and 5 units of credit for Pediatrics and Obstetrical nursing after successfully completing Nursing 220 and 222.

Upon completion of all degree requirements, the graduate is eligible to apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Graduates of the ADN program are also eligible to transfer into a BSN Program upon completion of the program.

**IMPORTANT:** Any prior conviction of a misdemeanor or felony may influence eligibility for licensure as a Registered Nurse. A flagged background check or drug screen may also prohibit participation in the nursing program. Applicants with prior convictions are required to contact the Director of Nursing for confidential advisement and planning prior to applying to the program.

### Application Period

In addition to a college application, an application for the nursing major is also required. Program applications will only be accepted during the application period. Prior to applying, please visit the Nursing Program website at [www.grossmont.edu/nursing](http://www.grossmont.edu/nursing) for the latest application dates. Applicants must submit a completed application with all required documentation and official transcripts as a packet; transcripts should not be sent separately. A check list is available to assist the applicant in submitting the required documents at <http://www.grossmont.edu/nursing/admissions.asp>. Incomplete application packets will not be considered for admission. Applicants not selected have the opportunity to reapply during the next application period. No waitlist will be maintained for the program.

All prospective nursing students must pass the Test of Essential Academic Skills exam (TEAS 5.0). This is a pre-entrance test that covers basic Math, Reading, English and Science. All applicants must pass the TEAS version 5.0 in order to apply to the program; no other versions will be accepted. Students may prepare for this exam by going to the ATI testing website (<http://www.atitesting.com>). TEAS 5.0 study guides and online practice exams are available for purchase through the website. <http://www.atitesting.com/Solutions/PreNursingSchool.aspx>.

Under the multi-selection criteria, points given for the TEAS exam are only awarded for the first exam taken. Students who fail to achieve a passing score must remediate by completing additional pre-nursing course work as directed by the Nursing Department. TEAS exams taken prior to the required remediation will not be considered and may prohibit your ability to apply to the program; read the entire TEAS policy prior to taking the exam. TEAS policies, procedures and detailed information on remediation and repeating the exam can be found at <http://www.grossmont.edu/nursing/TEAS%20Testing.asp>. **Students are strongly advised to review the TEAS policy on the nursing program website PRIOR TO taking the TEAS exam.**

For all information on admission criteria, see the Nursing

website at [www.grossmont.edu/nursing](http://www.grossmont.edu/nursing).

### Career Opportunities

Administrator\*  
Clinic Nurse (Ambulatory Care)  
Critical Care Nurse\*  
Emergency Room/ Lifeflight Nurse\*  
Home Health Nurse\*  
Hospital Staff Nurse  
Industrial Nurse  
Medical Researcher\*  
Nurse Anesthetist\*  
Nurse Midwife\*  
Nurse Practitioner\*  
Office Nurse  
Public Health Nurse\*  
Teacher/ Educator\*

\*Additional education is required

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Provide holistic patient care utilizing critical thinking within the framework of the nursing process and evidence based principles to provide safe patient care.
2. Communicate effectively when providing care for multicultural patients within a multidisciplinary healthcare system.
3. Safely implement the professional nursing role as defined by the California Nurse Practice Act and the American Nurses Association's principles of ethical practice.
4. Engage in life-long learning as part of the professional commitment to the Registered Nursing role.

### General Education Requirements For Nursing Majors

**All Allied Health and Nursing students adhere to the graduation requirements outlined in the college catalog for the academic year in which they enter the program.**

#### Competency Requirement

1. Competency in reading, writing, expression shown by achieving a "C" grade or higher or in courses listed under Area A, Section 1 – Written Communication.
2. Competency in Mathematics shown by either
  - a. Earning a grade of "C" or better, or "Pass," in Math 103 or a higher numbered mathematics course or
  - b. Assessing into Math 120 or higher through the mathematics placement process. (Students meeting competency through assessment must still take an Area A3 course.)

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

**Courses in bold print are required in the Nursing major.**

**Italicized courses are recommended for BSN/MSN transfer.**

#### Area A - Language and Rationality

Three courses (a minimum of nine units) are required in written communication, oral communication, and analytical thinking. At least ONE course must be taken from EACH of the following three sections:

##### 1. Written Communication

*Must be completed with a "C" grade or higher to satisfy the competency requirement.*

**English 120, 124**



**2. Oral Communication****Communication 122****3. Analytical Thinking**

- Competency in Mathematics shown by either*  
*a. Earning a grade of "C" or better, or "Pass," in Math 103*  
*or a higher numbered mathematics course or*  
*b. Assessing into Math 120 or higher through the*  
*mathematics placement process. (Students meeting*  
*competency through assessment must still take an Area*  
*A3 course.)*

Anthropology 215

Biology 215

Economics 215

Geography 104

**Mathematics** 103, 110, 120, 125, 126, 150, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284, 285

Psychology 215

Sociology 215

**Area B - Natural Sciences**

Two natural science courses (a minimum of seven units) are required. **Courses in bold print are required in the Nursing major. All required science courses for the Nursing Major must include a lab. Courses with an asterisk are laboratory only. Courses not containing a laboratory component are underlined.**

Anthropology 130, 131\*Astronomy 110, 112\*, 120**Biology 140, 141, and 141L\*or 144 and 145, 152, 105, 110, 112, 114, 118, 120, 142\*, 180, 230, 240**Chemistry 102, 110, 113, 115, 116, 120, 141, 142, 231, 232Geography 120, 121\*, 140Geology 104, 110, 111\*, 121, 210, 220, 230Oceanography 112, 113\*Physical Science 100, 110, 111\*

Physics 110, 130, 131, 140, 240, 241

Science 110**Area C - Humanities**

One humanities course (a minimum of three units) is required.

American Sign Language 120, 121, 140, 220, 221, 250

Arabic 120, 121, 122, 123, 148, 220, 221, 250, 251

Art 100, 120, 124, 126, 129, 140, 141, 142, 143, 145, 146, 147, 171, 189

Chinese 120, 121, 220, 221, 250, 251

Communication 135, 137, 144, 145

Cross-Cultural Studies 122, 123, 126, 134, 144, 147, 149, 152, 236, 237, 238

Dance 110

English 112, 118, 122, 126, 134-135-136-137, 201, 203, 215, 217, 218, 219, 221, 222, 231, 232, 234, 235, 236, 237, 238, 241, 242, 275, 276, 277

French 120, 121, 152, 220, 221, 250, 251

German 120, 121, 220, 221, 250, 251

History 100, 101, 103, 105, 106, 113, 126, 135, 136, 137, 148

Humanities 110, 120, 125, 130, 135, 160, 170

Italian 120, 121, 220, 221, 250, 251

Japanese 120, 121, 149, 220, 221, 250, 251

Media Communications 111, 189

Music 110, 111, 115, 116, 117, 189

Philosophy 110, 111, 112, 114, 116, 118, 140, 141, 145, 150

Photography 150, 154

Religious Studies 120, 130, 140, 150

Russian 120, 121, 220, 221, 250, 251

Spanish 120, 121, 122, 123, 141, 145, 220, 221, 250, 251

Theatre Arts 101, 110, 130, 143, 144, 189

**Area D - Social Sciences**

One social science course (a minimum of three units) is required.

Administration of Justice 110

Anthropology 120, 140

Child Development 115, 125, 131, 134, 145, 153

Communication 124, 128

Cross-Cultural Studies 114, 115, 118, 119, 124, 125, 128, 130, 131, 132, 133, 135, 145, 153, 154, 155, 180, 181

Economics 110, 120, 121

Family Studies 115, 120

Geography 106, 130, 170

Health Education 120, 155, 158, 201

Health Science 110

History 108, 109, 114, 115, 118, 119, 122, 123, 124, 127, 130, 131, 154, 155, 180, 181

Media Communications 110

Political Science 120, 121, 124, 130, 140, 150, 160

**Psychology 120, 125, 130, 132, 134, 138, 170****Sociology 114 or 120, 125, 130, 138, 140****Major Requirements for All Nursing Majors Registered Nursing Program****Associate Degree Major Requirements**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Choose ONE (1) sequence from the following courses.

<b>Subject &amp; Number</b>	<b>Title</b>	<b>Units</b>
Biology 140	Human Anatomy	5
and Biology 141	Human Physiology	3
and Biology 141L	Laboratory in Human Physiology	(1)
or Biology 142	Human Physiology Laboratory	2
or Biology 144	Anatomy and Physiology I	(4)
and Biology 145	Anatomy and Physiology II	(4)
Biology 152	Paramedical Microbiology	5
Communication 122	Public Speaking	3
English 120	College Composition and Reading	3
or English 124	Advanced Composition: Critical Reasoning and Writing	(3)
Nursing 118	Nursing Pharmacology I	1
Nursing 119	Nursing Pharmacology II	1
Nursing 120	Introduction to Nursing: Theory and Practice	8
Nursing 130	Perioperative Nursing	5
Nursing 132	Maternal/Newborn and Child Health Nursing	5
Nursing 220	Nursing Management in Nutritional-Metabolic Disorders	5
Nursing 222	Neurologic and Psychiatric Nursing	5
Nursing 230	Nursing Management in Cardio-Pulmonary and Circulatory Disorders	6
Nursing 235	Preceptored Patient Care Management	3

Psychology 120	Introductory Psychology	3
Sociology 114	Introduction to Sociology of Minority Group Relations	3
or		
Sociology 120	Introductory Sociology	(3)
	Total	66
	Plus Remaining General Education Requirements for Nursing Majors	8
	Total Required	72

## OCCUPATIONAL THERAPY ASSISTANT

See page 11 for special admission procedures and criteria.

This career major prepares the student to work as an Occupational Therapy Assistant with people who are limited by physical injury or illness, mental health problems, developmental or learning disabilities, or the aging process. Occupational therapy assistants (OTAs) work under the direct supervision of an occupational therapist (OT) providing all levels of patient treatment. The student learns to utilize manual and creative arts, purposeful activities, exercises, adaptive devices, daily living tasks and leisure activities to assist patients to achieve their highest level of function.

Those working in occupational therapy would be expected to assist the OT in assessing patient needs, determining therapeutic goals, planning treatment activities, carrying out treatment procedures, communicating with patients and health care providers, documenting patient progress, and maintaining clinical environments. Assistants are employed in rehabilitation facilities, hospitals, skilled nursing facilities, schools, day treatment centers, outpatient clinics and other community agencies.

Grossmont College prepares the student for an Associate Degree in Science as an Occupational Therapy Assistant. In addition to the occupational therapy courses, the major requires selected general education courses from the biological, social and behavioral sciences. The Program is fully accredited through the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD, 20814-3449. AOTA's phone number is (301) 652-6611 x2914. Graduates will be able to sit for their national certification exam for Occupational Therapy Assistants, administered by the National Board for Certification of Occupational Therapy. After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA)®. Most states require licensure to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Any prior convictions of a misdemeanor or felony may influence eligibility for state registration and eligibility to sit for National Boards as an Occupational Therapy Assistant. Applicants with prior convictions are urged to call Occupational Therapy Board of California at 1-916-263-2294 and NBCOT at 1-301-990-7979.

Students accepted to the Occupational Therapy Assistant Program are required to undergo a background check and/or urine drug screening test before starting the program or being placed at a clinical site. The cost of

these procedures may be \$65 - \$120. The student will be responsible for paying these fees. Failure to pass either or both of these procedures may interfere with clinical placement and/or acceptance of the student into the program.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Achieve entry level competence and understand the importance of lifelong learning to maintain competence.
2. Promote and support the profession of occupational therapy, emerging practice areas and community service.

### General Education Requirements For Occupational Therapy Assistant

**All Allied Health and Nursing students adhere to the graduation requirements outlined in the college catalog for the academic year in which they enter the program.**

### Competency Requirement

1. Competency in reading, writing, expression shown by achieving a "C" grade or higher or "Pass" in courses listed under Area A, Section 1 – Written Communication.
2. Competency in Mathematics shown by either
  - a. Earning a grade of "C" or better, or "Pass," in Math 103 or a higher numbered mathematics course or
  - b. Assessing into Math 120 or higher through the mathematics placement process. (students meeting competency through assessment must still take an Area A3 course.)

**Courses in bold print are required in the Occupational Therapy Assistant major. All coursework must be completed with a "C" grade or higher, a competent program skills checklist, and "meets standard" on final professional behavior evaluation prior to enrollment in OTA 240 and OTA 241.**

#### Area A - Language and Rationality

Three courses (a minimum of nine units) are required in written communication, oral communication, and analytical thinking. At least ONE course must be taken from EACH of the following three sections:

#### 1. Written Communication

*Must be completed with a "C" grade or higher to satisfy the competency requirement.*  
English 120, 124

#### 2. Oral Communication

Communication 120, 122

#### 3. Analytical Thinking

*Competency in Mathematics shown by either*  

- a. Earning a grade of "C" or better, or "Pass," in Math 103 or a higher numbered mathematics course or
- b. Assessing into Math 120 or higher through the mathematics placement process. (Students meeting competency through assessment must still take an Area A3 course.)

Anthropology 215

Biology 215

Economics 215

Geography 104

Mathematics 103, 110, 120, 125, 126, 150, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284, 285

Philosophy 125, 130

Psychology 215  
Sociology 215

### Area B - Natural Sciences

Two natural science courses (a minimum of seven units) are required. One course must contain a laboratory.

**Courses with an asterisk are laboratory only. Courses not containing a laboratory component are underlined.**

Anthropology 130, 131\*  
Astronomy 110, 112\*, 120  
Biology 140 and 141 or 144 and 145, 152, 105, 110, 112, 114, 118, 120, 142\*, 180, 230, 240  
Chemistry 102, 110, 113, 115, 116, 120, 141, 142, 231, 232  
Geography 120, 121\*, 140  
Geology 104, 110, 111\*, 121, 210, 220, 230  
Oceanography 112, 113\*  
Physical Science 100, 110, 111\*  
Physics 110, 130, 131, 140, 240, 241  
Science 110

### Area C - Humanities

One humanities course (a minimum of three units) is required.

American Sign Language 120, 121, 140, 220, 221, 250  
Arabic 120, 121, 122, 123, 148, 220, 221, 250, 251  
Art 100, 120, 124, 126, 129, 140, 141, 142, 143, 145, 146, 147, 171, 189  
Chinese 120, 121, 220, 221, 250, 251  
Communication 135, 137, 144, 145  
Cross-Cultural Studies 122, 123, 126, 134, 144, 147, 149, 152, 236, 237, 238  
Dance 110  
English 112, 118, 122, 126, 134-135-136-137, 201, 203, 215, 217, 218, 219, 221, 222, 231, 232, 234, 235, 236, 237, 238, 241, 242, 275, 276, 277  
French 120, 121, 152, 220, 221, 250, 251  
German 120, 121, 220, 221, 250, 251  
History 100, 101, 103, 105, 106, 113, 126, 135, 136, 137, 148, 156, 157  
Humanities 110, 120, 125, 130, 135, 160, 170  
Italian 120, 121, 220, 221, 250, 251  
Japanese 120, 121, 149, 220, 221, 250, 251  
Media Communications 111, 189  
Music 110, 111, 115, 116, 117, 189  
Philosophy 110, 111, 112, 114, 116, 118, 140, 141, 145, 150, 155  
Photography 150, 154  
Religious Studies 120, 130, 140, 150  
Russian 120, 121, 220, 221, 250, 251  
Spanish 120, 121, 122, 123, 141, 145, 220, 221, 250, 251  
Theatre Arts 101, 110, 130, 143, 144, 189

### Area D - Social Sciences

One social science course (a minimum of three units) is required.

Administration of Justice 110  
Anthropology 120, 140  
Child Development 115, 125, 131, 134, 145, 153  
Communication 124, 128  
Cross-Cultural Studies 114, 115, 118, 119, 124, 125, 128, 130, 131, 132, 133, 135, 145, 153, 154, 155, 180, 181  
Economics 110, 120, 121  
Family Studies 115, 120  
Geography 106, 130, 170  
Health Education 120, 155, 158, 201

Health Science 110  
History 108, 109, 114, 115, 118, 119, 122, 123, 124, 127, 130, 131, 154, 155, 180, 181  
Media Communications 110  
Political Science 120, 121, 124, 130, 140, 150, 160  
Psychology 120, 125, 130, 132, 134, 138, 170  
Sociology 114 or 120, 125, 130, 138, 140

### Area E - Fitness/Wellness

Two courses involving physical exercise and/or dance are required. They can only be chosen from the exercise science and/or dance courses listed below:

**Dance** 068, 071A, 071B, 072A, 072B, 074A, 074B, 078 A, 078B, 080A, 080B, 080C, 080D, 081A, 081B, 081C, 081D, 082A, 082B, 084A, 084B, 084C, 084D, 088A, 088B, 088C, 088D, 094A, 094B, 094C, 094D, 099A, 099B, 099C, 116

**Exercise Science** 001, 002, 003, 004A, 004B, 004C, 005A, 005B, 005C, 006A, 006B, 006C, 007A, 007B, 007C, 009A, 009B, 009C, 017A, 017B, 017C, 021A, 021B, 021C, 023A, 023B, 023C, 024A, 024B, 024C, 027, 028A, 028B, 028C, 029, 030, 035, 037A, 037B, 037C, 039, 040A, 040B, 040C, 041, 043A, 043B, 043C, 044A, 044B, 044C, 060A, 060B, 060C, 076A, 076B, 076C, 125A, 125B, 125C, 130A, 130B, 130C, 155A, 155B, 155C, 170A, 170B, 170C, 171A, 171B, 171C, 172A, 172B, 172C, 175A, 175B, 175C, 180, 185A, 185B, 185C

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Biology 140	Human Anatomy	5
and Biology 141 or Biology 144	Human Physiology	3
and Biology 145	Human Anatomy & Physiology I	(4)
Family Studies 120	Human Development	3
Occupational Therapy Assistant 100	Fundamentals of Occupational Therapy	2
Occupational Therapy Assistant 101	Fundamentals of Activity/Therapeutic Media	2
Occupational Therapy Assistant 102	Rehabilitation Terminology, Diseases and Diagnoses	2
Occupational Therapy Assistant 110	Occupational Skills – Psychosocial	4
Occupational Therapy Assistant 111	Clinical Practicum I	1
Occupational Therapy Assistant 120	Documentation in Occupational Therapy	3
Occupational Therapy Assistant 130	Dynamics of Human Movement	4
Occupational Therapy Assistant 140	Occupational Skills Development in Pediatric Roles	2
Occupational Therapy Assistant 141	Clinical Practicum II	1
Occupational Therapy Assistant 200	Introduction to Occupational Therapy Skills Physical Rehabilitation	3
Occupational Therapy Assistant 210	Assistive Technology in Occupational Therapy	3



Occupational Therapy Assistant 220	Advanced Occupational Therapy Skills for Physical Dysfunction	3
Occupational Therapy Assistant 221	Clinical Practicum III	1
Occupational Therapy Assistant 230	Occupational Therapy Management	2
Occupational Therapy Assistant 240	Clinical Practicum IV	6
Occupational Therapy Assistant 241	Clinical Practicum V	6
	<b>Total</b>	<b>56</b>
	Plus General Education Requirements	14
	<b>Total Required</b>	<b>70</b>

## OCEANOGRAPHY

Oceanography applies an eclectic mix of natural sciences to the study of the world's oceans. Physics, chemistry, biology, geology, geography, meteorology and even astronomy contribute to understanding the composition, structure and motion of seawater, and its interaction with the lithosphere, atmosphere and biosphere.

Although a few four-year institutions offer undergraduate degrees in oceanography, students who pursue oceanographic studies typically complete undergraduate degrees in one or more of the aforementioned natural sciences, then later apply that knowledge to graduate study in oceanography. The associate degree in oceanography outlined below provides beginning lecture, lab and field courses in oceanography, plus a solid foundation of math and appropriate science courses upon which transferring students can build baccalaureate degrees that are later applied in graduate oceanographic studies.

### Career Opportunities

Aquarist  
Boat Captain  
Chemical Oceanographer\*  
Climatologist\*  
Environmental Advocate  
Marine Archaeologist\*  
Marine Biologist\*  
Marine Economist\*  
Marine Geologist/Geophysicist\*  
Marine Lawyer\*  
Marine Policy Specialist\*  
Ocean Engineer\*  
Ocean Fisheries Specialist\*  
Ocean Resource Management\*  
Ocean Technician  
Physical Oceanographer\*  
Teacher\*

\* Bachelor's degree or higher required.

The Program-level Student Learning Outcome (PSLOs) below is an outcome that students will achieve after completing specific degree/certificate requirements in this program. Students will find, use and evaluate resources for oceanographic information.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Geology 110	Planet Earth	3
Mathematics 180	Analytic Geometry & Calculus I	5
Oceanography 112	Introduction to Oceanography	3
Oceanography 113	Oceanography Laboratory	1
	<b>Total</b>	<b>22</b>

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Biology 105	Life in the Sea	4
Biology 120	Principles of Biology	4
Mathematics 280	Analytic Geometry & Calculus II	4
Physics 140	Mechanics of Solids	4
Physics 240	Electricity, Magnetism & Heat	4
	<b>Total</b>	<b>8</b>

Select SIX (6) units from the following courses:

Subject & Number	Title	Units
Biology 110	Environmental Biology	4
Biology 132	Mammals of the Sea	2
Chemistry 110	Environmental Chemistry	3
Geography 104	Introduction to Geographic Information Science (GIS)	3
Geography 120	Elements of Physical Geography	3
Geography 140	Introduction to Meteorology	3
Geology 121	Earth History	4
Geology 162	Geologic Field Studies: Southern California Mountain Areas	1
Geology 163	Geologic Field Studies: Mojave Desert and Adjacent Areas	1
Geology 164	Geologic Field Studies: Southern California Coastal Areas	1
Geology 165	Geologic Field Studies: Colorado Desert/Salton Trough Area	1
Geology 172	Field Exploration: Colorado Plateau	3
Geology 173	Field Exploration: Cascade Range/Modoc Plateau	3
Geology 174	Field Exploration: Basin and Range Province	3
Geology 175	Field Exploration: California Coastal Mountains	3
Geology 176	Field Exploration: Sierra Nevada	3
Geology 210	Geology of California	4
Geology 220	Geology of National Parks	4
Geology 230	Natural Disasters	3
Oceanography 150	Field Study of the Natural History Greater San Diego Region	3
	<b>Total</b>	<b>6</b>
	<b>Total Required</b>	<b>36</b>
	Plus General Education and Elective Requirements	

## ORTHOPEDIC TECHNOLOGY

See page 11 for special admission procedures and criteria.

A program designed to train students as Orthopedic Technologists, preparing graduates with lifetime professional skills in an expanding allied health field. Orthopedic Technologists are employed in hospitals, clinics, or private practice offices for applying, adjusting, and/or removing of casts, splints, and braces. In addition, the Orthopedic Technologists set up, adjust, and maintain all traction configurations, assist with the care of the acutely injured orthopedic patients, and assist the physician in the reduction and/or manipulation of orthopedic injuries. This program prepares the graduate to take the national certification examination (NBCOT) and is the first Orthopedic Technology program to be officially recognized by the National Association of Orthopedic Technologists (NAOT).

### Career Opportunities

Orthopedic Assistant  
Orthopedic Cast Specialist  
Orthopedic Technologist/Assistant  
Orthopedic Surgical Technician  
Orthotic Assistant  
Orthotics-Prosthetics Assistant  
Prosthetics Assistant

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate the ability to communicate through written, oral and nonverbal methods with client, family, community representatives, medical personnel, and the public.
2. Uphold appropriate professional behaviors, values and attitudes that are in alignment with the Code of Ethics.
3. Practice in a variety of settings utilizing safe techniques and consider a range of diversity issues that impact the occupational needs of the client.
4. Achieve entry level competence and understand the importance of lifelong learning to maintain competence.
5. Promote and support the profession of occupational therapy, emerging practice areas and community service.

### Associate Degree Major Requirements

**All Allied Health and Nursing students adhere to the graduation requirements outlined in the college catalog for the academic year in which they enter the program.**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

**Prerequisite:** Admission to the program, physical and dental examinations, record of current immunizations, current CPR card.

Subject & Number	Title	Units
Orthopedic Technology 110	Orthopedic Anatomy and Physiology	5
Orthopedic Technology 111	Orthopedic Techniques I	4
Orthopedic Technology 210	Advanced Orthopedic Anatomy and Physiology	5
Orthopedic Technology 211	Orthopedic Techniques II	4
Orthopedic Technology 212	Supervised Hospital Clinical Practicum I	2
Orthopedic Technology 214	Supervised Hospital Clinical Practicum II	4
Total Required		24
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who chooses to complete only the courses required for the above major qualifies for a Certificate of Achievement in Orthopedic Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## PHILOSOPHY

The Philosophy major is designed to provide a solid background for students wishing to continue their studies in philosophy at four-year institutions. Students who plan to transfer to a four-year institution should check the catalog of the transfer school being considered.

### Career Opportunities

Archivist\*  
Biographer\*  
College Administrator\*  
Consultant  
Cultural Affairs Officer\*  
Director, Religious Activities\*  
Etymologist\*  
Insurance Agent/Broker  
Lawyer\*  
Librarian\*  
Manuscript Reader  
Peace Corp Worker  
Pastoral Assistant  
Philologist\*  
Teacher/Professor\*  
Writer

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Engage with a body of philosophic literature by demonstrating in college-level writing and/or other evaluative processes, including but not limited to, critiques, comparison and contrast of theories and formulation of argumentation.
2. Identify basic concepts, branches and terminology of the discipline by demonstrating in college-level writing and/or other evaluative processes, including but not limited to, critiques, comparison and contrast of theories and formulation of argumentation.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Philosophy 110	A General Intro. to Philosophy	3
English 120	College Composition and Reading	3
Total		6

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Philosophy 125	Critical Thinking	3
Philosophy 130*	Logic	3
	Total	3

\*Recommended for students planning to major in philosophy at a university.

Select TWO (2) of the following courses:

Subject & Number	Title	Units
Philosophy 111	Philosophy and Popular Culture	3
Philosophy 112	The Classical Mind	3
Philosophy 114	The Medieval Mind	3
Philosophy 116	The Modern Mind	3
Philosophy 118	The Contemporary Mind	3
Philosophy 140	Problems in Ethics	3
Philosophy 141	Moral Problems in Health Care	3
Philosophy 145	Social and Political Philosophy	3
Philosophy 150	Human Beings and Aesthetic Value	3
Philosophy 155	The Philosophy of Science	3
	Total	6

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Religious Studies 120	World Religions	3
Religious Studies 130	Scriptures of World Religions	3
Religious Studies 140	Religion and Culture	3
Religious Studies 150	Scriptures of India and China	3
	Total	3

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Humanities 110	Principles of the Humanities	3
Humanities 120	European Humanities	
Humanities 130	East Asian Humanities	3
Humanities 160	Humanities of the Future	3
Humanities 170	World Humanities	3
	Total	3
	Total Required	21
	Plus General Education and Elective Requirements	



Associate Degree  
for Transfer™

## ASSOCIATE IN SCIENCE IN PHYSICS FOR TRANSFER (A.S.-T)

The Associate of Science in Physics for Transfer (A.S.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 25 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Physics for Transfer (A.S.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

The Associate of Science in Physics for Transfer Degree Program offers a secure foundation for further study in physics or engineering. The primary emphasis of the program is to prepare students for transfer to four-year institutions as science or engineering majors. Students are asked to consult the catalog of the transfer institution for specific requirements.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/ certificate requirements in this program.

Students will apply the fundamental principles of physics to real world or idealized situations.

### Associate Degree Major Requirements

**Note: All courses must be completed with a letter grade of "C" or higher.**

#### Required Core

Subject & Number	Title	Units
Physics 140*	Mechanics of Solids	4
Physics 240*	Electricity, Magnetism and Heat	4
Physics 241*	Light, Optics, and Modern Physics	4
Math 180*	Analytic Geometry & Calculus I	5
Math 280*	Analytic Geometry & Calculus II	4
Math 281*	Multivariable Calculus	4
	Units for the major	25
	Units for CSU GE or IGETC-CSU GE	37-39
	Total units required for degree	60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.



## PHYSICS

The Associate in Science Degree Program offers a secure foundation for further study in physics or engineering. The primary emphasis of the program is to prepare students for transfer to four-year institutions as science or engineering majors. Students are asked to consult the catalog of the transfer institution for specific requirements.

In addition to the required and elective courses, physics students are expected to attend at least four physics or engineering colloquia in their last semester.

### Career Opportunities

Aerodynamist\*  
 Airplane Navigator\*  
 Air Pollution Operating Specialist  
 Ballistics Expert  
 Engineer (Mechanical, Electrical)\*  
 Hydrologist\*  
 Instructor/Professor\*  
 Industrial Hygienist  
 Pharmacist\*  
 Physicist (Mechanical, Laser, Electrical, Optics, etc.)\*  
 Premedical\*

\*Bachelor's Degree or higher required.

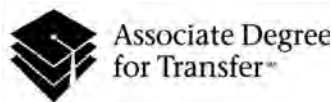
The Program-level Student Learning Outcome (PSLOs) below is an outcome that students will achieve after completing specific degree/certificate requirements in this program.

Students will apply the fundamental principles of physics to real world or idealized situations.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Chemistry 141	General Chemistry I	5
Chemistry 142	General Chemistry II	5
Mathematics 180	Analytic Geometry & Calculus I	5
Mathematics 280	Analytic Geometry & Calculus II	4
Mathematics 281	Multivariable Calculus	4
Physics 140	Mechanics of Solids	4
Physics 240	Electricity, Magnetism & Heat	4
Physics 241	Light, Wave Motion and Modern Physics	4
	Total Required	35
	Plus General Education and Elective Requirements	



## ASSOCIATE IN ARTS IN POLITICAL SCIENCE FOR TRANSFER (A.A.-T)

The Associate in Arts in Political Science for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. A total of 18-19 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Arts in Political Science for Transfer (A.A.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

Political Science is perhaps the oldest organized academic discipline in western civilization, and a major in this field prepares students for a variety of challenges. This transfer degree in political science can lead to a transfer to a university where one can continue work leading to a baccalaureate degree in political science, public administration or public policy. In addition, there are selected entry level positions in business and government open to the graduate with an Associate in Arts degree in Political Science. Some individuals follow the steps necessary to go beyond an undergraduate degree and enter graduate schools leading to career in law, government service, or industry. Outlined below is the program that fulfills the lower division requirements for most majors in political science in universities. For special requirements, the student should consult the baccalaureate granting institution he/ she is considering for matriculation.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/ certificate requirements in this program. Students will:

1. Think critically and effectively express their views in written and verbal communication.
2. Demonstrate the skills for contemporary world citizen.

3. Demonstrate a basic understanding of US and world politics as well as the broad discipline of political science.
4. Pursue advanced study in political science and relevant career-oriented programs.
5. Critically analyze the nature of power in political systems including the roles played by institutional and non-institutional actors.

### Associate Degree Major Requirements

**Note: All courses must be completed with a letter grade of "C" or higher.**

#### Required Core

Subject & Number	Title	Units
Political Science 121*	Introduction to U.S. Government and Politics	3
	<b>Total</b>	<b>3</b>

#### List A

Select THREE (3) of the following courses:

Political Science 120*	Introduction to Politics and Political Analysis	3
Political Science 124*	Introduction to Comparative Government and Politics	3
Political Science 130*	Introduction to International Relations	3
Political Science 150*	Introduction to Political Theory	3
Math 160* or Anthropology / Psychology / Sociology 215*	Elementary Statistics	4
	Statistics for the Behavioral Sciences	(3)
	<b>Total</b>	<b>9-10</b>

#### List B

Select TWO (2) of the following courses:

Any List A course not used above or		
Economics 110*	Economic Issues and Policies	3
Economics 120*	Principles of Macroeconomics	3
Economics 121*	Principles of Microeconomics	3
Political Science 140*	Introduction to California Government and Politics	3
	<b>Total</b>	<b>6</b>
	Units for the major	18-19
	Units for CSU GE or IGETC-CSU GE	37-39
	<b>Total units required for the degree</b>	<b>60</b>

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

## POLITICAL SCIENCE

Political Science is perhaps the oldest organized academic discipline in western civilization, and a major in this field prepares students for a variety of challenges. A major in political science can lead to a transfer to a university where one can continue work leading to a baccalaureate degree in political science, public administration or public policy. In addition, there are selected entry level positions in business and government open to the graduate with an Associate in Arts degree in Political Science. Some individuals follow the steps necessary to go beyond an undergraduate degree and enter graduate schools leading to careers in law, government service, or industry.

Outlined below is the program that fulfills the lower division requirements for most majors in political science in universities. For special requirements, the student should consult the baccalaureate granting institution he/she is considering for matriculation.

### Career Opportunities

Book Critic  
City Manager\*  
Congressional District Aide  
Consular Officer\*  
Diplomatic Officer\*  
Election Supervisor  
Fund Raising Director\*  
Intelligence Specialist\*  
Labor Relations Specialist\*  
Lawyer\*  
Paralegal Assistant  
Research Assistant  
Urban Planner\*

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Think critically and effectively express their views in written and verbal communication.
2. Demonstrate the skills for contemporary world citizenship.
3. Demonstrate a basic understanding of US and world politics as well as the broad discipline of political science.
4. Pursue advanced study in political science and relevant career-oriented programs.
5. Critically analyze the nature of power in political systems including the roles played by institutional and non-institutional actors.

### Associate Degree Major Requirements

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Political Science 120	Introduction to Politics and Political Analysis	3
Political Science 121	Introduction to U.S. Government and Politics	3
	<b>Total</b>	<b>6</b>

Select THREE (3) of the following courses after consultation with a member of the political science faculty and a counselor because of differences in transfer requirements at various four year institutions.

Subject & Number	Title	Units
Political Science 124	Introduction to Comparative Government and Politics	3
Political Science 130	Introduction to International Relations	3
Political Science 140	Introduction to California Governments and Politics	3
Political Science 150	Introduction to Political Theory	3
	<b>Total</b>	<b>9</b>

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Economics 120	Principles of Macroeconomics	3
Geography 130	Human & Cultural Geography	3
	<b>Total</b>	<b>3</b>
	<b>Total Required</b>	<b>18</b>
	Plus General Education and Elective Requirements	

#### Recommended electives:

Students planning to complete a baccalaureate degree in political science are **STRONGLY** advised to consult with a faculty advisor in political science at Grossmont College and take the following courses:

Subject & Number	Title	Units
Anthropology 120	Cultural Anthropology	3
History 108	Early American History	3
History 109	Modern American History	3
Mathematics 160	Elementary Statistics	4
or		
Psychology 215	Statistics for Life and Behavioral Sciences	(3)
Political Science 135	Model United Nations	1
Sociology 120	Introductory Sociology	3



Associate Degree  
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## ASSOCIATE IN ARTS IN PSYCHOLOGY FOR TRANSFER (A.A.-T)

The Associate in Arts in Psychology for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. A total of 19-20 units are required to fulfill the major portion of this degree. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Arts in Psychology for Transfer (A.A.-T) degree:

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.

- (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

Psychology is a diverse discipline, grounded in science, but with nearly boundless applications in everyday life. Some psychologists do basic research, developing theories and testing them through carefully honed research methods involving observation, experimentation and analysis. Other psychologists apply the discipline's scientific knowledge to help people, organizations and communities function better (APA).

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Identify, explain, and compare and contrast the major theoretical perspectives in psychology.
2. Evaluate psychological information using the scientific method.
3. Apply appropriate statistical analyses to quantitative data.
4. Apply principles of psychology to the understanding of self and others.

### Associate Degree Major Requirements

#### Required Core

Subject & Number	Title	Units
Psychology 120*	Introductory Psychology	3
Psychology 205	Research Methods for Psychology	3
Psychology 215*	Statistics for the Behavioral Sciences	3
	<b>Total</b>	<b>9</b>

#### List A

Select ONE (1) of the following courses:

Biology 120*	Principles of Biology	4
Psychology 140*	Physiological Psychology	3
	<b>Total</b>	<b>3-4</b>

#### List B

Select THREE (3) of the following courses:

Any List A course not used above or		
Psychology 138*	Social Psychology	3
Psychology 150*	Developmental Psychology	3
Psychology 170*	Abnormal Psychology	3
Psychology 201	Academic & Career Opportunities in Psychology	1
Psychology 220*	Learning	3
	<b>Total</b>	<b>7-8</b>
	<b>Units for the major</b>	<b>19-20</b>
	<b>Units for CSU GE or IGETC- CSU GE</b>	<b>37-39</b>
	<b>Total units required for the degree</b>	<b>60</b>

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.



## RESPIRATORY THERAPY

See page 12 for special admission procedures and criteria.

Respiratory Therapy is an allied health specialty employed in the treatment, management, control and care of patients with deficiencies and abnormalities associated with the cardio-respiratory system. It is defined as the therapeutic use of medical gases, air and oxygen administering apparatus, environmental control systems, humidification and aerosols, drugs and medications, ventilatory assistance and ventilatory control, postural drainage, chest physiotherapy and breathing exercise, respiratory rehabilitation, assistance with cardio-pulmonary resuscitation, and maintenance of natural, artificial and mechanical airways.

Specific testing techniques are employed in respiratory therapy to assist in diagnoses, monitoring, treatment and research. This includes measurement of ventilatory volumes, pressures and flows and blood gas analyses.

Grossmont College prepares the student for an Associate in Science Degree in Respiratory Therapy as well as eligibility to take the registry and licensing examinations administered by the National Board for Respiratory Care (NBRC).

In addition to the college application, a special application for this major is required. An individual evaluation will be made for students wishing to transfer into the Respiratory Therapy Program or to receive credit for previous college education.

Upon completion of the major course requirements from the Respiratory Therapy Program, the graduating student will be required to successfully pass the comprehensive NBRC "Self Assessment Examination" (SAE) during the fourth semester or a similar exam which will serve as the Program Examination.

### Career Opportunities

Asthma Educator  
Clinician  
Critical Care Specialist  
Department Supervisor+ / Manager\*  
Educator (Academic)\*  
Equipment Sales Representative  
Health Educator  
Home Care Respiratory Specialist  
Industrial Consultant  
Medical Researcher\*  
Neonatal / Pediatric Respiratory Specialist  
Pulmonary Function Specialist  
Pulmonary Rehabilitation Specialist  
\*Bachelor's degree or higher  
+Bachelor's degree recommended

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate the ability to comprehend, apply and evaluate clinical information relevant to his/her role as a Respiratory Therapist.
2. Demonstrate the technical proficiency in all the skills necessary to fulfill the role as a Respiratory Therapist.
3. Demonstrate personal behaviors consistent with professional and employer expectations as a Respiratory Therapist.

## General Education Requirements for Respiratory Therapy Majors

**All Allied Health and Nursing students adhere to the graduation requirements outlined in the college catalog for the academic year in which they enter the program.**

### Competency Requirement

1. Competency in reading, writing, expression shown by achieving a "C" grade or higher or "Pass" in courses listed under Area A, Section 1 – Written Communication.
2. Competency in Mathematics shown by either
  - a. Earning a grade of "C" or better or "Pass" in Math 103 or a higher numbered mathematics course or
  - b. Assessing into Math 120 or higher through the mathematics placement process. (Students meeting competency through assessment must still take an Area A3 course.)

### Area A - Language and Rationality

Three courses (a minimum of nine units) are required in written communication, oral communication, and analytical thinking. At least ONE course must be taken from EACH of the following three sections:

#### 1. Written Communication

Must be completed with a "C" grade or higher or "Pass" to satisfy the competency requirement.  
English 120, 124

#### 2. Oral Communication

Communication 120, 122

#### 3. Analytical Thinking

Competency in Mathematics shown by either  
a. Earning a grade of "C" or better or "Pass" in Math 103 or a higher numbered mathematics course or  
b. Assessing into Math 120 or higher through the mathematics placement process. (Students meeting competency through assessment must still take an Area A3 course.)

Anthropology 215

Biology 215

Economics 215

Geography 104

Mathematics 103, 110, 120, 125, 126, 150, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284, 285

Philosophy 125, 130

Psychology 215

Sociology 215

### Area B - Natural Sciences

Two natural science courses (a minimum of seven units) are required. One course must contain a laboratory.

**Courses with an asterisk are laboratory only. Courses not containing a laboratory component are underlined.**

Anthropology 130, 131

Astronomy 110, 112\*, 120

Biology 105, 110, 112, 114, 118, 120, 140, 141, 142\*, 144, 145, 152, 180, 230, 240

Chemistry 102, 110, 113, 115, 116, 120, 141, 142, 231, 232

Geography 120, 121\*, 140

Geology 104, 110, 111\*, 121, 210, 220, 230

Oceanography 112, 113\*

Physical Science 100, 110, 111\*

Physics 110, 130, 131, 140, 240, 241

Science 110

**Area C - Humanities**

One humanities course (a minimum of three units) is required.

American Sign Language 120, 121, 140, 220, 221, 250  
 Arabic 120, 121, 122, 123, 148, 220, 221, 250, 251  
 Art 100, 120, 124, 126, 129, 140, 141, 142, 143, 145, 146, 147, 171, 189  
 Chinese 120, 121, 220, 221, 250, 251  
 Communication 135, 137, 144, 145  
 Cross-Cultural Studies 122, 123, 126, 134, 144, 147, 149, 152, 236, 237, 238  
 Dance 110  
 English 112, 118, 122, 126, 134-135-136-137, 201, 203, 215, 217, 218, 219, 221, 222, 231, 232, 234, 235, 236, 237, 238, 241, 242, 275, 276, 277  
 French 120, 121, 152, 220, 221, 250, 251  
 German 120, 121, 220, 221, 250, 251  
 History 100, 101, 103, 105, 106, 113, 126, 135, 136, 137, 148  
 Humanities 110, 120, 125, 130, 135, 160, 170  
 Italian 120, 121, 220, 221, 250, 251  
 Japanese 120, 121, 149, 220, 221, 250, 251  
 Media Communications 111, 189  
 Music 110, 111, 115, 116, 117, 189  
 Philosophy 110, 111, 112, 114, 116, 118, 140, 141, 145, 150, 155  
 Photography 150, 154  
 Religious Studies 120, 130, 140, 150  
 Russian 120, 121, 220, 221, 250, 251  
 Spanish 120, 121, 122, 123, 141, 145, 220, 221, 250, 251  
 Theatre Arts 101, 110, 130, 143, 144, 189

**Area D - Social Sciences**

One social science course (a minimum of three units) is required.

Administration of Justice 110  
 Anthropology 120, 140  
 Child Development 115, 125, 131, 134, 145, 153  
 Communication 124, 128  
 Cross-Cultural Studies 114, 115, 118, 119, 124, 125, 128, 130, 131, 132, 133, 135, 145, 153, 154, 155, 180, 181  
 Economics 110, 120, 121  
 Family Studies 115, 120  
 Geography 106, 130, 170  
 Health Education 120, 155, 158, 201  
 Health Science 110  
 History 108, 109, 114, 115, 118, 119, 122, 123, 124, 127, 130, 131, 154, 155, 180, 181  
 Media Communications 110  
 Political Science 120, 121, 124, 130, 140, 150, 160  
 Psychology 120, 125, 130, 132, 134, 138, 170  
 Sociology 114, 120, 125, 130, 138, 140

**Area E - Fitness/Wellness**

Two courses involving physical exercise and/or dance are required. They can only be chosen from the exercise science and/or dance courses listed below:

**Dance** 068, 071A, 071B, 072A, 072B, 074A, 074B, 078 A, 078B, 080A, 080B, 080C, 080D, 081A, 081B, 081C, 081D, 082A, 082B, 084A, 084B, 084C, 084D, 088A, 088B, 088C, 088D, 094A, 094B, 094C, 094D, 099A, 099B, 099C, 116

**Exercise Science** 001, 002, 003, 004A, 004B, 004C, 005A, 005B, 005C, 006A, 006B, 006C, 007A, 007B, 007C, 009A, 009B, 009C, 017A, 017B, 017C, 021A, 021B, 021C, 023A, 023B, 023C, 024A, 024B, 024C, 027, 028A, 028B, 028C, 029, 030, 035, 037A, 037B, 037C, 039, 040A, 040B, 040C,

041, 043A, 043B, 043C, 044A, 044B, 044C, 060A, 060B, 060C, 076A, 076B, 076C, 125A, 125B, 125C, 130A, 130B, 130C, 155A, 155B, 155C, 170A, 170B, 170C, 171A, 171B, 171C, 172A, 172B, 172C, 175A, 175B, 175C, 180, 185A, 185B, 185C

**Associate Degree Major Requirements**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Biology 140 and Biology 141 and Biology 141L	Human Anatomy	5
	Human Physiology	3
	Laboratory in Human Physiology	1
or Biology 144 and Biology 145 Biology 152 Chemistry 115 Respiratory Therapy 105 Respiratory Therapy 108	Anatomy & Physiology I	(4)
	Anatomy & Physiology II	(4)
	Paramedical Microbiology	5
	Fundamentals of Chemistry	4
	Cardiopulmonary Physiology and Disease Entities	4
	Basic Respiratory Therapy Equipment, Procedures and Life Support Systems	5
	Supervised Clinical Practicum I	1
Respiratory Therapy 112 Respiratory Therapy 114 Respiratory Therapy 116 Respiratory Therapy 118 Respiratory Therapy 122 Respiratory Therapy 150 Respiratory Therapy 201 Respiratory Therapy 205 Respiratory Therapy 208 Respiratory Therapy 222 Respiratory Therapy 232 Respiratory Therapy 268	Respiratory Pharmacology	2
	Assessment in Respiratory Care	3
	Critical Care Life Support Equipment and Procedures	4.5
	Supervised Clinical Practicum II	3
	Neonatal-Pediatric Respiratory Care	3
	Cardiopulmonary Pathology and Pathophysiology	4
	Cardiopulmonary Patient Management	3.5
	Invasive and Noninvasive Cardiopulmonary Monitoring	4.5
	Supervised Clinical Practicum III	3.5
	Supervised Clinical Practicum IV	3.5
	Home Care Laboratory Techniques	1
	Total Required	63 or 64
	Plus General Education and Elective Requirements	

**Certificate of Achievement  
Anesthesia Technology**

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject and Number	Title	Units
Respiratory Therapy 141	Anesthesia Technology I	2
Respiratory Therapy 142	Anatomy & Physiology for the Anesthesia Technician	2
Respiratory Therapy 143	Introduction to the Operating System	1.5

Respiratory Therapy 144	Supervised Clinical Practicum I for the Anesthesia Technician	3
Respiratory Therapy 145	Anesthesia Technology II	2.5
Respiratory Therapy 146	Pharmacology for the Anesthesia Technician	2
Respiratory Therapy 147	Anesthesia Technology III	2.5
Respiratory Therapy 148	Supervised Clinical Practicum II for the Anesthesia Technician	2
Total		17.5

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above qualifies for a Certificate of Achievement in Respiratory Therapy- Anesthesia Technology. An official request must be filed with the Admissions and Records Office prior to the deadline stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## RETAIL MANAGEMENT

Retail sales and management is one of the largest fields for employment in the United State. This program is designed to provide the foundation for advancement from entry level positions to management in retailing. Career opportunities are plentiful in food chains, department stores, specialized small and large retail outlets, and small stores. A certificate or degree in the program greatly enhances a part-time or full-time employee's opportunity to progress in a career in this large, growing industry.

Note: This major meets the core retail management curriculum recommended by the Western Association of Food Chains for employees who wish to prepare for management positions.

### Career Opportunities

Department Manager  
District Manager  
Human Resources Assistant  
Marketing Manager  
Merchandise Manager  
Office Manager  
Retail Store Manager  
Sales Manager  
Store Owner/Operator

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate knowledge of the history of contemporary and traditional retail practices including basic consumer laws and regulation for consumer protection.
2. Identify and apply the basic economic retail principles of pricing, quality, customer service and ethics.
3. Discuss communication from retailer to customer including such forms as visual merchandising, personal selling, advertising, sales promotions, internet sales and advertising and public relations.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Business 109	Elementary Accounting	3
Business 115	Human Relations in Business	3
Business 118	Retail Management	3
Business 128	Business Communications	3
Business 146	Introduction to Marketing	3
Business 152	Business Math	2
Business 155	Human Resources Management	3
Business 156	Principles of Management	3
Communication 122	Public Speaking	3
Computer Science Info. Systems 110	Principles of Information Systems	4
or		
Computer Science Info. Systems 172	Introduction to Microcomputer Applications (2)	
Total		28-30
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above qualifies for a Certificate of Achievement in Retail Management. An official request must be filed with the Admissions and Records Office prior to the deadline stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## RUSSIAN

This program is designed to provide students with skills in understanding, speaking, reading, and writing Russian. It also gives students a greater understanding of Russian culture and civilization and prepares them for greater international and domestic career opportunities. For the suggested sequence of courses to be taken, and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of Foreign Languages.

### Career Opportunities

Advertising  
Bilingual Aide  
Foreign Correspondent\*  
Foreign Broadcast Specialist\*  
Import-Export Agent  
In-Country Representative  
Intelligence Specialist  
Journalist\*  
Manufacturer's Representative  
Sales Person  
Scientist Linguist  
Teacher/Professor\*  
Translator/Interpreter\*  
Travel Agent  
United Nations Guide

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.



- Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city life health and well-being, professions and occupations, the arts, current events, and politics.
- Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
History 105	Early Western Civilization	3
Russian 120	Russian I	5
Russian 121	Russian II	5
Russian 220	Russian III	5
Russian 221	Russian IV	5
Russian 250	Conversational Russian I	3
Russian 251	Conversational Russian II	3
Total		29
Plus General Education and Elective Requirements		

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above qualifies for a Certificate of Achievement in Russian. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**



Associate Degree  
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## ASSOCIATE IN ARTS IN SOCIOLOGY FOR TRANSFER (A.A.-T)

The Associate in Arts in Sociology for Transfer (A.A.-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. A total of 18 units are required to fulfill the major portion of this degree. This degree reflects the Transfer Model Curriculum (TMC) supported by the Statewide Academic Senate. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Arts in Sociology for Transfer (A.A.-T) degree:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

- Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher in all courses required for the major or area of emphasis. A "Pass" grade is not an acceptable grade for courses in the major.

Sociology is the study of human social life. It is a broad discipline, grounded in science, with many applications for daily life. A major in sociology offers a rigorous preparation to students planning undergraduate and graduate work in sociology, political science, and other social and behavioral sciences. In addition, sociological education is an excellent background for professional training in law, business, education, and social work. Majoring in sociology provides a solid liberal education, and it is an excellent choice for undergraduates who are planning careers in the private sector, government, and non-profit organizations.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

- Identify, explain, and compare and contrast the major theoretical perspectives in sociology.
- Identify and explain the principles of social scientific research methodology.
- Explain sociologically inequalities of class, race, ethnicity, gender, and age in modern and pre-modern societies. Use SPSS for the analysis of quantitative data.

### Associate Degree Major Requirements

#### Required Core

Subject & Number	Title	Units
Sociology 120*	Introductory Sociology	3

#### List A

Select TWO (2) of the following:

Sociology 130*	Contemporary Social Problems	3
Sociology 215*	Statistics for Behavioral Sciences (MATH 160 will be accepted)	3
Psychology 205	Research Methods for Psychology	3
Total		6

#### List B

Select TWO (2) of the following courses:

Any List A course not used above or:

Sociology 114*	Introduction to the Sociology of Minority Group Relations	3
Sociology 125*	Marriage, Family and Alternative Life Styles	3
Sociology 138*	Social Psychology	3
Sociology 140*	Sex and Gender Across Cultures	3
Total		6

**List C**

Select ONE (1) of the following courses:

Any course from List A or B not used above or:

Anthropology 120*	Cultural Anthropology	3
Geography 130*	Human and Cultural Geography	3
Psychology 134*	Human Sexuality	3
	Total	3
	Units for the major	18
	Units for CSU GE or IGETC-CSU GE	37-39
	Total units required for the degree	60

Complete transferable units as needed to reach 60.

\* Courses that double count with CSU GE or IGETC-CSU GE.

**SPANISH**

This program is designed to provide students with skills in understanding, speaking, reading, and writing Spanish. It also gives students a greater understanding of Spanish culture and civilization and prepares them for greater international and domestic career opportunities.

For the suggested sequence of courses to be taken and/or for assistance in transferring to a four-year institution, students should consult the Counseling Center or the Department of World Languages.

**Career Opportunities**

Bilingual Aide  
Border Patrol Officer  
Buyer  
Court Interpreter\*  
Counseling  
Customs Agent/Inspector  
Foreign Exchange Clerk  
Foreign Student Advisor\*  
Interpreter\*  
Journalist\*  
Museum Curator\*  
Physician\*  
Scientific Linguist\*  
Tour Guide  
Tutor

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.
2. Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city life, health and well-being, profession, and occupations, the arts, current events, and politics.
3. Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

**Associate Degree Major Requirements**

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Spanish 120	Spanish I	5
Spanish 121	Spanish II	5
Spanish 220	Spanish III	5
or		
Spanish 122	Spanish for the Native Speaker I	(5)
Spanish 221	Spanish IV	5
or		
Spanish 123	Spanish for the Native Speaker II	(5)
Spanish 250	Conversational Spanish I	3
Spanish 251	Conversational Spanish II	3
	Total	26

Select ONE (1) of the following courses:

Subject & Number	Title	Units
Spanish 141	Spanish and Latin American Cultures	3
Spanish 145	Hispanic Civilizations	3
Cross-Cultural Studies 118	U.S. History: The Chicano/ Chicana Perspectives I	3
or		
History 118	U.S. History: Chicano/ Chicana Perspectives I	3
Cross-Cultural Studies 119	U.S. History: Chicano/ Chicana Perspectives II	3
or		
History 119	U.S. History: Chicano/ Chicana Perspectives II	3
	Total Required	29
	Plus General Education and Elective Requirements	

**Certificate of Achievement**

Any student who wishes to complete only the requirements listed above qualifies for a Certificate of Achievement in Spanish. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

**SPEECH COMMUNICATION**

See: Communication

**TELECOMMUNICATIONS**

See: Media Communications

**THEATRE ARTS**

The Theatre Arts major is designed to provide academic knowledge and practical technical training in all aspects of theatre arts at the entry level. The curriculum provides the essential lower division courses necessary for transfer to similar programs at four-year institutions, as well as assisting students towards employment in the professional and community theatre.

**Career Opportunities**

Actor/Actress  
Actors' Agent  
Casting Director  
Costume Designer\*

Director\*  
 Display Designer\*  
 Light Technician\*  
 Producer\*  
 Production Stage Manager\*  
 Sound Engineer  
 Special Effects Specialist\*  
 Theatre Manager

\*Bachelor's Degree or higher required.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Demonstrate an appreciation of learning and create a diverse aesthetic for theatre and it's place in culture and society.
2. Participate in high quality, accessible theatrical productions and present them at a reasonable cost for our students and the community at large.
3. Understand the proper artistic conduct in all academic and professional environments.

### Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Theatre Arts 101	Introduction to Narrative Theory	3
Theatre Arts 110	Introduction to the Theatre	3
Theatre Arts 130	Acting I	3
Theatre Arts 134 A or B	Fundamentals of Costume Design and Construction I or II	3
or		
Theatre Arts 155	Stagecrafts	(3)
Theatre Arts 136	Theatre Makeup	2
Theatre Arts 143	Historic Costume for the Theatre	3
or		
Theatre Arts 144	20th Century Fashion and Costumes	(3)
	<b>Total</b>	<b>20</b>

Select ONE (1) of the following courses:

Theatre Arts 102A or B or C or D	Theatre Production Practicum: Costumes I or II or III or IV	2
Theatre Arts 103A or B or C or D	Theatre Production Practicum: Sets I or II or III or IV	2
Theatre Arts 104A or B or C or D	Theatre Production Practicum: Lighting/Sound I or II or III or IV	2
Theatre Arts 111A or B or C or D	Rehearsal and Performance: Acting I or II or III or IV	2
Theatre Arts 112A or B or C or D	Rehearsal and Performance: Stage Management I or II or III or IV	2
Theatre Arts 113A or B or C or D	Rehearsal and Performance: Production Crew I or II or III or IV	2
	<b>Total</b>	<b>2</b>

Note: Plus one area of emphasis selected from the following:

### Area of Emphasis

#### Acting

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Theatre Arts 115	Voice and Movement for the Stage	3
or		
Theatre Arts 119A or B	Theatre Mime I or II	(3)
Theatre Arts 131	Acting II	3
Theatre Arts 207 or 208	Techniques of Directing I or II	3
Theatre Arts 230	Acting III	3
or		
Theatre Arts 132	Acting for the Camera	(3)
	<b>Total</b>	<b>12</b>
	<b>Total Required</b>	<b>31</b>
	Plus General Education and Elective Requirements	

#### Recommended Electives:

Subject & Number	Title	Units
Theatre Arts 111A or B or C or D	Rehearsal Performance Acting I or II or III or IV	2

### Area of Emphasis Technical

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Theatre Arts 134A or B	Fundamentals of Costume Design and Construction I or II	3
or		
Theatre Arts 156	Fundamentals of Scenic Design	(3)
Theatre Arts 137	Theatre Makeup II	2
or		
Theatre Arts 157	Fundamentals of Stage Lighting and Sound Design	(3)
Theatre Arts 254A or B	Advanced Design I or II	3
	<b>Total</b>	<b>8-9</b>
	<b>Total Required</b>	<b>30-31</b>
	Plus General Education and Elective Requirements	

### Certificate of Achievement

Any student who chooses to complete only the requirements listed above under Theatre Arts core curriculum plus one of the areas of emphasis qualifies for a Certificate of Achievement in Theatre Arts, Acting or Theatre Arts, Technical. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

### Technical Training Program

The Theatre Arts Technical Training Program is designed to provide technical theatre skills and practical technical theatre training in all aspects of Technical Theatre. The curriculum prepares students for entry-level technical employment in the professional and community theatre.



## Associate Degree Major Requirements

**Note: All courses in the major must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Theatre Arts 101	Introduction to Narrative Theory	3
Theatre Arts 134A or B	Fundamentals of Costume Design and Construction I or II	3
Theatre Arts 136 or Theatre Arts 140A or B	Theatre Makeup	2
	Costume Patternmaking I or II	(2)
Theatre Arts 155	Stagecrafts	3
Theatre Arts 156	Fundamentals of Scenic Design	3
Theatre Arts 157	Fundamentals of Stage Lighting and Sound	3
Theatre Arts 241	Theatre Arts Technical Internship	1
or Theatre Arts 242	Theatre Arts Technical Internship	(2)
or Theatre Arts 243	Theatre Arts Technical Internship	(3)
	Total Required	18-20
Select FOUR (4) courses from the following:		
Theatre Arts 102A or B or C or D	Theatre Production Practicum: Costumes I or II or III or IV	2
Theatre Arts 103A or B or C or D	Theatre Production Practicum: Sets I or II or III or IV	2
Theatre Arts 104A or B or C or D	Theatre Production Practicum: Lighting/Sound I or II or III or IV	2
	Total	8
	Plus General Education and Elective Requirements	27-30

## Certificate of Achievement

Any student who chooses to complete only the requirements listed above under Theatre Arts Technical Training Program qualifies for a Certificate of Achievement. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**

## TRIBAL GAMING: CULTURE AND POLICIES

### Certificate of Proficiency

A department issued Certificate of Proficiency may be awarded upon successful completion of a prescribed course of study. This certificate will **not** appear on a student's transcripts. The Tribal Gaming: Culture and Policies Certificate of Proficiency provides a basis of cultural and academic knowledge in the tribal gaming industry. These skills include:

- How to understand tribal governments, tribal peoples and the regulatory agencies that govern tribal gaming.
- How to work for an organization which caters to an ethnically diverse market of customers.
- How to understand social, political and environmental impacts of tribal gaming on local, regional and national jurisdictions.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree/certificate requirements in this program. Students will:

1. Analyze and describe tribal governments, tribal peoples and the regulatory agencies that govern tribal gaming.
2. Demonstrate the ability to interact effectively within and across cultures, particularly as an employee of an organization which caters to an ethnically diverse market of customers.
3. Analyze the social, political and environmental impacts of tribal gaming on local, regional and national jurisdictions.

**Note: All courses must be completed with a letter grade of "C" or higher.**

Subject & Number	Title	Units
Cross-Cultural Studies 170	American Indian Tribal Governments and Indian Sovereignty	3
Cross-Cultural Studies 172	Tribal Gaming and the Law	3
Cross-Cultural Studies 174	Organizational Culture of Gaming	3
Cross-Cultural Studies 176	Tribal Gaming Theory	3
Cross-Cultural Studies 178	Gambling Behavior: Addiction and Problem Gaming	3
	Total	15

## UNIVERSITY STUDIES

The Associate Degree in University Studies with five areas of emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. Students can refer to [www.ASSIST.org](http://www.ASSIST.org) and the Grossmont College Articulation Web Site: [www.grossmont.edu/articulation](http://www.grossmont.edu/articulation) for current articulation of courses required for transfer majors.

Students who intend to transfer must complete a minimum of 37- 45 units of general education depending on the transfer pattern. This may result in more than 60 units for the associate degree. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

### Requirements

To meet the University Studies Degree requirements, a student must complete the following:

#### I. California State University (CSU) General Education Breadth

1. Complete CSU General Education Breadth (see Transfer Information and Degree Requirements in college catalog).
2. Earn a grade of "C" or higher for all courses in Area A and the Mathematical/Quantitative Reasoning courses in Area B.
3. Complete a minimum of 18 units in an area of emphasis (listed below) with a "C" grade or higher.
4. Complete a minimum of 60 degree applicable CSU transferable semester units. (All courses included in each area of emphasis are CSU transferable.) Additional CSU transferable units may be chosen as electives.

5. Earn a cumulative GPA of 2.0 in all college coursework completed.
6. Meet Grossmont College residence requirements for graduation (see Degree Requirements in college catalog).

OR

## II. Intersegmental General Education Transfer Curriculum (IGETC) for CSU or UC

1. Complete IGETC Certification (see Transfer Information and Degree Requirements in college catalog).
2. Earn a grade of "C" or higher in all IGETC courses.
3. Complete a minimum of 18 units in an area of emphasis (listed below) with a "C" grade or higher.
4. Complete a minimum of 60 degree applicable UC transferable semester.

**Courses that are non-UC transferable are indicated by (\*).** Additional UC transferable units may be chosen as electives.

5. Earn a cumulative GPA of 2.0 in all college coursework completed.
6. Meet Grossmont College residence requirements for graduation (see Degree Requirements in college catalog).

AND

## III. Area of Emphasis

Select **one** area of emphasis with a minimum of 18 units required from the list below

- A. Business and Economics
- B. Communication and Language Arts
- C. Humanities and Fine Arts
- D. Mathematics, Natural Science and Computer Science
- E. Social and Behavioral Sciences

AND

## IV. Fitness/ Wellness

Select one of the following options:

1. Take any TWO exercise science or dance courses designated as meeting the GE requirement. (See college catalog for Associate Degree GE requirements.)
- or**
2. Take ONE fitness course, chosen from the following: ES 001, 002, 003, 004A-C, 005A-C, 006A-C, 007A-C, 009A-C, 021A-C, 023A-C, 024A-C, 040A-C, 041, 044A-C
- or**
3. Take Health Education 120.

While 18 units are required in a specific area to meet the requirements of the degree, it is strongly recommended that as many lower division preparation for the major courses as possible be completed at the community college prior to transfer. Cross-listed courses receive credit for only one course. Some baccalaureate majors and four-year institutions require a higher GPA than is necessary for the Associate Degree. Completion of the University Studies Degree does not guarantee admission to a four-year institution.

**Note: All courses in the area of emphasis must be completed with a letter grade of "C" or higher.**

## A. Business and Economics - AA

The Program-level Student Learning Outcomes (PSLOs) are outcomes that students who complete a degree/certificate in this program will be able to achieve upon degree/certificate completion. The PSLOs for the University Studies degree in BUSINESS AND ECONOMICS are:

1. Students will apply mathematical and quantitative reasoning skills to the discipline's methodologies
2. Students will evaluate and interpret basic economic principles and theories related to performance and specific economic sectors

A minimum of 18 units required. Courses in this area of emphasis focus on the study of business transaction theory and practice, the operations and strategies of business decisions, legal concepts, and the place of business in the American and global economy as a whole. Students apply mathematical and quantitative reasoning skills to the discipline's methodologies, and evaluate and interpret basic economic principles and theories related to performance and specific economic sectors. Students completing this area may be interested in the following baccalaureate majors: accounting, business, economics, finance, information and decision systems, international business, hospitality/tourism, management, and marketing. Students must complete a minimum of six units in business, six units in economics, and six units of electives from the following.

**Note: All courses in the area of emphasis must be completed with a letter grade of "C" or higher.**

### Business

BUS 110, 120, 121, 125, 128\*, 158\*, 160\*

### Economics

ECON 110, 120, 121, 261

### Electives

CSIS 110

ECON 215\*

LIR 110\*

MATH 160, 175, 178, 180, 280, 281

\*Non-UC transferable course

## B. Communication and Language Arts - AA

The Program-level Student Learning Outcomes (PSLOs) are outcomes that students who complete a degree/certificate in this program will be able to achieve upon degree/certificate completion. The PSLOs for the University Studies degree in COMMUNICATION AND LANGUAGE ARTS are:

1. Students will explore and analyze written and verbal communication methods
2. Students will develop and advance their oral and written communication skills.

A minimum of 18 units required. Courses in this area of emphasis focus on the study of how language works to express human ideas and feelings. Students explore and analyze written and verbal communication methods, as well as develop and advance their oral and written communication skills. Students completing this area may be interested in the following baccalaureate majors: American Sign Language, communication, English, foreign language, literature, journalism, linguistics and media/film/television. Students must complete a minimum of six units in communication and six units in language arts. The remaining six units may be taken from either category.

**Note: All courses must be completed with a letter grade of "C" or higher.**

#### Communication

CCS 144

COMM 120, 122, 123, 124, 128, 135, 136, 137, 144, 145

MCOM 110, 111, 112\*, 116\*, 117\*, 118\*, 120, 189

#### Language Arts

ARBC 120, 121, 122, 123, 148, 220, 221, 250, 251

ASL 120, 121, 140, 220, 221

CCS 122, 123

CHIN 120, 121, 220, 221, 250, 251

ENGL 112\*, 118, 122, 124, 126, 130, 131, 132, 133, 140, 141, 142, 143, 215, 219, 221, 222, 225, 226, 227, 228, 231, 232

FREN 120, 121, 220, 221, 250, 251

GERM 120, 121, 220, 221, 250, 251

ITAL 120, 121, 220, 221, 250, 251

JAPN 120, 121, 220, 221, 250, 251

RUSS 120, 121, 220, 221, 250, 251

SPAN 120, 121, 122, 123, 220, 221, 250, 251

\*Non-UC transferable course

### C. Humanities and Fine Arts - AA

The Program-level Student Learning Outcomes (PSLOs) are outcomes that students who complete a degree/certificate in this program will be able to achieve upon degree/certificate completion. The PSLOs for the University Studies degree in HUMANITIES AND FINE ARTS are:

1. Students will evaluate and interpret the ways in which people through the ages in different cultures responded to themselves and the world around them through artistic and cultural creation.
2. Students will develop an aesthetic awareness and incorporate these concepts when constructing value judgments.

A minimum of 18 units required. Courses in this area of emphasis relate to the study of cultural, humanistic activities, and artistic expression of human beings. Students evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them through artistic and cultural creation. Students develop an aesthetic awareness and incorporate these concepts when constructing value judgments. Students completing this area may be interested in the following baccalaureate majors: art, dance, humanities, music, musical theatre, photography, philosophy, religious studies, and theatre arts. Students must complete a minimum of six units in Humanities and six units in Fine Arts. The remaining six units may be taken from either category.

**Note: All courses must be completed with a letter grade of "C" or higher.**

#### Humanities

ARBC 120, 121, 122, 123, 220, 221, 250, 251

ASL 120, 121, 140, 220, 221

CHIN 120, 121, 220, 221, 250, 251

CCS 122, 123, 135, 145, 147, 149, 152, 236, 237, 238

ENGL 112\*, 118, 122, 201, 215, 217, 218, 219, 221, 222, 225, 226, 227, 228, 231, 232, 236, 237, 238, 241, 242

FREN 120, 121, 152, 220, 221, 250, 251

GERM 120, 121, 220, 221, 250, 251

HIST 100, 101, 103, 105, 106, 126, 135, 136, 137, 148

HUM 110, 120, 125, 130, 135, 160, 170

ITAL 120, 121, 220, 221, 250, 251

JAPN 120, 121, 149, 220, 221, 250, 251

PHIL 110, 111, 112, 114, 116, 118, 125, 130, 140, 145, 150, 155

RELG 120, 130, 140, 150

RUSS 120, 121, 220, 221, 250, 251

SPAN 120, 121, 122, 123, 141, 145\*, 220, 221, 250, 251

#### Fine Arts

ART 100, 120, 121, 124, 125, 126, 127, 128, 129, 130, 131\*, 132\*, 133\*, 140, 141, 142, 143, 145, 146, 147, 172, 189

CCS 126, 134

DANC 068, 071AB, 072AB, 080A-D, 081A-D, 082AB, 084A-D, 088A-D, 094A-D, 099ABC, 110, 115, 205, 206

MCOM 189

MUS 101, 102, 105, 106, 110, 111, 114, 115, 116, 117, 124, 125, 126, 127, 128, 129, 132, 133, 134, 135, 136, 137, 138, 139, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 164, 165, 166, 167, 170, 171, 172, 173, 174, 175, 180, 181, 189, 190, 191, 201-206, 210, 211, 212, 213, 224, 226, 232, 233, 236, 237, 238, 239, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 264, 265, 266, 267, 270, 271, 272, 273, 274, 275, 290, 291

PHOT 150, 151, 152\*, 154

THTR 101, 102A, 103A, 104A, 110, 111A, 111B, 111C, 111D, 112A, 112B, 112C, 112D, 113A, 113B, 113C, 113D, 115, 119A, 119B, 122A, 122B, 122C, 122D, 123A, 123B, 123C, 123D, 124A, 124B, 124C, 124D, 130, 131, 134A, 134B, 136, 137, 143, 144, 145, 146, 147, 148, 155, 156, 157, 189, 207, 208, 230, 234A, 234B, 235A, 235B, 254A, 254B

\*Non-UC transferable course

### D. Mathematics and Natural Science and Computer Science - AS

The Program-level Student Learning Outcomes (PSLOs) are outcomes that students who complete a degree/certificate in this program will be able to achieve upon degree/certificate completion. The PSLOs for the University Studies degree in MATHEMATICS, NATURAL SCIENCE, AND COMPUTER SCIENCE are:

1. Students will recognize and utilize the methodologies of science as investigative tools.
2. Students will use basic mathematical skills to solve numerical problems encountered in daily life, and more advanced skills for applications in the physical and life sciences.

A minimum of 18 units required. Courses in this area of emphasis focus on the study of mathematical and quantitative reasoning skills and apply the facts and principles that form the foundations of living and non-living systems. Students recognize and utilize the methodologies of science as investigative tools, as well as the limitations of science. Students use basic mathematical skills to solve numerical problems encountered in daily life, and more advanced skills for applications in the physical and life sciences. Students completing this area may be interested in the following baccalaureate majors: astronomy, biological sciences, chemistry, computer science, engineering, geography, geology, mathematics, oceanography, physical science, and physics. Students must complete a minimum of six units in Mathematics, and a minimum of six units in Natural Science or Computer Science. The remaining six units may be taken from either of the categories: Mathematics, Natural Science or Computer Science.

**Note: All courses must be completed with a letter grade of "C" or higher.**



**Mathematics**

ANTH 215  
 BIO 215  
 MATH 150, 160, 170\*, 175, 176, 177, 178, 180, 245, 280, 281, 284, 285  
 PSY 215  
 SOC 215

**Natural Science**

ANTH 130, 131  
 ASTR 110, 112, 120  
 BIO 105, 110, 112, 114, 118, 120, 140, 141, 141L, 142, 144, 145, 152\*, 180, 230, 240  
 CHEM 102, 110, 113, 115, 116, 120, 141, 142, 231, 232  
 GEOG 104, 106, 120, 121, 130, 140, 150, 170  
 GEOL 104, 110, 111, 121, 150, 210, 230  
 OCEA 112, 113, 150  
 PHYC 110, 130, 131, 140, 240, 241  
 PSC 100, 110, 111  
 SCI 110

**Computer Science**

CSIS 165, 293, 294, 296, 297  
 \*Non-UC transferable course

**E. Social and Behavioral Sciences - AA**

The Program-level Student Learning Outcomes (PSLOs) are outcomes that students who complete a degree/certificate in this program will be able to achieve upon degree/certificate completion. The PSLOs for the University Studies degree in SOCIAL AND BEHAVIORAL SCIENCES are:

1. Students will evaluate and interpret human societies; the institutions, organizations, and the groups that form them; and the ways in which individuals and groups relate to one another.
2. Students will evaluate various approaches and methodologies of the disciplines.

A minimum of 18 units required. Courses in this area of emphasis focus on the study and understanding of human behavior. Students evaluate and interpret human societies; the institutions, organizations, and the groups that form them; and the ways in which individuals and groups relate to one another. Students evaluate various approaches and methodologies of the disciplines. Students completing this area may be interested in the following baccalaureate majors: anthropology, child development, criminal justice, education, ethnic studies, history, nutrition, political science, psychology, public health, social work, and sociology. Students must complete a minimum of six units in Social Science and six units in Behavioral Science. The remaining six units may be taken from either category:

**Note: All courses must be completed with a letter grade of "C" or higher.**

**Social Sciences**

AOJ 110, 200, 240  
 ANTH 120, 140  
 COMM 144  
 CCS 114, 115, 118, 119, 124, 125, 128, 130, 131, 132, 133, 135, 143, 144, 145, 147, 152, 154, 155, 180, 181  
 ECON 110, 120, 121, 261  
 GEOG 106, 130, 170  
 HIST 103, 108, 109, 112, 113, 114, 115, 118, 119, 122, 123, 124, 127, 130, 131, 136, 147, 148, 154, 155, 156, 157, 180, 181  
 POSC 120, 121, 124, 130, 140, 150, 155, 160  
 SOC 114  
 SPAN 145\*

**Behavioral Sciences**

CCS 125  
 CD 115, 125, 131, 145  
 COMM 124, 128  
 ED 200  
 FS 115, 120  
 HED 120, 155, 201, 255  
 PSY 120, 125, 130, 134, 138, 140, 150, 170, 220  
 SOC 120, 125, 130, 138, 140  
 \*Non-UC transferable course

**Certificate of Achievement**

Students who complete the CSU General Education Breadth requirements or the IGETC for CSU or UC requirements are eligible to receive a Certificate of Achievement in University Studies. An official request must be filed with the Admission and Records Office prior to the deadline as stated in the Academic Calendar.

**Note: All courses must be completed with a letter grade of "C" or higher.**





