

## Programs of Study

AA = Associate in Arts Degree and AS= Associate in Science Degree (4 semesters, 60+ units)  
 AD-T = Associate Degree for Transfer (California State University system, 60 units)  
 C = Certificate of Achievement and LC = Local Certificate (1-3 semesters, short-term training)

Administration of Justice. . . . .	AS-T
Administration of Justice - Correctional Science. . . . .	AS/AA
Agriculture Plant Science. . . . .	AS-T
Agriculture Science Technology. . . . .	AS/C/LC
Art. . . . .	AA-T
Biology. . . . .	AS
Business. . . . .	
Business - Administration. . . . .	AS-T
Business - Bookkeeping. . . . .	AS/AA/C
Business - Management. . . . .	AS/AA/C
Business - Retail Business Management. . . . .	AS/AA/C
Child Development. . . . .	
Child Development - Administrative. . . . .	LC
Child Development - Assistant Teacher. . . . .	LC
Child Development - Associate Teacher. . . . .	LC
Child Development - School-Age. . . . .	LC
Child Development - Teacher. . . . .	C
Communication Studies. . . . .	AA-T
Computer Information Systems (CIS) - Microcomputer Applications Specialist. . . . .	AS/AA/C
Early Childhood Education. . . . .	AS-T
English as a Second Language. . . . .	LC
Geography. . . . .	AA-T
Geology. . . . .	AS-T
Health Science (General). . . . .	AS
Heavy Equipment Operation. . . . .	C
Humanities. . . . .	AA
Integrated Pest Management. . . . .	C
Irrigation Engineering Technology. . . . .	C
Kinesiology. . . . .	AA
Liberal Arts - Area of Emphasis for Arts and Humanities. . . . .	AA
Liberal Arts - Area of Emphasis for English and Communication. . . . .	AA
Liberal Arts - Area of Emphasis for Math and Science. . . . .	AA
Liberal Arts for Social and Behavioral Science. . . . .	AA
Liberal Studies - Elementary Education. . . . .	AA
Mathematics. . . . .	AS-T
Performing Arts. . . . .	LC
Political Science. . . . .	AA-T
Psychiatric Technician. . . . .	AS/C
Psychology. . . . .	AA/AA-T
Social Work. . . . .	LC
Transfer Studies – Full Intersegmental General Education Transfer (IGETC) Curriculum Certification: UC. . . . .	C
Transfer Studies – Full Intersegmental General Education Transfer Curriculum (IGETC) Certification: CSU. . . . .	C
Welding Technology. . . . .	C

# Administration of Justice

## Administration of Justice AS-T Degree

The Associate in Science in Administration of Justice for Transfer degree provides introductory and journey level course work in Administration of Justice for local, state, federal, and private enterprise levels. Student development is enhanced with philosophical, statutory, practical, and tactical experience. Students will be prepared to work in a variety of fields, including public law enforcements agencies such as municipal police, probation officers, county deputy sheriffs, correctional officers, game wardens, state parks and private security.

The Associate in Science Transfer degree is intended for students who plan to complete a bachelor’s degree in Criminal Justice or a related field of study in the California State University System. Students will be prepared to study in the following areas; Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transfer to earn a bachelor’s degree.

Program student learning outcomes

- Students will be able to explain the legal process of the criminal justice system
- Students will be able to demonstrate a working knowledge of how statutory and case laws at the federal, state, and local levels affect the criminal justice system
- Students will be able to write correct documents used in the criminal justice system using proper format and citations. This includes reports, memos, and legal briefs.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC
- Complete the major units as presented below
- Complete electives to reach a total of 60 transferable units
- Earn a grade of C or better in each major course
- Maintain a minimum cumulative G.P.A. of 2.00
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
AOJ 001 . . . .	Introduction to Criminal Justice . . . . .	3
AOJ 020 . . . .	Criminal Law . . . . .	3
<b>Plus 6 units from below</b>		
AOJ 003 . . . .	Introduction to Corrections . . . . .	3
AOJ 010 . . . .	Principles & Procead of Criminal Justice . . . . .	3
AOJ 016 . . . .	Human & Commu Relations in Crim Justice . . . . .	3
AOJ 022 . . . .	Criminal Evidence . . . . .	3
AOJ 024 . . . .	Criminal Investigation . . . . .	3
AOJ 032 . . . .	Juvenile Delinquency . . . . .	3
<b>Plus 6-7 units from below</b>		
PSYCH 001 .	Introductory Psychology . . . . .	3
SOC 001 . . . .	Introduction to Sociology . . . . .	3
MATH 025 ..	Introduction to Statistics . . . . .	4
	Total. . . . .	18-19
	CSU GE Breath or IGETC. . . . .	41-42
	.....	
	<b>Total . . . . .</b>	<b>60</b>

# Administration of Justice - Correctional Science

## Correctional Science AS or AA Degree

The Administration of Justice Correctional Science degree is designed to provide the student with option of emphasizing their program of study in the correctional science field. This program provides introductory and journey level course work in corrections for local, state, federal and private levels of correctional enterprise levels. This program enhances student development with philosophical, statutory, and practical background necessary to successfully compete in a technologically advance competitive, and rewarding career field. The following have been recognized as core course requirements by the Commission on Correctional Peace Officers Standards and Training (STC) for all new apprentices (entry-level) hired with the Department of Corrections and Department of Youth Authority after July 1, 1995.

Upon completion of the program the student will be able to meet the following objectives:

- The students will be able to write correct documents used in corrections using proper format and citations. This includes reports, memos, and legal briefs.
- The students will be able to explain the basic rights afforded persons who are under the authority of the correctional system.
- The student will be able to track the appeals process of a convicted offender through the state and federal court system.
- The students will be able to explain the requirements and responsibilities of those who are employed in the correctional system.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete a minimum of 18 additional units from the major list below
- Complete electives to reach a total of 60 degree applicable units
- Earn a grade of C or better in each major course
- Maintain a minimum cumulative G.P.A. of 2.00
- Complete the English and math proficiency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
AOJ 003 . . . .	Introduction to Corrections . . . . .	3
AOJ 004 . . . .	Control & Supervision Inmates . . . . .	3
AOJ 006 . . . .	Correctional Interviewing and Counseling . . . . .	3
AOJ 007 . . . .	Legal Aspects of Corrections . . . . .	3
AOJ 012 . . . .	Written Criminal Justice Communications . . . . .	3
AOJ 020 . . . .	Criminal Law . . . . .	3
<b>Plus 3 units from the courses listed below</b>		
AOJ 016 . . . .	Human & Commu Relations in Crim Justice . . . . .	3
AOJ 024 . . . .	Criminal Investigation . . . . .	3
AOJ 029 . . . .	Criminology . . . . .	3
AOJ 032 . . . .	Juvenile Delinquency . . . . .	3
	<b>Total . . . . .</b>	<b>21</b>

# Agriculture Plant Science

## Agriculture Plant Science AS-T Degree

The Associate in Science in Agriculture Plant Science for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Plant Science or similar major.

This program provides knowledge of the general principles of agricultural production including soil fertility and irrigation management, tractor operation, pest control and planting, growing, harvesting and marketing of crops.

This program includes coursework required for entry-level positions and foundational knowledge required for careers as pest control advisors, certified crop advisors, farm managers, irrigation consultants, fertilizer sales, and agricultural research technician. A baccalaureate degree in Plant Science will prepare students for various careers in viticulture, horticulture and agronomy.

In order to complete the AS-T in Agriculture Plant Science students must met the following requirements:

- Complete 60 semester units or 90 quarter units that are eligible for transfer to a California State University and include requirements for the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum;
- Complete a minimum of 18 semester or 27 quarter units in the major or area of emphasis with a grade of "C" or better in all required courses;
- Earn a minimum grade point average of 2.0.

The goals for the Associate in Science in Agriculture Plant Science for Transfer Degree are:

- The Associate in Science in Agriculture Plant Science for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Plant Science or a similar major.
- Identify the major plant vegetative and reproductive structures and explain plant growth and reproduction processes including respiration, photosynthesis, transpiration, growth, fertilization and fruit formation.
- Integrate and apply basic plant and soil science principles to achieve sustainable plant growth and yield under diverse environmental conditions.
- Explain historical, present and future challenges associated with local and global food production systems.
- Apply scientific reasoning and critical thinking skills to address practical challenges in agricultural production systems.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
SLSCI 021 ..	Introduction to Soil Science .....	4
CHEM 002A	Introductory Chemistry .....	4
MATH 025 ..	Introduction to Statistics .....	4
AG 014 .....	Tractor Operations .....	3
CRPSCI 001 .	Introduction to Plant Science .....	3
Or CRPSCI 002 .....	Plant Science Theory .....	3
AGBUS 040 .	Introductory Agricultural Economics .....	3
Or ECON 001B .....	Microeconomics .....	3
Total Major Units .....		21
Units to Be Double-Counted as General Education .....		11
CSU GE Breadth or IGETC Units .....		37-39
Transferrable Elective Units .....		19-21
<b>Total Units Required for AS-T Degree .....</b>		<b>60</b>



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# Agriculture Science Technology

## Agriculture Science Technology AS Degree

The Agriculture Science Technology Degree prepares students to work with global positioning satellite (GPS) systems, geographic information system (GIS) software, automatic tractor guidance systems, variable rate chemical input applicators, surveying equipment, and related computer software. Students will learn in hands-on, real-world applications. Completing the certificate qualifies the student to enter the professional job market in the public sector as well as the agriculture industry. Units for the Precision Agriculture Certificate apply to the Associates Science Degree in Agriculture.

Upon completion of the program the student will be able to meet the following objectives:

- Students will demonstrate their ability to use agricultural technology.
- Students will understand agronomic fundamentals (soil, plant, water relationships)
- Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS
- Students will demonstrate job readiness skills needed to obtain employment upon graduation

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
  - Complete major course requirements as specified in the catalog with a C or better
  - Complete electives to reach a total of 60 degree applicable units
  - Maintain a grade point average of 2.00 overall
  - Complete the English and math competency requirements with a C or better
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<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
AG 015X...	Occupational Work Experience .....	1 - 8
AGBUS 015.	Computer Application to Agriculture .....	3
SLSCI 021 ..	Introduction to Soil Science .....	4
CRPSCI 001.	Introduction to Plant Science .....	3
or CRPSCI 002.....	Plant Science Theory .....	3
<b>Plus at least 15 units from the courses listed below</b>		
AG 011 .....	Agriculture Sales and Communication .....	3
AG 014.....	Tractor Operations .....	3
AGBUS 040.	Introductory Agricultural Economics .....	3
AET 010.....	Surveying .....	3
AET 015.....	CAD for Agriculture .....	2
AET 021.....	AG-Irrigation Management .....	3
AET 022.....	Irrigation Evaluation/Design Principles .....	4
AET 023.....	Advanced Irrigation Design .....	3
AET 024.....	Drip & Micro Irrigation Design & MGMT. ....	3
CRPSCI 006.	Introduction to Precision Agriculture .....	3
CRPSCI 008.	Applications of Geospatial Technology .....	3
CRPSCI 017.	Control and Sensor Systems in Ag .....	3
CRPSCI 018.	Precision Ag Software .....	3
CRPSCI 019.	California Water .....	3
CRPSCI 021.	Orchard Production .....	3
CRPSCI 023.	Row Crop Production .....	3
CRPSCI 032.	Weeds and Poisonous Plants .....	3
CRPSCI 036.	Fertilizers and Soil Amendments .....	3
CRPSCI 044.	Economic Entomology .....	3
CRPSCI 045.	Ca Pest Control Laws & Regulations .....	2
IMT 060.....	Industrial Core .....	3
IMT 061.....	Industrial Maintenance Mechanic Level I .....	3
IMT 062.....	Industrial Maint. Mechanic Level II .....	4
WT 070.....	Introduction to Certified Welding .....	2.5
	<b>Total .....</b>	<b>26</b>

## Precision Agriculture Certificate of Achievement

Completion of the 26 units listed above fulfills the requirements for the Precision Agriculture Certificate of Achievement.

For Gainful Employment information please visit:

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/precision-agriculture.php>

## Agriculture Science Technology Local Certificate

Program student learning outcomes:

- Students will demonstrate their ability to use agricultural technology.
- Students will understand agronomic fundamentals (soil, plant, water relationships).
- Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS.

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<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
AGBUS 015.	Computer Application to Agriculture .....	3
CRPSCI 001.	Introduction to Plant Science .....	3
CRPSCI 006.	Introduction to Precision Agriculture .....	3
CRPSCI 007.	Advanced Precision Agriculture .....	3
CRPSCI 019.	California Water .....	3
	<b>Total .....</b>	<b>15</b>

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# Art

## Studio Arts AA-T Degree

The Associate in Art in Studio Arts for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Studio Arts or similar major.

The Art program is dedicated to providing the highest quality of lower division art courses for students who are majoring in art as well as all students who want to explore visual artistic expression through the creation of art and the study of art history. The Art program offers a complete selection of lower division courses in the Fine Arts. Students planning to continue their studies at a four-year college typically include courses in Art History, Design, Drawing and other studio art courses. This provides students with a richer understanding of their world and themselves. Students in the art program work with experienced instructors who assist them in the development of a sound artistic foundation.

Upon completion of the studio arts program, students will be able to:

- Create a visually balanced artwork using the art elements and design principles
- Produce sustained and developed artworks for inclusion in an artistic portfolio
- Create artworks demonstrating proficiency with basic color theory and color mixing
- Write a personal and individual critique and artist statement describing her/his series of artworks
- Understand visual art concepts and terminology relating to art history and art disciplines, media, materials, and techniques
- Analyze, critique, and respond orally and in writing to a variety of artistic movements throughout European and Non-European history.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree and transfer to a CSU.

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better
- A maximum of 6 units may be double counted

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
ART 002 . . . .	Two-Dimensional Design . . . . .	3
ART 003 . . . .	Three Dimensional Design Fundamentals . . . . .	3
ART 005A . . .	Basic Drawing . . . . .	3
ART 005B . . .	Intermediate Drawing . . . . .	3
ART 013A . . .	Beginning Ceramics . . . . .	3
ART 015A . . .	Beginning Painting . . . . .	3
ART 016A . . .	Survey of Western Art: Pre-History . . . . .	3
ART 016B . . .	Survey of Western Art: Renaissance . . . . .	3
	Total . . . . .	24
	Units to be double-counted as General Education . . . . .	6
	CSU GE Breadth or IGETC Units . . . . .	39
	Transferable Elective Units . . . . .	3
	<b>Total . . . . .</b>	<b>60</b>

# Biology

## Biology AS Degree

The Biology Program provides students with the opportunity to earn an associate degree in the student’s area of specialization and prepares the student for transfer to a four-year institution. Students completing the baccalaureate program or graduate school may be hired in the major or in a related field such as biochemistry, bioengineering, botany, clinical lab technology, environmental biology, forestry, oceanography, range management, wildlife/fisheries biology, or zoology.

Program student learning outcomes

- Students will be able to label and identify prokaryotic and eukaryotic cell parts and describe their function.
- Students should be able to describe the processes of nutrient catabolism in human body cells.
- Students should be able to differentiate between human tissue types and their respective functions.
- Students should be able to describe the transcription and translation of a human gene

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BIO 032 . . . .	Human Anatomy . . . . .	4
BIO 035 . . . .	Human Physiology . . . . .	4
BIO 038 . . . .	Microbiology . . . . .	4
<b>Plus at least 8 units from the courses listed below:</b>		
* CHEM 001A . . . . .	General Chemistry I . . . . .	5
* CHEM 001B . . . . .	General Chemistry II . . . . .	5
* CHEM 002A . . . . .	Introductory Chemistry . . . . .	4
MATH 001A . . . . .	Introduction to Calculus . . . . .	5
* MATH 001B . . . . .	Calculus With Applications . . . . .	5
<b>Total . . . . .</b>		<b>20</b>

*\*This course is offered infrequently.*

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## Business

The Business Program prepares the student for entry level positions in areas such as bookkeeping, management, and retailing. The business program provides a foundation for further study and is valuable for students interested in starting or enhancing their own business. The program provides students with an understanding of the operation of business in the American economic system. An associate degree or a certificate of achievement may be earned in each of the areas of emphasis listed below.

### **Business - Associate Degrees**

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the General Education pattern for the associate degree
- Complete the required units chosen exclusively from the major list below
- Complete electives to reach a total of 60 degree applicable units
- Earn a grade of C or better in each course in the major
- Maintain a minimum cumulative G.P.A. of 2.00
- Complete the English and math proficiency requirements with a C grade or better

Students planning to transfer to a four-year university are cautioned that this degree may not meet all of the lower division requirements for transfer into a particular major. Students should consult with a counselor for specific information and develop an educational plan to ensure that this degree would be the most beneficial prior to transferring to the university of their choice. Students can also access transfer information on [www.assist.org](http://www.assist.org)

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## Business - Administration

### Business Administration AS-T

The Associate in Science in Business Administration for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Business Administration or similar major.

Students will gain a broad knowledge in the foundation of the business field including accounting, computer systems, economics, and contract law. The program includes coursework that is essential for entry-level positions and enhances the knowledge base of those who are seeking career advancement. A baccalaureate degree will prepare students will to work with a variety of occupations including account executive, analyst, bank employee, buyer, clerk, data-entry clerk, data-entry specialist, government service, insurance representative, manager, office assistant, public administration, and sales.

Upon completion of the business administration program, the student will be able to:

- Identify and explain the major functional areas of business organizations including management, marketing, finance, and accounting.
- Apply commonly used computer application programs to create relevant business documents.
- Apply accounting and mathematical concepts and principles in making decisions about business operations.
- Analyze practical business problems and utilize research and critical thinking to evaluate and recommend alternative solutions.
- Assess the relationships and inter-dependencies of economic, social, legal, and global environments in which businesses operate.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BUS 001A ..	Beginning Principles of Accounting .....	4
BUS 001B ..	Elementary Principles of Accounting .....	4
BUS 018 ....	Business Law .....	4
BUS 020 ....	Introduction to Business .....	3
CIS 007 .....	Computer Concepts .....	3
ECON 001A .	Macroeconomics .....	3
ECON 001B .	Microeconomics .....	3
MATH 025 ..	Introduction to Statistics .....	4
	Total .....	28
	Units to be double-counted as General Education .....	9
	CSU GE Breadth or IGETC Units .....	39
	Transferable Elective Units .....	2
	<b>Total .....</b>	<b>60</b>

# Business - Bookkeeping

## Business Bookkeeping AS or AA Degree

### Program student learning outcomes

- Students will understand business concepts related to accounting, management, and human resource management.
- Students will be able to effectively communicate business information orally and in writing.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BUS 055 . . . .	Bookkeeping . . . . .	3
BUS 013A ..	Word for Windows I . . . . .	1.5
BUS 013B ..	Word for Windows II . . . . .	1.5
BUS 020 . . . .	Introduction to Business . . . . .	3
BUS 024 . . . .	Business Mathematics . . . . .	3
BUS 028 . . . .	Business Communication . . . . .	3
BUS 074 . . . .	Computerized Accounting . . . . .	3
CIS 007 . . . .	Computer Concepts . . . . .	3
CIS 034 . . . .	Introduction to Spreadsheets . . . . .	3
	<b>Total . . . . .</b>	<b>24</b>

## Business Bookkeeping Certificate of Achievement

Completion of the 24 units listed above fulfills the requirements for Business Bookkeeping Certificate of Achievement.

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/business-bookkeeping.php>

## Business - Management

### Business - Management Option AS or AA Degree

The Business Management Degree provides an overview of the various disciplines in business such as management, marketing, accounting, and finance. The degree provides a strong foundation for entry into a variety of business fields. The coursework is essential for entry-level positions while enhancing the knowledge base of those who are seeking career progression.

Upon complete of the business management program, the student will be able to:

- Identify and explain major functional areas of business organizations including management, marketing, finance, and accounting
- Identify the functions of management and apply them in business situations
- Apply commonly used computer application programs to create relevant business documents
- Effectively communicate both verbally and in writing in various business settings
- Apply business mathematics in order to analyze data and solve business problems Students must fulfill the following requirements to qualify for an associate degree:
  - Complete the Associate Degree requirements
  - Complete major course requirements as specified in the catalog with a grade of C or better
  - Complete electives to reach a total of 60 degree applicable units
  - Maintain a grade point average of 2.00 overall
  - Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BUS 001A ..	Beginning Principles of Accounting .....	4
or BUS 055 ..	Bookkeeping .....	3
BUS 020 ....	Introduction to Business .....	3
BUS 024 ....	Business Mathematics .....	3
BUS 028 ....	Business Communication .....	3
CIS 007 ....	Computer Concepts .....	3
	<b>Total Core Courses .....</b>	<b>15 - 16</b>
<b>Management Option Requirements</b>		
BUS 035 ....	Human Resources Management .....	3
BUS 018 ....	Business Law .....	4
BUS 032 ....	Small Business Management .....	3
	<b>Total Management Option .....</b>	<b>10</b>
<b>Bookkeeping Option Requirements</b>		
BUS 013A ..	Word for Windows I .....	1.5
BUS 013B ..	Word for Windows II .....	1.5
CIS 034 ....	Introduction to Spreadsheets .....	3
BUS 074 ....	Computerized Accounting .....	3
	<b>Total Bookkeeping Option .....</b>	<b>9</b>

### Business - Management Certificate of Achievement

Completion of the 24-26 units listed above fulfills the requirements for Business Management Certificate of Achievement.

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/business-management.php>

## Business - Retail Business Management

### Business - Retail Business Management AS or AA Degree

The Retail Business Management Certificate provides an overview of the various disciplines in business such as management, marketing, accounting, and finance. The degree provides a training and education for those wishing to own or manage a retail business. The various elements involved in starting and operating a small business are covered.

Upon completion of the retail business management program, the student will be able to:

- Identify and explain major functional areas of business organizations including management, marketing, finance, and accounting
- Apply commonly used computer application programs to create relevant business documents
- Effectively communicate both verbally and in writing in various business settings
- Research and compose a business plan that can be used for planning as well as financing Students must fulfill the following requirements to qualify for an associate degree:
- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BUS 001A . .	Beginning Principles of Accounting . . . . .	4
or BUS 055 .	Bookkeeping . . . . .	3
BUS 018 . . . .	Business Law . . . . .	4
BUS 020 . . . .	Introduction to Business . . . . .	3
BUS 028 . . . .	Business Communication . . . . .	3
BUS 032 . . . .	Small Business Management . . . . .	3
BUS 035 . . . .	Human Resources Management . . . . .	3
CIS 007 . . . .	Computer Concepts . . . . .	3
	<b>Total . . . . .</b>	<b>22 - 23</b>

### Business - Retail Business Management Certificate of Achievement

Completion of the 22-23 units listed above fulfills the requirements for Retail Business Management Certificate of Achievement.

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/business-management.php/>

## **Child Development**

The State of California, Commission for Teacher Preparation and Licensing, is responsible for issuing Child Development Permits to eligible students seeking employment in State funded early childhood educational programs or other selective children's programs. The student with the intention of securing a Child Development Permit must follow mandated course requirements as outlined by the Child Development Permit Matrix handout. To secure a copy of the Child Development Permit Matrix contact a Child Development instructor or the coordinator of the Child Development Training Consortium. There is a monetary fee paid to the Commission for Teacher Preparation and Licensing when securing the Child Development permit and as required, all course work must be passed with a grade of C or better.

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# Child Development - Administrative

## Child Development - Administrative Local Certificate

The course work in this certificate helps to partially qualify a student to become a director/supervisor/administrator of a State, Federal, nonprofit, or privately owned children’s program. Courses within this certificate meet State mandated requirements. CD 14A, 14B and 22 are mandated courses for the site supervisor and program director requirements for the Child Development Permit.

It is strongly recommended students not take these courses until they have some experience working with children and adults and have completed at least 12.0 units of child development courses, which include the State mandated classes (CD 5, 10, and 12A).

Program student learning outcomes

- Students will integrate knowledge of operating a successful child care program.
- Students will apply administrative principles, including budgeting, conflict resolution and health and safety issues.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
CD 014A . . .	Administration & Superv. of Child. Progr . . . . .	3
CD 014B . . .	Adm. & Superv. of Child. Pgrm Practicum . . . . .	3
CD 022 . . . . .	Superv. Adults Work in Child. Program . . . . .	2
	Computer and/or Business Electives. . . . .	4
	<b>Total . . . . .</b>	<b>12</b>

**Electives:** It is recommended that students choose computer and/or business classes that meet their educational needs.

# Child Development - Assistant Teacher

## Child Development - Assistant Teacher Local Certificate

The student will be eligible for this certificate by completing 6 units from the following child development courses and obtaining a “C” or better in the outcome of the courses. It is recommended the student start taking English 51A or English 1A before these courses or at the same time.

Upon completion of the program the student will be able to meet the following objectives:

- Integrate child development concepts into their daily practices with young children.
- Implement developmentally appropriate teaching practices with young children.
- Implement various techniques while working with infants, toddlers, young children and their families.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Choose 6 units from the following list:</b>		
CD 002 . . . . .	Teaching in a Diverse Society . . . . .	3
CD 003 . . . . .	Observation and Assessment . . . . .	3
CD 004 . . . . .	Parenting . . . . .	3
CD 005 . . . . .	Child Development . . . . .	3
CD 010 . . . . .	Child, Family and Society . . . . .	3
CD 012A . . . . .	Principles & Practices of ECE . . . . .	3
CD 012B . . . . .	Principles & Practices of ECE Field Wo Early Childhood Practicum-Field Exp . . . . .	3
CD 015 . . . . .	Lit. & Lang Arts for Young Child. . . . .	3
CD 016 . . . . .	Introduction to Curriculum . . . . .	3
CD 017A . . . . .	Sex Ed for Teach & Parents of Young Chil . . . . .	1
CD 017B . . . . .	Child Abuse Recognition & Prevention . . . . .	1
CD 017C . . . . .	Single Parenting . . . . .	1
CD 018 . . . . .	Health, Safety and Nutrition . . . . .	3
CD 021 . . . . .	Infant and Toddler Caregiving . . . . .	3
CD 023 . . . . .	Domestic Violence Recognition & Prevent. . . . .	1
	<b>Total . . . . .</b>	<b>6</b>

## Child Development - Associate Teacher

### Child Development - Associate Teacher Local Certificate

The student will be eligible for this certificate by completing 12 units of child development course work, including the State mandated core classes. All of the courses must be passed with a “C” or better.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
* CD 005 ...	Child Development .....	3
* CD 010 ...	Child, Family and Society .....	3
* CD 012A ..	Principles & Practices of ECE .....	3
<b>Plus any 3 units from the following:</b>		
CD 002 .....	Teaching in a Diverse Society .....	3
CD 003 .....	Observation and Assessment .....	3
CD 004 .....	Parenting .....	3
CD 012B ...	Principles & Practices of ECE Field Wo Early Childhood Practicum-Field Exp .....	3
CD 015 .....	Lit. & Lang Arts for Young Child. ....	3
CD 016 .....	Introduction to Curriculum .....	3
CD 017A ...	Sex Ed for Teach & Parents of Young Chil .....	1
CD 017B ...	Child Abuse Recognition & Prevention .....	1
CD 017C ...	Single Parenting .....	1
CD 018 .....	Health, Safety and Nutrition .....	3
CD 021 .....	Infant and Toddler Caregiving .....	3
CD 023 .....	Domestic Violence Recognition & Prevent. ....	1
	<b>Total .....</b>	<b>12</b>

*\*As marked, these are State mandated core courses which are required in order to teach in California and as mandated for the Child Development Permit.*

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/child-development-teacher.php>

# Child Development - School-Age

## Child Development - School-Age Local Certificate

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
CD 024 . . . . .	School Age Development . . . . .	3
CD 025 . . . . .	School-Age Curriculum . . . . .	3
CD 026A . . . . .	Foundation of School-Age Child Care . . . . .	1
CD 026B . . . . .	Quality School-Age Care . . . . .	1
CD 026C . . . . .	School-Age Sports and Activities . . . . .	1
CD 018 . . . . .	Health, Safety and Nutrition . . . . .	3
	<b>Total . . . . .</b>	<b>12</b>

## Child Development - Teacher

### Child Development - Teacher Certificate of Achievement

The student will be eligible for the Child Development Teacher certificate by completing 30 units of child development course work, including the core courses.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
CD 002 . . . . .	Teaching in a Diverse Society . . . . .	3
CD 003 . . . . .	Observation and Assessment . . . . .	3
CD 005 . . . . .	Child Development . . . . .	3
CD 010 . . . . .	Child, Family and Society . . . . .	3
CD 012A . . . . .	Principles & Practices of ECE . . . . .	3
CD 012B . . . . .	Principles & Practices of ECE Field Wo Early Childhood Practicum-Field Exp . . . . .	3
CD 016 . . . . .	Introduction to Curriculum . . . . .	3
CD 018 . . . . .	Health, Safety and Nutrition . . . . .	3
<b>Plus 6 units from the courses listed below:</b>		
CD 004 . . . . .	Parenting . . . . .	3
CD 014A . . . . .	Administration & Superv. of Child. Progr . . . . .	3
CD 014B . . . . .	Adm. & Superv. of Child. Pgrm Practicum . . . . .	3
CD 017A . . . . .	Sex Ed for Teach & Parents of Young Chil . . . . .	1
CD 017B . . . . .	Child Abuse Recognition & Prevention . . . . .	1
CD 017C . . . . .	Single Parenting . . . . .	1
CD 022 . . . . .	Superv. Adults Work in Child. Program . . . . .	2
	<b>Total . . . . .</b>	<b>30</b>

# Communication Studies

## Communication Studies AA-T Degree

The Associate in Art in Communication Studies for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Communication Studies or similar major.

The AA-T in Communication Studies offers broad-based preparation in effective oral and written communication, presentation, and debate as well as a foundation in group dynamics and interpersonal relationships. The degree is designed to provide entry-level skills and knowledge for those students who simply want to improve their marketability with potential employers. The degree prepares students in the main skills employers look for in potential employees: the ability to effectively communicate both orally and in writing and to effectively work in groups and/or teams.

Upon completion of the communication studies program, the student will be able to:

- Identify and differentiate among various perspectives across the Communication discipline.
- Critically analyze evidence and reasoning to identify and provide appropriate and credible support for written and oral communication.
- Identify and demonstrate effective and appropriate written and oral communication skills, both verbal and nonverbal, across diverse context.
- Demonstrate individual responsibility, integrity, respect, and influence to effectively and appropriately communicate with diverse audiences.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
COM 001 . . .	Elements of Speech . . . . .	3
COM 002 . . .	Oral Interpretation of Literature . . . . .	3
COM 003 . . .	Argumentation and Debate . . . . .	3
COM 004 . . .	Small Group Dynamics and Presentation . . . . .	3
COM 005 . . .	Interpersonal Communication . . . . .	3
<b>Select One Course (3 units):</b>		
PSYCH 001 .	Introductory Psychology . . . . .	3
SOC 001 . . .	Introduction to Sociology . . . . .	3
	Total . . . . .	18
	Units to be double-counted as General Education . . . . .	6-12
	CSU GE Breadth or IGETC units . . . . .	39
	Transferable Elective Units . . . . .	9-15
	<b>Total</b> . . . . .	<b>60</b>

## **Computer Information Systems (CIS) - Microcomputer Applications Specialist**

### **CIS - Microcomputer Applications Specialist AA or AS Degree**

The Computer Information Systems Program teaches concepts, procedures and terminology, as well as the skills and applications necessary to operate computers.

Upon completion of the computer information systems program, students will be able to:

- Filter records in an access table.
- Change a Theme or Quick Style and apply it in a document.
- Compose business correspondence using correct format responding to a case study

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BUS 013A ..	Word for Windows I .....	1.5
BUS 013B ..	Word for Windows II .....	1.5
BUS 020 ....	Introduction to Business .....	3
BUS 024 ....	Business Mathematics .....	3
CIS 007 .....	Computer Concepts .....	3
CIS 019B ...	Database Creation & Management .....	3
CIS 034 .....	Introduction to Spreadsheets .....	3
	<b>Total .....</b>	<b>18</b>

### **CIS - Microcomputer Applications Specialist Certificate of Achievement**

Completion of the 18 units listed above fulfills the requirements for a CIS Certificate of Achievement.

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/computer-information-systems.php>

# Early Childhood Education

## Early Childhood Education AS-T

The Associate in Science in Child development for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Early Childhood Education or similar major.

The West Hills College Child Development Program offers a comprehensive background in the field of child growth and development. Program emphasis includes information directed at working with culturally diverse families, addressing the needs of children at risk through early intervention, and creating and teaching developmentally appropriate curriculum to young children.

Students will be offered information and skills for potential employment in Federal, State, non-profit, or privately owned early childhood education/child care programs. Courses in this program may assist the student to qualify for Child Development Certificates issued by West Hills College and/or a Child Development Permit obtained from the State of California, Commission for Teacher Preparation and Licensing.

- Upon completion of the early childhood education program, the student will be able to:
- Integrate child development concepts into their daily practices with young children.
- Implement developmentally appropriate teaching practices with young children.
- Integrate knowledge of operating a successful child care program.
- Apply administrative principles, including budgeting, conflict resolution and health and safety issues.
- Apply early intervention strategies while working with infants, toddlers and young children.
- Implement various early intervention techniques while working with infants, toddlers, young children and their families.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
CD 002 . . . . .	Teaching in a Diverse Society . . . . .	3
CD 003 . . . . .	Observation and Assessment . . . . .	3
CD 005 . . . . .	Child Development . . . . .	3
CD 010 . . . . .	Child, Family and Society . . . . .	3
CD 012A . . . . .	Principles & Practices of ECE . . . . .	3
CD 012B . . . . .	Principles & Practices of ECE Field Wo Early Childhood Practicum-Field Exp . . . . .	3
CD 016 . . . . .	Introduction to Curriculum . . . . .	3
CD 018 . . . . .	Health, Safety and Nutrition . . . . .	3
	Total. . . . .	24
	Units to be double-counted as General Education. . . . .	3
	CSU GE Breadth or IGETC units. . . . .	39
	Transferable Elective Units. . . . .	3
	<b>Total . . . . .</b>	<b>60</b>

# English as a Second Language

## English as a Second Language Local Certificate

The ESL Certificate of Competency is designed to prepare students to communicate, write, and read in the English language. Students will have an opportunity to show their employers and future employers that they have an understanding and knowledge of the English language. Program student learning outcomes:

- The student will verbally communicate, by using appropriate beginning level grammar, vocabulary, organization, and clear pronunciation.
- The student will carry a conversation based on a contemporary issue and will present new information to the class.
- The student will develop a paragraph using lower-intermediate level grammar.
- The student will create a presentation about their background, job skills, and educational experiences..

The ESL Certificate of Competency program is a certificate program to help English Language Learners in their present and future goals. The certificate will show that they have basic English skills in conversation, writing, and reading. The curriculum is designed to help students show employers that they have a basic understanding of the English language which will help them in their place of employment. Completion of the certificate will help students be marketable in the job market.

Upon completion of the program the student will be able to meet the following objectives:

- Introduce basic structure and example for questions with 'be'; 'do'; 'wh-question + be' (ex: Who is happy?) and 'wh-question + do' (ex: What do you eat for dinner?) in the present tense;
- Role-play short conversations practicing with a classmate;
- Learn a simple grammatical lesson online (provided), complete the online quiz and present that lesson to the class;
- Understand and produce structure and an example for questions with 'be'; 'do'; 'wh-questions + be' (ex: Who is/was happy?) and 'wh-questions + do' (ex: What do/did you eat for dinner?) in the present and past tense;
- Speak extemporaneously for 2-3 minutes on a given topic;
- Create, write and deliver short conversations with the appropriate tense, subject- verb agreement and frequency adverb with a classmate;
- Understand and use regular and irregular verbs in affirmative and negative sentences both in speaking, reading, and writing;
- Learn a simple grammatical lesson online (provided), complete the on line quiz and present that lesson to the class;
- Read a short passage and identify the topic, main ideas, and supporting details;
- Outline textbook chapter for lesson analysis in English;
- Construct an interview with 'be' and 'do+ base verb' questions and answers;
- Write present and past tense paragraphs respectively;
- Read articles for comprehension, vocabulary, and pronunciation;
- Complete weekly timed readings rating words per minute and minimum comprehension errors;
- Provide understanding, critical thinking, and practical skills in basic communication settings;
- Communicate one to one, one to many, and speaker to audience;
- Students will engage in interpersonal exercises to use communication skills such as listening, paraphrasing, describing feelings, decision-making, perception checking, and verbal and non-verbal communication.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
NC 120 . . . . .	Beg Reading, Writing & Speaking Skills . . . . .	N/A
NC 125 . . . . .	Intermediate Read, Writing & Speaking . . . . .	N/A
NC 130 . . . . .	Advanced Reading, Writing & Speaking . . . . .	N/A
NC 135 . . . . .	Advanced Com Skills for Life & Career . . . . .	N/A
	<b>Total Hours</b> . . . . .	<b>216</b>

# Geography

## Geography AA-T

The Associate in Arts in Geography for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Geography or similar major.

A degree in geography trains individuals to view the full scope of Earth’s natural and cultural systems from a spatial perspective; therefore, geographers have an important role to play in understanding and interpreting the many complex patterns and processes that characterize places/regions and determine the interactions that occur between and within places/regions. Geographers are employed as research scientists and teachers by educational institutions; international, federal, state, regional and local government agencies; local and regional planning firms; and environmental consulting firms. Geographers are generally analytical, inquisitive and creative. Geographers are trained to draw upon a variety of information sources/disciplines and to view the world from a holistic perspective. Because of their “bird’s eye view of the world,” geographers are often found to be well suited to project coordination and/or management.

Upon completion of the AA-T in Geography, students will/ be able to:

- Use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.
- Have an understanding of how physical processes shape the Earth’s surface and determine the character and spatial distribution of global climates and ecosystems.
- Have an understanding of the characteristics, distribution, and migration of human populations on Earth’s surface.
- Have an understanding of the characteristics, distribution, and complexity of Earth’s cultural mosaic.
- Have an understanding of the patterns and networks of physical and cultural interdependence on Earth’s surface.
- Have an understanding of how physical systems affect human systems and of how human actions affect physical systems.

In order to complete the AA-T in Geography students must met the following requirements:

- Complete 60 semester units or 90 quarter units that are eligible for transfer to a California State University and include requirements for the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum;
- Complete a minimum of 18 semester or 27 quarter units in the major or area of emphasis with a grade of “C” or better in all required courses;
- Earn a minimum grade point average of 2.0.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
GEOG 001 ..	Physical Geography .....	4
GEOG 002 ..	World Regional Geography .....	3
GEOG 003 ..	Cultural Geography .....	3
GEOG 018 ..	Geography of California .....	3
<b>Select 6 units minimum from the courses listed below:</b>		
GEOG 016 ..	Regional Field Studies .....	1
CIS 007 .....	Computer Concepts .....	3
GEOL 001 ..	Physical Geology .....	4
	<b>Total</b> .....	<b>19 - 21</b>
	Units to be double-counted as General Education .....	10
	CSU GE Breadth or IGETC Units .....	37 - 39
	Transferable Elective Units .....	10 - 11
	<b>Total</b> .....	<b>60</b>

# Geology

## Geology AS-T Degree

The Associate in Science in Geology for Transfer Degree is designed to provide students a seamless transfer to the California State University system. The degree is designed to prepare students for a baccalaureate degree in Geology or similar major.

A degree in geology provides individuals with training in the physical aspects and history of the earth. These individuals are then able to locate resources (e.g., fossil fuels and minerals) and manage and mitigate human impacts on ecosystems. They are employed as research scientists, teachers and geologists by educational institutions, construction companies, government agencies, mining and petroleum industries, surveying and engineering companies, and environmental consulting firms. Geologists are generally analytical, inquisitive and creative. They are required to work well individually or as team members and to communicate effectively.

Upon completion of the geology program, students will be able to:

- Understand the Earth as a system with many separate but interacting parts.
- Understand the relationship between people and the natural environment and will understand how the discipline of geology can be used to solve problems that arise from these interactions.
- Understand how scientific hypotheses are formulated and tested in general and will specifically understand the evolution and development of major geological science theories.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
GEOL 001 ..	Physical Geology .....	4
GEOL 003 ..	Historical Geology .....	4
* CHEM 001A .....	General Chemistry I .....	5
* CHEM 001B .....	General Chemistry II .....	5
MATH 001A	Introduction to Calculus .....	5
* MATH 001B .....	Calculus With Applications .....	5
	Total .....	28
	Units to be double-counted as General Education .....	10
	CSU GE Breadth or IGETC Units .....	39
	Transferable Elective Units .....	3
	<b>Total .....</b>	<b>60</b>

*\*This course offered infrequently.*

# Health Science (General)

## Health Science (General) AS Degree

The Health Science General Program is designed for those students planning to transfer to two-year institutions to attain specific and additional training in a particular field of study such as dental hygiene, health care assistant, nursing, and radiology technician. Requirements for admission to each of these programs vary among institutions.

Upon completion of the health sciences program, students will be able to:

- Describe the processes of nutrient catabolism in human body cells.
- Differentiate between human tissue types and their respective functions

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BIO 032 . . . .	Human Anatomy . . . . .	4
BIO 035 . . . .	Human Physiology . . . . .	4
BIO 038 . . . .	Microbiology . . . . .	4
CHEM 002A	Introductory Chemistry . . . . .	4
NUT 001 . . .	Basic Nutrition . . . . .	3
	<b>Total . . . . .</b>	<b>19 - 20</b>

**Recommended Electives:** PSYCH 1, SOC 1

# Heavy Equipment Operation

## Heavy Equipment Operation - Certificate of Achievement

West Hills College Coalinga Heavy Equipment Operation Certificate Program is a one semester Certificate of Achievement program. Intrinsic learning is accomplished through a hands on approach to introduce students to a wide range of skills necessary for equipment operation. Laboratory work is designed to simulate field experiences. Heavy equipment operation requires good hand-eye coordination and demands attention to details like timelines, precision operation, coordination of multiple tasks, and following plan directions. Development of problem solving skills and safe work habits will be instilled in the student.

Heavy Equipment Operation program prepares students for careers in the operation of crawlers, tractors, scrapers, backhoes, excavator, loaders, motor graders, trucks, laser controlled equipment, and technical support programs. The curriculum is designed to align with the National Center for Construction Education and Research (NCCER) certification. Completion of the certificate qualifies students to enter the professional job market.

Upon completion of the Heavy Equipment Operation program, the student will be able to:

- Explain the basic terminology and types of equipment and their uses.
- Explain the need for safety measures when working in and around heavy equipment.
- Describe the long- and short-term health effects, first-aid measures, handling and storage, and/or required personal protective equipment (PPE) for a chemical using a safety data sheet (SDS).
- Explain the basics of a hydraulic system and identify hydraulic components.
- Describe basic safety rules and some specific safety rules when operating heavy equipment.
- Perform basic maneuvering with a tractor.
- Identify and explain earthmoving terms and methods.
- Demonstrate and state the steps of the pre-operational safety inspection.
- Explain safety rules for operating Rollers, Scrapers, Loaders, Forklifts, Dozers, Backhoes, Excavators, and Motor Graders
- Identify basic geometric shapes
- Interpret construction plans to determine grading requirements.
- Read and interpret drawings to determine the type of excavations needed to prepare the site.
- Describe how workers' values have changed over the years.
- List the characteristics of effective leaders.
- Identify the three styles of leadership.
- Explain the purpose of the Occupational Safety and Health Act (OSHA).
- Identify the key points of a safety program.
- Define the three types of project delivery systems.
- Identify the two most common schedules.
- Demonstrate an understanding of laser and GPS technology.
- Explain the requirements for finish and final grading of earthwork.
- Describe the characteristics of different types of soils.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
IMT 060 . . . .	Industrial Core . . . . .	3
HVYEQUI 060A . . . . .	Level I Heavy Equipment Operations . . . . .	5
HVYEQUI 060B . . . . .	Level II Heavy Equip Operations . . . . .	5
HVYEQUI 060C . . . . .	Level III Heavy Equipment Operations . . . . .	5
	<b>Total . . . . .</b>	<b>18</b>

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/heavy-equipment-operations.php>



# Humanities

## Humanities AA Degree

The Humanities Program provides the opportunity to achieve an associate degree. The program provides introductory lower division work. The major is made up of 18 units in the fields of Humanities, Philosophy, Foreign Language, Art, Music, English, History, and Speech. The program prepares students to become enlightened citizens, equipped with the broad cultural background essential to studies in the fields of education, philosophy, literature, law, government, journalism, public service, and business.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
HUM 001 ...	Introduction to Western Culture .....	3
HUM 022 ...	Introduction to Comparative Religion .....	3
PHIL 001 ...	Introduction to Philosophy .....	3
PHIL 002 ...	Introduction to Logic .....	3
<b>Plus 6 unites from the courses listed below:</b>		
ART 016A ..	Survey of Western Art: Pre-History .....	3
ART 016B ..	Survey of Western Art: Renaissance .....	3
ENG 001B ..	Literature/ Critical Thinking & Writing .....	3
ENG 025 ...	Creative Writing .....	3
FLSPN 001 .	Introductory Span for Non-Native Speake .....	4
FLSPN 002 .	Elementary Spanish for Non-Native Speake .....	4
FLSPN 003 .	Inter. Spanish for Native & Non-Native S .....	4
FLSPN 004 .	Adv Spanish for Native & Non-Native Spea .....	4
FLSPN 011 .	Intro Spanish Limitedly Bilingual .....	4
FLSPN 012 .	Elementary Span/Limitedly Bilingual .....	4
HIST 004A ..	Western Civilization to 1700 .....	3
HIST 004B ..	Western Civilization From 1700 .....	3
MUS 042 ...	Music Appreciation .....	3
PHIL 003 ...	Ethics .....	3
	<b>Total .....</b>	<b>18</b>

# Integrated Pest Management

## Integrated Pest Management Certificate of Achievement

The Integrated Pest Management program prepares students for an agriculture production career; learning the skills needed for the production and care of agricultural crops through hands-on, real-world experience. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license. This certificate program is for students interested in careers as Pest Control Advisers, Certified Crop Consultants, Qualified Applicator's or Agri-chemical sales representatives.

On completion of the Integrated Pest Management program, the student will be able to:

- identify common weeds found in Central California and statewide;
- explain the methods of safely applying various herbicides;
- identify insects and closely related plant and animal pests and pest damage;
- explain the economic aspects of beneficial and harmful insects;
- select possible methods and timing of control in a given circumstance;
- understand the difference between California laws and DPR regulations;
- diagram and describe the parts of a pesticide label;
- understand the requirements to use a pesticide with a restricted label;
- identify and describe the various DPR pest control certifications and licenses;
- employ the principles and concepts of IPM in field crop environments;
- explain the mode of action of pesticides, pesticide absorption by the human body, and the importance of poisoning measurements;
- safely and properly mix, calibrate, apply, and dispose of different pesticide formulations utilizing different techniques and equipment.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
CRPSCI 032 .	Weeds and Poisonous Plants . . . . .	3
CRPSCI 044 .	Economic Entomology . . . . .	3
CRPSCI 045 .	Ca Pest Control Laws & Regulations . . . . .	2
CRPSCI 046 .	Integrated Pest Management . . . . .	3
<b>Plus 3 units from the following:</b>		
CRPSCI 001 .	Introduction to Plant Science . . . . .	3
CRPSCI 002 .	Plant Science Theory . . . . .	3
<b>Plus 4 units from the following:</b>		
AG-010 . . . . .	Introduction to Agriculture. . . . .	3
AG 011 . . . . .	Agriculture Sales and Communication . . . . .	3
AGBUS 015 .	Computer Application to Agriculture . . . . .	3
AET 010 . . . . .	Surveying . . . . .	3
AET-011 . . . . .	Advanced Surveying and GIS Applications. . . . .	3
AET 015 . . . . .	CAD for Agriculture . . . . .	2
AET-016 . . . . .	Applications for Land Management in Agriculture. . . . .	1
AET 021 . . . . .	AG-Irrigation Management . . . . .	3
AET 022 . . . . .	Irrigation Evaluation/Design Principles . . . . .	4
CRPSCI 006 .	Introduction to Precision Agriculture . . . . .	3
CRPSCI 007 .	Advanced Precision Agriculture . . . . .	3
CRPSCI 019 .	California Water . . . . .	3
CRPSCI 036 .	Fertilizers and Soil Amendments . . . . .	3
SLSCI 021 . .	Introduction to Soil Science . . . . .	4
	<b>Total . . . . .</b>	<b>18</b>

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/integrated-pest-management.php>



# Irrigation Engineering Technology

## Irrigation Engineering Technology Certificate of Achievement

The Irrigation Engineering Technology program prepares students for careers in irrigation sales, installation, design and operation; learning skills in computer-aided drafting, irrigation management, evaluation and design, including advanced design and drip and micro irrigation design and management. The curriculum is designed to align with the Irrigation Association’s certified irrigation designer certification and certified agricultural irrigation specialist (CAIS) certification. Completion of either certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation’s (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy’s Certified Crop Adviser (CCA).

On completion of the Irrigation Engineering Technology program, the student will be able to:

- draw basic two-dimensional drawings with the associated drawing tools and aids;
- create 2-dimensional isometric drawings with the associated drawing tools;
- demonstrate a complete understanding of the soil-plant-water relationship by correctly completing a soil water budget;
- calculate evapotranspiration rates for crops common to California over a complete growing season;
- compare and install all the major water supply systems (i.e. surface, sprinkler, drip, and micros);perform an irrigation system evaluation for drip/micro irrigation systems;
- determine irrigation system distribution uniformity and application efficiency for given irrigation systems;
- determine which type of irrigation system is appropriate for site specific conditions, i.e. soil properties and crop data;
- specify materials and components to make a complete system that optimizes the balance between capital investment and operation and maintenance costs;
- determine plant water use for given crops and climatic conditions;
- calculate sprinkler spacing for head-to-head coverage;
- select proper sprinklers for given crops and irrigation system components;
- complete irrigation designs for efficiency and uniformity;
- calculate system flow rate requirements and friction losses in hoses;
- determine allowable pressure differences in irrigation systems;
- determine proper pipe size, pressure regulation and appropriate filtration for given design parameters;
- select proper emission devices and design for minimization of clogging.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
AET 015 . . . .	CAD for Agriculture . . . . .	2
AET 021 . . . .	AG-Irrigation Management . . . . .	3
AET 022 . . . .	Irrigation Evaluation/Design Principles . . . . .	4
AET 023 . . . .	Advanced Irrigation Design . . . . .	3
AET 024 . . . .	Drip & Micro Irrigation Design & MGMT. . . . .	3
<b>Plus 3 units from the following:</b>		
AET 010 . . . .	Surveying . . . . .	3
AET-011 . . . .	Advanced Surveying with GIS Applications. . . . .	1
AET-016 . . . .	Applications for Land Management in Agriculture. . . . .	1
CRPSCI 006 . . . .	Introduction to Precision Agriculture . . . . .	3
CRPSCI 019 . . . .	California Water . . . . .	3
SLSCI 021 . . . .	Introduction to Soil Science . . . . .	4
	<b>Total . . . . .</b>	<b>18</b>

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/irrigation-engineering-technology.php>

# Kinesiology

## Kinesiology AA Degree

The term kinesiology means the study of movement and the associate of arts degree program emphasizes major preparation courses for students seeking transfer to a four-year university. Students entering the field of kinesiology can look forward to career prospects in the areas of fitness, health and wellness, athletic training, exercise science, education/coaching, and sports administration.

Students who have selected the particular four-year college to which they wish to transfer should use the catalog of that institution as the principle guide for determining additional coursework.

Upon completion of the kinesiology program, students will be able to:

- Know the structure and function of the human body as it relates to physical activity, fitness and health.
- Know the impact of physical inactivity on fitness and health in a societal context.
- Perform basic motor skills and apply a variety of concepts and methods common to the academic field of Kinesiology.
- Develop and apply the multiple strategies that encourage societal adoption and active healthy lifestyles and commitment to lifelong learning.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
BIO 032 . . . .	Human Anatomy . . . . .	4
BIO 035 . . . .	Human Physiology . . . . .	4
NUT 001 . . .	Basic Nutrition . . . . .	3
KINES 001 ..	Introduction to Kinesiology . . . . .	3
PE-029/ PSCYH-029**	Intro to Sport & Exercise Psychology . . . . .	3
PE-046. . . . .	Care & Prevention of Athletic Injury . . . . .	2
PE. . . . .	Two different activity courses . . . . .	2
	<b>Total . . . . .</b>	<b>21</b>

*\*\*PSYCH 29 and PE 29 are cross-listed as the same class*

## Liberal Arts - Area of Emphasis for Arts and Humanities

### Liberal Arts - Area of Emphasis for Arts and Humanities AA Degree

The Arts and Humanities area of emphasis is designed to provide the student with an opportunity to understand emotional and intellectual responses, increase awareness and appreciation of the traditional humanistic disciplines such as art, drama, literature, music, philosophy, and foreign language in addition to introducing and understanding of the interrelationships between these disciplines. This area of emphasis prepares students for baccalaureate majors including but not limited to: art, foreign language, history, philosophy and performing arts.

Upon completion of the arts and humanities program, the student will be able to:

- Compose a technically correct essay.
- Create a visually balanced artwork using the art elements and design principles.
- Produce sustained and developed artworks for inclusion in an artistic portfolio.
- Create artworks demonstrating proficiency with basic color theory and color mixing.
- Write a personal and individual critique and artist statement describing her/his series of artworks.
- Understand visual art concepts and terminology relating to art history and art disciplines, media, materials, and techniques.
- Analyze, critique, and respond orally and in writing to a variety of artistic movements throughout European and Non-European history.
- Demonstrate an understanding of the characteristics, distribution, and complexity of Earth's cultural mosaic.
- Analyze and/or critique the aesthetics of a live theatrical performance or film in typed written form with supporting MLA bibliography.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better.

**Select at least 18 units from the following courses. Courses must be selected from two or more disciplines listed below.**

<i>Course #</i>	<i>Title</i>	<i>Units</i>
ART 002 . . . .	Two-Dimensional Design . . . . .	3
ART 003 . . . .	Three Dimensional Design Fundamentals . . . . .	3
ART 005A . . .	Basic Drawing . . . . .	3
ART 005B . . .	Intermediate Drawing . . . . .	3
ART 013A . . .	Beginning Ceramics . . . . .	3
ART 013B . . .	Intermediate Ceramics . . . . .	3
ART 013C . . .	Advanced Ceramics . . . . .	3
ART 015A . . .	Beginning Painting . . . . .	3
ART 015B . . .	Intermediate Painting . . . . .	3
ART 015C . . .	Advanced Painting . . . . .	3
ART 016A . . .	Survey of Western Art: Pre-History . . . . .	3
ART 016B . . .	Survey of Western Art: Renaissance . . . . .	3
ART 042 . . . .	Art Appreciation . . . . .	3
COM 002 . . . .	Oral Interpretation of Literature . . . . .	3
ENG 001B . . .	Literature/ Critical Thinking & Writing . . . . .	3
FLSPN 001 . . .	Introductory Span for Non-Native Speake . . . . .	4
FLSPN 002 . . .	Elementary Spanish for Non-Native Speake . . . . .	4
FLSPN 003 . . .	Inter. Spanish for Native & Non-Native S . . . . .	4
FLSPN 004 . . .	Adv Spanish for Native & Non-Native Spea . . . . .	4
FLSPN 011 . . .	Intro Spanish Limitedly Bilingual . . . . .	4
FLSPN 012 . . .	Elementary Span/Limitedly Bilingual . . . . .	4
FLSPN 051 . . .	Intro Conv Span for Personal/Prof Use . . . . .	3
FLSPN 052 . . .	Elem Conv Span for Personal/Prof Use . . . . .	3
FLSPN 054 . . .	Advanced Conv Span Personal/Prof Use . . . . .	3
GEOG 003 . . .	Cultural Geography . . . . .	3
HIST 004A . . .	Western Civilization to 1700 . . . . .	3
HIST 004B . . .	Western Civilization From 1700 . . . . .	3
HIST 020 . . . .	World History I . . . . .	3
HUM 001 . . . .	Introduction to Western Culture . . . . .	3
HUM 022 . . . .	Introduction to Comparative Religion . . . . .	3
LING 011 . . . .	Introduction to Linguistics . . . . .	3
MUS 042 . . . .	Music Appreciation . . . . .	3
PA 001 . . . . .	Introduction to Theater . . . . .	3
PA 003 . . . . .	Film Appreciation . . . . .	3
PA 005 . . . . .	Voice & Diction . . . . .	3
PA 014 . . . . .	Fundamentals of Acting . . . . .	3
PA 032 . . . . .	Stage Lighting and Sound . . . . .	3
PA 035 . . . . .	Theater Crafts . . . . .	3
PHIL 001 . . . .	Introduction to Philosophy . . . . .	3
PHIL 002 . . . .	Introduction to Logic . . . . .	3
PHIL 003 . . . .	Ethics . . . . .	3
POLSCI 005 . .	Introduction to Political Theory . . . . .	3
	<b>Total . . . . .</b>	<b>18</b>

## Liberal Arts - Area of Emphasis for English and Communication

### Liberal Arts - Area of Emphasis for English and Communication AA Degree

The English and Communication Area of Emphasis is designed to provide the student with foundational knowledge and skills in the following areas: the relationship of language to logic, as well as how to analyze, criticize, and advocate ideas, to reason deductively and inductively, and to reach conclusions. Courses fulfilling this requirement provide an understanding of the psychological and social significance of the communication principles of voice and speech, discovery of critical evaluation and reporting of information, reading, listening, speaking, writing effectively, and provide active participation and practice in written and oral communication. This area of emphasis prepares students for baccalaureate majors including but not limited to: speech and communications.

Upon completion of the English and communication program, the student will be able to:

- Identify an author's main idea.
- Utilize research material.
- Speak in an understandable and organized fashion to explain their ideas and express their feelings.
- Listen actively and respectfully to analyze the substance of others comments.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

**Select at least 18 units from the following courses. A minimum of 3 units must be completed in each discipline of English and communication.**

<i>Course #</i>	<i>Title</i>	<i>Units</i>
AG 011 . . . . .	Agriculture Sales and Communication . . . . .	3
BUS 028 . . . . .	Business Communication . . . . .	3
COM 001 . . . . .	Elements of Speech . . . . .	3
COM 002 . . . . .	Oral Interpretation of Literature . . . . .	3
COM 003 . . . . .	Argumentation and Debate . . . . .	3
COM 004 . . . . .	Small Group Dynamics and Presentation . . . . .	3
COM 005 . . . . .	Interpersonal Communication . . . . .	3
EDUC 005 . . . . .	Critical Thinking in the Classroom . . . . .	3
ENG 051A . . . . .	Introduction to Communication Skills . . . . .	3
ENG 001A . . . . .	Composition and Reading . . . . .	3
ENG 001B . . . . .	Literature/ Critical Thinking & Writing . . . . .	3
PA 005 . . . . .	Voice & Diction . . . . .	3
PHIL 002 . . . . .	Introduction to Logic . . . . .	3
	<b>Total . . . . .</b>	<b>18</b>

## Liberal Arts - Area of Emphasis for Math and Science

### Liberal Arts - Area of Emphasis for Math and Science AA Degree

The Math and Science area of emphasis is designed to provide the student with foundational knowledge and skills in the following areas: the natural sciences, the physical universe, its life forms and natural phenomena. Students will be provided the opportunity to develop mathematical and quantitative reasoning skills and demonstrate understanding of the methodologies of science as investigative tools and to understand the influence scientific knowledge has on society. This area of emphasis prepares students for baccalaureate majors including but not limited to: agriculture, computer science, engineering, enology, geology, geography, genetics, health science, kinesiology, and pre-nursing.

Upon completion of the math and science program, the student will be able to:

- Use mathematical models and/or concepts to solve real-world applications.
- Label and identify prokaryotic and eukaryotic cell parts and describe their functions.
- Describe the processes of nutrient catabolism in human body cells.
- Differentiate between human tissue types and their respective functions.
- Describe the transcription and translation of a human gene.
- Use molecular models to interpret chemical systems.
- Use graphing software to interpret data.
- Demonstrate the ability to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.
- Demonstrate and understanding of how physical systems affect human systems and of how human actions affect physical systems.
- Understand the Earth as a system with many separate but interacting parts.
- Understand the relationship between people and the natural environment and will understand how the discipline of geology can be used to solve problems that arise from these interactions.
- Understand how scientific hypotheses are formulated and tested in general and will specifically understand the evolution and development of major geological science theories.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

**Select at least 18 units from the following courses. Students must complete at least one math course:**

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<i>Course #</i>	<i>Title</i>	<i>Units</i>
ASCI 012...	Introduction to Animal Science .....	3
BIO 010....	Fundamentals of Biology .....	3
BIO 015....	Biology for Education .....	3
BIO 032....	Human Anatomy .....	4
BIO 035....	Human Physiology .....	4
BIO 038....	Microbiology .....	4
CHEM002A	Introductory Chemistry .....	4
CRPSCI 001.	Introduction to Plant Science .....	3
CRPSCI 002.	Plant Science Theory .....	3
CRPSCI 006.	Introduction to Precision Agriculture .....	3
CRPSCI 007.	Advanced Precision Agriculture .....	3
GEOG 001..	Physical Geography .....	4
GEOL 001..	Physical Geology .....	4
GEOL 003..	Historical Geology .....	4
* PHYSICI 001 .....	Survey of the Physical Sciences .....	4
PSYCH 006.	Research Methods in Psychology .....	3
SLSCI 021..	Introduction to Soil Science .....	4
MATH 063..	Intermediate Algebra .....	5
MATH 010A	Structure & Concepts in Mathematics I .....	3
MATH 010B	Structure & Concepts in Mathematics II .....	3
MATH 025..	Introduction to Statistics .....	4
MATH 015..	Precalculus .....	5
MATH 045..	Contemporary Math .....	3
MATH 001A	Introduction to Calculus .....	5
* MATH 001B .....	Calculus With Applications .....	5
* MATH 002A .....	Multivariate Calculus .....	4
* MATH 002B .....	Differential Equations .....	4
	<b>Total .....</b>	<b>18</b>

*\*This course offered infrequently*

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# Liberal Arts for Social and Behavioral Science

## Liberal Arts for Social and Behavioral Science AA Degree

The Social and Behavioral Science area of emphasis allows students to take courses that prepare them for possible majors within the fields of criminology, business, economics, geography, psychology, history, sociology, political science, and related disciplines. The student is provided the opportunity to learn a variety of theories and perspectives, behavioral and sociological concepts, historical context with respect to particular times, places, events and significant figures, production and distribution analysis, and American and comparative government. This area of emphasis prepares students for baccalaureate majors including but not limited to: Chicano studies, child development, criminology, economics, geography, history, mass communication and journalism, political science, psychology, and sociology and social work.

Upon completion of the social and behavioral science program, the student will be able to:

- Understand the global significance of past political, cultural, and economic issues and how they have impacted contemporary events.
- Recognize will analyze and differentiate between different economic solutions to social issues.
- Demonstrate an understanding of how physical systems affect human systems and of how human actions affect physical systems.
- State different types of governments and explain their historical developments and political processes within a given country.
- Identify different theories on personality development.
- Recognize the various types of sources used within the social science discipline, including primary and secondary sources.
- Analyze the legitimacy and validity of the various sources used within the social science discipline, including discerning facts from opinions, biases, the validity of data collection, and public opinion polls

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

**Required Courses (Select at least 18 units from the following courses. Courses must be selected from two or more disciplines listed below:**

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<i>Course #</i>	<i>Title</i>	<i>Units</i>
AGBUS 040.	Introductory Agricultural Economics . . . . .	3
AOJ 001 . . . .	Introduction to Criminal Justice . . . . .	3
AOJ 029 . . . .	Criminology . . . . .	3
BUS 020 . . . .	Introduction to Business . . . . .	3
CD 002 . . . . .	Teaching in a Diverse Society . . . . .	3
CD 005 . . . . .	Child Development . . . . .	3
CD 010 . . . . .	Child, Family and Society . . . . .	3
CRPSCI 019.	California Water . . . . .	3
ECON 001A.	Macroeconomics . . . . .	3
ECON 001B.	Microeconomics . . . . .	3
GEOG 002 . . .	World Regional Geography . . . . .	3
GEOG 003 . . .	Cultural Geography . . . . .	3
GEOG 018 . . .	Geography of California . . . . .	3
HIST 004A . . .	Western Civilization to 1700 . . . . .	3
HIST 004B . . .	Western Civilization From 1700 . . . . .	3
HIST 017A . . .	History of the U.S. 1492-1877 . . . . .	3
HIST 017B . . .	History of the U.S. 1865-PRESENT . . . . .	3
HIST 020 . . . .	World History I . . . . .	3
HIST 032 . . . .	Cultural History of the Chicano . . . . .	3
HIST 044 . . . .	Women's Roles in United States History . . . . .	3
** PE-029 . . . .	Introduction to Sport and Exercise Psychology. . . . .	3
POLSCI 001 . . .	American Government . . . . .	3
POLSCI 002 . . .	Comparative Government . . . . .	3
POLSCI 004 . . .	Introduction to International Relations . . . . .	3
POLSCI 005 . . .	Introduction to Political Theory . . . . .	3
POLSCI 010 . . .	Modern Politics . . . . .	3
POLSCI 020 . . .	Legal and Judicial Reasoning . . . . .	3
PSYCH 001 . . .	Introductory Psychology . . . . .	3
PSYCH 002 . . .	Abnormal Psychology . . . . .	3
PSYCH 003 . . .	Developmental Psychology . . . . .	3
PSYCH 004 . . .	Personal Psychology . . . . .	3
PSYCH 005 . . .	Biological Psychology . . . . .	3
**	Introduction to Sport and Exercise Psychology. . . . .	3
PSYCH-029 . . .		
SOC 001 . . . . .	Introduction to Sociology . . . . .	3
SOC 002 . . . . .	Critical Thinking and Social Problems . . . . .	3
SOC 003 . . . . .	Marriage and Family Relations . . . . .	3
SW 020 . . . . .	Introduction to Social Welfare . . . . .	3
	<b>Total . . . . .</b>	<b>18</b>

\*\*PSYCH 29 and PE 29 are cross-listed as the same class

## Liberal Studies - Elementary Education

### Liberal Studies - Elementary Education AA Degree

The Associate of Arts in Liberal Studies – Emphasis in Elementary Education Degree provides transfer level preparation that affords the student a broad-based study in written and oral communication, human culture, behavior and the sciences. It is designed to prepare students for transfer to a four-year institution and teacher credential program in the multiple subject discipline. Students should consult a counselor for specific information and develop an educational plan to determine the correct pattern for transfer prior to transferring to their preferred college or university of choice. Students can also access transfer information on [www.assist.org](http://www.assist.org).

Upon completion of the liberal studies program, student will be able to:

- Use mathematical models and/or concepts to solve real-world applications.
- Demonstrate an understanding of the characteristics, distribution, and complexity of Earth's cultural mosaic.
- Recognize social issues from an economic perspective.
- Analyze and differentiate between different economic solutions to social issues.
- Analyze social situations within elementary education, including social interactions and micro- and macro-interventions among diverse populations.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree and transfer to a CSU.

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

**Select a minimum of 18 units from the area of emphasis list below and transfer level electives to complete the 60 units necessary to be eligible for admission.**

<i>Course #</i>	<i>Title</i>	<i>Units</i>
CD 005 . . . . .	Child Development . . . . .	3
EDUC 001 ..	Introduction to Teaching . . . . .	3
CIS 007 . . . . .	Computer Concepts . . . . .	3
ECON 001A .	Macroeconomics . . . . .	3
ECON 001B .	Microeconomics . . . . .	3
SOC 001 . . . .	Introduction to Sociology . . . . .	3
GEOG 003 ..	Cultural Geography . . . . .	3
LING 011 . . .	Introduction to Linguistics . . . . .	3
MATH 010B	Structure & Concepts in Mathematics II . . . . .	3
	<b>Total . . . . .</b>	<b>18</b>

*See a counselor for clarification on specific transfer requirements for the university of your choice for the multiple subject teaching credential.*

# Mathematics

## Mathematics AS-T Degree

The Associate in Science in Mathematics for Transfer degree provides students preparation for careers in quantitative professions such as actuarial science, education, computer programming, systems analysis, and operations research analysis.

Upon completion of the math program, students will be able to:

- Take the derivative of various functions.
- Integrate various functions.
- Solve application problems using calculus.
- Graph functions on the coordinate plane.
- Use arithmetic, algebraic, analytic, or statistical methods to solve equations.
- Simplify mathematical expressions.
- Use mathematical models and/or concepts to solve real-world applications.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree and transfer to a CSU.

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
MATH 001A	Introduction to Calculus .....	5
*MATH-001B	Calculus with Applications.....	5
*MATH-002A	Multivariate Calculus.....	4
*MATH-002B	Differential Equations .....	4
MATH 025 ..	Introduction to Statistics .....	4
	<b>Total .....</b>	<b>22</b>

*\*This course is offered infrequently.*

# Performing Arts

## Performing Arts - Technical Theater Production

Program student learning outcomes

- Exhibit the basic technical skills required in the craft of theater.
- Articulate the creative process of theatrical tasks.
- Exhibit the unique collaborative skills necessary to participate in a theater.

## Performing Arts - Television Production Local Certificate

<i>Course #</i>	<i>Title</i>	<i>Units</i>
PA 032 . . . . .	Stage Lighting and Sound . . . . .	3
PS-042A . . . . .	Television Production Camera Operation . . . . .	4
PA 042B . . . . .	Television Production Editing . . . . .	4
PA 042C . . . . .	Television Production Project . . . . .	4
	<b>Total . . . . .</b>	<b>15</b>

## Performing Arts - Technical Theater Production Local Certificate

<i>Course #</i>	<i>Title</i>	<i>Units</i>
3 PA 001 . . . . .	Introduction to Theater . . . . .	3
1-3 PA 021 . . . . .	Play Production . . . . .	1 - 3
3 PA 032 . . . . .	Stage Lighting and Sound . . . . .	3
3 PA 035 . . . . .	Theater Crafts . . . . .	3
4 PA 042A . . . . .	Television Production Camera Operation . . . . .	4
	<b>Total . . . . .</b>	<b>14-17</b>

# Political Science

## Political Science AA-T Degree

The Associate in Arts for Transfer in Political Science is designed to provide the transfer student with the opportunity to take lower division courses that could be applied to a political science major at a four year university. Politics is the struggle of who gets what, when and how. A broad spectrum of groups fight for their interests locally, nationally or globally. Political Science looks at the interaction between the individual or group and the government such as local and state governments creating a budget to national governments combating terrorism abroad.

The student who majors in Political Science will become more aware of current events and how those events impact their daily lives. As a Political Science major students may become more politically active and more civic responsible. An AA-T in Political Science would be a stepping stone to many other career fields such as teaching, law, local, state and federal government work and group advocacy.

Upon completion of the political science program, students will be able to:

- Evaluate and summarize research material without involving their own political beliefs or bias.
- State different types of governments and explain their historical developments and political processes within a given country.
- Identify different political theories and apply those theories to contemporary issues
- Differentiate between different theories.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
POLSCI 001 .	American Government .....	3
<b>Select Three Courses (9 units):</b>		
POLSCI 002 .	Comparative Government .....	3
POLSCI 004 .	Introduction to International Relations .....	3
POLSCI 005 .	Introduction to Political Theory .....	3
POLSCI 010 .	Modern Politics .....	3
MATH 025 .	Introduction to Statistics .....	4
<b>Select Two Courses (6 units):</b>		

Any courses not selected above, any CSU transferable political science courses, and/or other courses that are articulated as lower division preparation for the political science major at a CSU, or any CSU transferable introductory course in the social sciences.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
AOJ 001 . . . .	Introduction to Criminal Justice . . . . .	3
AOJ 029 . . . .	Criminology . . . . .	3
CD 005 . . . . .	Child Development . . . . .	3
ECON 001A . . . .	Macroeconomics . . . . .	3
ECON 001B . . . .	Microeconomics . . . . .	3
GEOG 002 . . . .	World Regional Geography . . . . .	3
GEOG 003 . . . .	Cultural Geography . . . . .	3
GEOG 018 . . . .	Geography of California . . . . .	3
HIST 004A . . . .	Western Civilization to 1700 . . . . .	3
HIST 004B . . . .	Western Civilization From 1700 . . . . .	3
HIST 017A . . . .	History of the U.S. 1492-1877 . . . . .	3
HIST 017B . . . .	History of the U.S. 1865-PRESENT . . . . .	3
PE-029 . . . . .	Introduction to Sport and Exercise Psychology . . . . .	3
POLSCI 020 . . . .	Legal and Judicial Reasoning . . . . .	3
PSYCH 001 . . . .	Introductory Psychology . . . . .	3
PSYCH 002 . . . .	Abnormal Psychology . . . . .	3
PSYCH 003 . . . .	Developmental Psychology . . . . .	3
PSYCH 005 . . . .	Biological Psychology . . . . .	3
SOC 001 . . . . .	Introduction to Sociology . . . . .	3
SOC 002 . . . . .	Critical Thinking and Social Problems . . . . .	3
SOC 003 . . . . .	Marriage and Family Relations . . . . .	3
SW 020 . . . . .	Introduction to Social Welfare . . . . .	3
	<b>Total</b> . . . . .	18-19
	Units to be double-counted as General Education . . . . .	6-18
	CSU GE Breadth or IGETC Units . . . . .	39
	Transferable Elective Units . . . . .	8-21
	<b>Total</b> . . . . .	

*\*\*PSYCH 29 and PE 29 are cross-listed as the same class*

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# Psychiatric Technician

## Psychiatric Technician AS Degree

The West Hills Community College Psychiatric Technician Program is an approved program by the California Board of Licensed Vocational Nurses and Psychiatric Technicians. This accelerated program is divided into three main content areas, nursing science, developmental disorders, and psychiatric nursing. Program participants will receive didactic and hands-on experiences to apply the nursing process in the planning and implementation of care for clients with a variety of special needs. Participants will be introduced to the professional psychiatric technician standards related to professionalism and safety and grow in the role of client advocate and sponsor. The Psychiatric Technician Training Program will prepare the student in a variety of health care settings. Upon completion of the Psychiatric Technician Training Program, students will receive a certificate or associate degree and qualify to take the licensure exam from the California Board of Vocational Nursing and Psychiatric Technicians.

This is an intensive certificate/degree program. Classes will meet at the college, local hospitals, mental health facilities, Coalinga State Hospital, Porterville Developmental Center, and other approved facilities to accommodate the clinical aspects of instruction.

Upon completion of the psychiatric technician program, the student will be able to:

- Calculate the correct medication dosages.
- Discuss and demonstrate the importance of accurate communication and documentation in the various health care settings within their scope of practice.
- Apply the nursing process to implement an appropriate plan of care for the client with medical, developmental disabilities and mental illness disorders.
- Identify signs and symptoms of medical, developmental disabilities, and mental disorders

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
  - Complete major course requirements as specified in the catalog with a C or better
  - Complete electives to reach a total of 60 degree applicable units
  - Maintain a grade point average of 2.00 overall
  - Complete the English and math competency requirements with a C or better
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<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
PT 101 . . . . .	Psychiatric Tech Training Program Orient . . . . .	1.5
VNTP-050. . .	Anatomy for Nurses. . . . .	2
VNTP-051. . .	Fundamentals of Nursing. . . . .	5
VNTP-051L. . .	Fundamental of Nursing Clinical. . . . .	3
PT 052 . . . . .	Medical Surgical Nursing . . . . .	4.5
PT 052L . . . .	Medical Surgical Nursing Clinical . . . . .	3
VNPT 081 . . .	Pharmacology 1 . . . . .	1
VNPT 060 . . .	Life Span for Nurses . . . . .	2
PT 061 . . . . .	Intro. to Developmental Disabilities . . . . .	5
PT 061L . . . .	Intro to Develop Disabilities Clinical . . . . .	3
PT 062 . . . . .	Developmental Disabilities . . . . .	4.5
PT 062L . . . .	Developmental Disab Nursing Clinical . . . . .	3
VNPT 082 . . .	Pharmacology 2 . . . . .	1
VNPT 070 . . .	Psychology for Nurses . . . . .	2
PT 071 . . . . .	Introduction to Mental Disorders . . . . .	5
PT 071L . . . .	Intro to Mental Disorders Clinical . . . . .	3
PT 072 . . . . .	Mental Disorders . . . . .	4.5
PT 072L . . . .	Mental Disorders Clinical . . . . .	3
VNPT 083 . . .	Pharmacology 3 . . . . .	1
	<b>Total . . . . .</b>	<b>57</b>

### **Program Prerequisites, Corequisite or Advisory Courses**

For Consideration of eligibility to the Psychiatric Technician Training Program, applicant must meet current admission criteria and all of the following:

- HS 080 – Introduction to Medical Professionals
- HS 088 – Medical Terminology for Health Careers
- VNTP 090 – Math for Medical Professionals

### **Program Prerequisite Skills and/or Knowledge**

- Show proof of a current American Heart Association, Basic Life Support for Health Care Providers Certificate.
- Be at least 18 years of age.
- Show evidence of high school graduation or equivalent (GED or CHSPE).
- Submit a complete application to West Hills College.
- Submit a complete and current application to the West hills College Psychiatric Technician Training Program.
- Be able to read, write and communicate at college level.
- Complete and pass a physical, background check and drug screen.
- In addition to the prerequisites, applicants are strongly advised to possess an active California certification as a nursing assistant.

## **Psychiatric Technician Certificate of Achievement**

Completion of the 57 units listed above fulfills the requirements for the Psychiatric Technician Certificate of Achievement.

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/psychiatric-technician.php>

# Psychology

## Psychology AA-T Degree

The AA-T in Psychology is designed to provide entry-level skills and knowledge for the student transferring to a four-year institution with a major in psychology. The psychology major requires 19 units in psychology and related fields. Psychology is the scientific study of behavior and mental processes. Course work in this program will provide a better understanding of human behavior in the areas of biological psychology, life-span development, states of consciousness, learning, memory, intelligence, personality, abnormal behavior, therapy, and social psychology. The psychology major prepares students for four-year programs with emphasis in psychology, counseling, child development, educational psychology, education, social work, sociology, human services, and nursing.

Upon completion of the psychology program, students will be able to:

- Differentiate between scientifically derived knowledge versus pseudoscience within the field of psychology.
- Compare and contrast the major theoretical perspectives in psychology.
- Define basic psychological terminology regarding behavior, cognition, and emotion, and be able to express it clearly when writing or speaking about psychology.
- Evaluate psychological data, use the scientific method, draw reasonable conclusions, and apply these to personal, community, and scientific problems.
- Employ psychological principles that lay the foundation for life-long personal growth and development of interpersonal and social skills.
- Demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion.

This program is intended for students planning to transfer to a California State University. Students must fulfill the following requirements to qualify for an associate degree for transfer:

- Complete CSU GE Breadth or IGETC pattern
- Complete the major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 transferable units
- Maintain a grade point average of 2.0 overall
- Complete the English, Critical Thinking, Communication, and Math requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Courses (16 units)</b>		
PSYCH 001 .	Introductory Psychology . . . . .	3
PSYCH 005 .	Biological Psychology . . . . .	3
PYSCH-006 .	Research Methods in Psychology . . . . .	3
MATH 025 ..	Introduction to Statistics . . . . .	4
BIO 010 . . . .	Fundamentals of Biology . . . . .	3
<b>Select One Course (3 units):</b>		
PSYCH 002 .	Abnormal Psychology . . . . .	3
PSYCH 003 .	Developmental Psychology . . . . .	3
PSYCH 004 .	Personal Psychology . . . . .	3
** PSYCH 029 . . . . .	Intro to Sport & Exercise Psychology . . . . .	3
	<b>Total</b> . . . . .	<b>19</b>
	Units to be double-counted as General Education . . . . .	12-15
	CSU Breadth or IGETC Units . . . . .	39
	Transferable Elective Units . . . . .	14-17
	<b>Total</b> . . . . .	<b>60</b>

*\*\*PSYCH 29 and PE 29 are cross-listed as the same class*

## Psychology AA Degree

The Psychology Associate Degree Program is designed to provide entry-level skills and knowledge for the student transferring to a four-year institution with a major in psychology. The psychology major requires 18 units in psychology and related fields. Psychology is the scientific study of behavior and mental processes. Course work in this program will provide a better understanding of human behavior in the areas of biological psychology, life-span development, states of consciousness, learning, memory, intelligence, personality, abnormal behavior, therapy, and social psychology. The psychology major prepares students for four-year programs with emphasis in psychology, counseling, child development, educational psychology, education, social work, sociology, human services, and nursing.

Upon completion of the program, students will be able to:

- Identify different research methods.
- Identify different perspectives in psychology.
- Identify different theories on personality development.

Students must fulfill the following requirements to qualify for an associate degree:

- Complete the Associate Degree requirements
- Complete major course requirements as specified in the catalog with a C or better
- Complete electives to reach a total of 60 degree applicable units
- Maintain a grade point average of 2.00 overall
- Complete the English and math competency requirements with a C or better

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
PSYCH 001 .	Introductory Psychology .....	3
PSYCH 002 .	Abnormal Psychology .....	3
PSYCH 003 .	Developmental Psychology .....	3
PSYCH 004 .	Personal Psychology .....	3
PSYCH 005 .	Biological Psychology .....	3
	Electives taken from list below.....	3
	<b>Total .....</b>	<b>18</b>

Recommended Electives: BIO 32, 35; CIS 7; MATH 25; PSYCH 8; SOC 1, 2

## Social Work

### Social Work Local Certificate

The Social Work Certificate option provides an introduction to the field of social welfare along with interdisciplinary courses to prepare students to entry level work in the Department of Social Services. Topics will include counseling and interviewing, child abuse, and domestic violence recognition and prevention, written communication and computer skills. Students should be aware that a pre-employment examination is required before an applicant begins the hiring process in addition to college-level coursework.

Upon completion of the social work program, students will be able to:

- Write correct documents used in corrections using the proper format and citations. This includes reports, memos, and legal briefs.
- Analyze social policies and problems typical of the social work profession.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
AOJ 006 . . . .	Correctional Interviewing and Counseling . . . . .	3
AOJ 012 . . . .	Written Criminal Justice Communications . . . . .	3
BUS 013A . .	Word for Windows I . . . . .	1.5
BUS 013B . .	Word for Windows II . . . . .	1.5
CD 010 . . . .	Child, Family and Society . . . . .	3
CD 017B . . .	Child Abuse Recognition & Prevention . . . . .	1
CD 023 . . . .	Domestic Violence Recognition & Prevent. . . . .	1
SW 020 . . . .	Introduction to Social Welfare . . . . .	3
	<b>Total . . . . .</b>	<b>17</b>

## Transfer Studies – Full Intersegmental General Education Transfer (IGETC) Curriculum Certification: UC

### Transfer Studies – Full IGETC Certification: UC, Certificate of Achievement

The Intersegmental General Education Transfer Curriculum (IGETC) Full Certification for University of California (UC) provides students the ability to fulfill in-state, public university lower-division general education requirements before transferring. It is strongly recommended that students complete the IGETC prior to transfer to allow more flexibility in class selection at the university and timely progress to degree completion. All UC and CSU campuses will accept the completed IGETC to satisfy all lower-division general education requirements, however, individual colleges or majors within a CSU or UC campus may not accept IGETC for meeting general education.

Upon completion of the Transfer Studies - Full IGETC Certification: UC, the student will be able to:

- Demonstrate critical thinking through literary works and written compositions
- Utilize quantitative analysis and have the ability to use and criticize quantitative arguments
- Analyze works of philosophical, historical, literary, aesthetic and cultural importance
- Examine social and behavioral perspectives in their contemporary, historical, and geographical settings
- Comprehend physical and biological concepts, their limitations, and the power of scientific inquiry
- Demonstrate proficiency in a language other than English

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
Area 1A. ....	English Composition. ....	3
Area 1B. ....	Critical Thinking – English Composition. ....	3
Area 2. ....	Math Concepts & Quantitative Reasoning. ....	3-5
Area 3A. ....	Arts. ....	3
Area 3B. ....	Humanities. ....	3
Area 3A/B. ...	Arts & Humanities. ....	3
Area 4. ....	Social & Behavioral Sciences. ....	9
Area 5A. ....	Physical Science. ....	4
Area 5B. ....	Biological Science. ....	3-4
Area 5C. ....	Laboratory Science. ....	
Area 6. ....	Language Other Than English. ....	
	<b>Total</b> .....	<b>34-37</b>

## **Transfer Studies – Full Intersegmental General Education Transfer Curriculum (IGETC) Certification: CSU**

### **Transfer Studies – Full IGETC Certification: CSU, Certificate of Achievement**

The Intersegmental General Education Transfer Curriculum (IGETC) Full Certification for California State University (CSU) provides students the ability to fulfill in-state, public university lower-division general education requirements before transferring. It is strongly recommended that students complete the IGETC prior to transfer to allow more flexibility in class selection at the university and timely progress to degree completion. All UC and CSU campuses will accept the completed IGETC to satisfy all lower-division general education requirements, however, individual colleges or majors within a CSU or UC campus may not accept IGETC for meeting general education.

Upon completion of the Transfer Studies - Full IGETC Certification: CSU, the student will be able to:

- Demonstrate critical thinking through literary works and written compositions
- Utilize quantitative analysis and have the ability to use and criticize quantitative arguments
- Analyze works of philosophical, historical, literary, aesthetic and cultural importance
- Examine social and behavioral perspectives in their contemporary, historical, and geographical settings
- Comprehend physical and biological concepts, their limitations, and the power of scientific inquiry

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
Area 1A. ....	English Composition. ....	3
Area 1B. ....	Critical Thinking – English Composition. ....	3
Area 1C. ....	Oral Communication. ....	3
Area 2. ....	Math Concepts & Quantitative Reasoning. ....	3-5
Area 3A. ....	Arts. ....	3
Area 3B. ....	Humanities. ....	3
Area 3A/B. . . .	Arts & Humanities. ....	3
Area 4. ....	Social & Behavioral Sciences. ....	9
Area 5A. ....	Physical Science. ....	4
Area 5B. ....	Biological Science. ....	3-4
Area 5C. ....	Laboratory Science. ....	
	<b>Total</b> .....	<b>37-40</b>

# Welding Technology

## Welding Technology Certificate of Achievement

The Welding Technology program is a Certificate of Achievement program designed to prepare students for a career in welding. Program performance standards for certification will be in accordance with those set forth by the National Center for Construction and Research (NCCER), the American Welding Society (AWS), and the American Society of Mechanical Engineers (ASME). Career opportunities for certified welders exist in oil production and maintenance, agriculture, fabrication, manufacturing and construction. Laboratory work is completed in a modern and well equipped welding shop.

On completion of the Welding Technology program, the student will be able to:

- identify hazards and perform safe welding and shop practices including proper PPE;
- identify and explain material safety data sheets and storing and handling cylinders safely;
- explain and perform oxyfuel, plasma arc and air carbon arc cutting;
- understand codes governing welding;
- understand welder qualification tests including weld imperfections and their causes and nondestructive and destructive testing;
- understand and execute safe SMAW practices;
- identify tools for weld cleaning;
- identify factors that affect electrode selection;
- explain AWS and ASME filler metal classification systems and identify different types of filler metals;
- select proper electrodes for a specific welding task;
- make stringer, weave and overlapping beads;
- perform fillet welds in horizontal, vertical and overhead positions;
- identify and explain groove welds;
- identify and explain groove welds with backing;
- setup and operate SMAW equipment for making V-groove welds;
- perform SMAW for V-groove welds with backing in the Flat (1G), Horizontal (2G), Vertical (3G), and Overhead (4G) positions;
- read welding symbols on drawings, specifications, and welding procedure specifications;
- identify and explain a welding detail drawings;
- identify and explain dimensioning;
- create and understand a bill of materials;
- understand the classification and demonstrate field identification methods for base metals;
- identify forms and shapes of structural metals;
- explain metallurgical consideration for welding materials;
- demonstrate preheating metals, maintaining interpass temperature and post-weld heat treatment.

<i>Course #</i>	<i>Title</i>	<i>Units</i>
<b>Required Core Courses</b>		
IMT 060 . . . .	Industrial Core . . . . .	3
WT 070 . . . .	Introduction to Certified Welding . . . . .	2.5
WT 071 . . . .	Beginning SMAW . . . . .	3
WT 072 . . . .	Advanced SMAW . . . . .	3
WT 073 . . . .	Intro to Metallurgy & Weld Symbols . . . . .	1.5
WT 074 . . . .	GMAW and FCAW:Plate . . . . .	3
WT 075 . . . .	SMAW Pipe Welding . . . . .	2
WT 076 . . . .	Welding Certification Preparation . . . . .	0.5
	<b>Total . . . . .</b>	<b>18.5</b>

**For Gainful Employment information please visit:**

<https://www.westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/welding-technology.php>