















ANTELOPE VALLEY COLLEGE

# 2021 | 2022 CATALOG • ADDENDUM

JUMPSTART YOUR CAREER











# ACADEMIC AFFAIRS - Ms. ISABELLE SABER, VICE-PRESIDENT

Ms. Kathryn Mitchell, Interim Dean Arts & Humanities

Art Film and Television Photography/Commercial Photography

Dance Music Theatre Arts

Digital Media Music - Commercial

Mr. Thomas Gang, Athletics and Kinesiology

Intercollegiate Athletic Athletic Training Recreational Leadership

Health Education Kinesiology

Dr. Maria Clinton, Interim Dean Career Technical Education

Advanced Manufacturing Airframe Manufacturing Technology Electronics Technology Aeronautical and Aviation Technology Auto Body Industrial Manufacturing

Air Conditioning and Refrigeration Automotive Technology Welding

Aircraft Fabrication and Assembly Electrical Technology

Mr. Gregory Bormann, Dean Health & Safety Sciences

Distance Education Medical Office Assisting Registered Nursing **Emergency Medical Technology** Nutrition and Foods Respiratory Care Radiologic Technology Fire Technology Vocational Nursing

Mr. Christos Valiotis, Dean Math, Sciences, & Engineering

Agriculture/Park Landscape Mgt. Computer Information Science Microbiology Earth Science Physical Science Anatomy

Astronomy Engineering **Physics** 

**Biology** Geography/GIS Physiology

Geology Water Treatment Botany

Chemistry Mathematics

Ms. Catherine Hart, Interim Dean Community Projects & Extended Learning

Off Site Campuses Adult Education (AB104) **Dual Enrollment** Corporate and Community Services **Economic Development** Palmdale Center

Prison Education

Ms. Riley Dwyer, Dean Rhetoric & Literacy

Academic Development French Learning Assistance Communication Studies German Learning Center

English Journalism Reading Latin Spanish English as a Second Language

World Languages

Ms. Amber Casolari, Interim Dean Social & Behavioral Sciences

Accounting Cooperative Work Experience Philosophy Administration of Justice **Economics** Political Science Anthropology Education Psychology **Business** High School Articulation Real Estate **Business Information Professional** History Sociology

Child and Family Education Management

# **2** Graduation / Associate Degree and Certificate Requirements

# DEGREES AND CERTIFICATES

		)EG	KEE	S AL	עוי	CERTIFICATES					
Subject Area Degree or Certificate Title BS	AA-T	AS-T	AA	AS	С	Subject Area Degree or Certificate Title	AA-T AS	S-T	AA	AS	С
						<b>Business Information Professional</b>					
Accounting						Business Information Professional				AS	
Professional Bookkeeping				AS	С	Business Information Professional Qui	ick Start Cer	tificate	:		С
Troicestonal Bookiteeping				110	Ü	Business Information Professional Two					C
Administration of Justice		AS-T	Λ Λ			Business Information Professional Thr					C
Administration of Justice		A3-1	AA			business information Professional Info	ee Certificat	e			C
Advanced Manufacturing						Chemistry	A	AS-T			
Computer Aided Manufacturing					C						
Computer Aided Drafting in Solidworks					C	Child and Family Education		i	AA		С
Computer Aided Drafting in CATIA/3D		nce			Č	Early Childhood Education	1	AS-T			Ü
Computer Aided Drafting and Manufac		iicc			C	School-Aged Child Care	1		AA		С
Computer Aided Draiting and Manufac	turing				C	School-Aged Child Care		1	лл		C
Aeronautical & Aviation Technology						<b>Communication Studies</b>	AA-T				
Aircraft Airframe				AS	C						
Aircraft Powerplant				AS	C	Computer Applications				AS	С
General Aircraft Maintenance				AS	C	Computer Networking Core				110	C
General Alleran Mannenance				АЗ	C					AS	C
						Computer Networking Multi-Platform	ı				
Agriculture/Park & Landscape Manag	ement					IT Cybersecurity				AS	С
Environmental Horticulture				AS	C						
Landscaping Construction				AS	C	Computer Information Science					
						Business Computer Info. Science				AS	C
Air Conditioning & Refrigeration						Computer Science	AS-	Т			
Air Conditioning Specialist				AS	С	Computer Software Developer	110	-		AS	С
Air Conditioning & Refrig. Specialist				AS	C	Computer software Developer				110	C
						CCH C IEI (					0
Refrigeration Specialist				AS	С	CSU - General Education					С
Aircraft Fabrication and Assembly Tec	h					Dance				AS	
Aircraft Fabrication and Assembly Tech				AS	C						
Blueprints & Structures Local Certificate					С	Deaf Studies					
						American Sign Language			AA		С
						Interpreter Training			AA		C
Ainfuomo Monufosturing Tooh DC						interpreter framing		1	лл		C
Airframe Manufacturing Tech BS						D: 14 134 11					
						Digital Media					
Anthropology	AA-T					Computer Animation		1	AA		C
						Digital Photographic Imaging		1	AA		C
Art						Digital Printing		1	AA		C
Art History	AA-T					Graphic Design		1	AA		С
Studio Art	AA-T					Interactive Media-Web Design			AA		Č
otudio mit	7171 1					Video Design & Production			AA		C
Auto Pody						video Design & Floudellon		1	1/1		C
Auto Body				4.0	0	Dagger / Comment Atlanta				4.0	0
Collision Repair Specialist				AS	С	Drafting/Computer Aided Design				AS	С
Collision Repair & Refinishing Specialis	t			AS	C						
Refinishing Specialist				AS	С	Economics	AA-T				
Automotive Technology						Education-Instructional Aide			AA		С
Driveability, Emissions & Electrical				AS	С	Education Instructional Aide		1	** *		J
						Flord Cool Tools and				4 C	0
Engine and Drive Trains				AS	С	Electrical Technology				AS	С
Biological Sciences				AS		Electronics Technology				AS	С
		AC T		AJ						110	C
Biology		AS-T				Avionics Technology					C
Business						Engineering					
		40 75								4.0	
Business Administration 2.0		AS-T		4.0	_	Computer Engineering				AS	
General Business				AS	С	Electrical Engineering				AS	
						Mechanical Engineering				AS	

# **Graduation / Associate Degree and Certificate Requirements**

# DEGREES AND CERTIFICATES CONT.

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Subject Area Degree or Certificate Title	AA-T	AS-T	AA	AS	С	Subject Area  Degree or Certificate Title	AA-T	AS-T	AA	AS	С
English	AA-T					Photography-Commercial Commercial Photography			AA		С
English as a Second Language High Intermediate ESL					С	Physics		AS-T			
Film, TV, and Electronic Media	AS-T					Political Science	AA-T				
Fire Technology				AS	С	Psychology	AA-T				
Firefighter I Academy Wildland Fire Technology <b>Geosciences</b>				AS	C C	Alcohol and Other Drug Studies Cert				A C	С
Geographic Information Systems (GIS) Geography	) AA-T				С	Radiologic Technology				AS	
Geology	AA-1	AS-T				Real Estate Real Estate Broker Real Estate Salesperson				AS	C C
History	AA-T					Respiratory Care				AS	C
Industrial Manufacturing Industrial Manufacturing Technician A	apprentic	e			С	Sociology	AA-T			710	
IGETC - General Education					С	Spanish	AA-T				
Kinesiology	AA-T					Theatre Arts	AA-T				
Yoga Instructor					С	Welding				AS	С
Liberal Arts and Sciences Option I - Math and Sciences Option II - Social/Behavioral Sciences Option III - Arts and Humanities			AA AA AA								
Mathematics		AS-T									
Medical Assisting Clinical Medical Assistant Medical Assistant				AS AS	C C						
Music	AA-T										
Music, Commercial Level 1 - General Level II - Performance Specialty			AA		C C						
Nursing Science- Licensed Vocational Nurse Nursing Skills Lab Registered Nursing				AS	C C						
Office Technology Administrative Assistant Administrative Medical Assistant Office Specialist				AS AS AS	C C C						
Philosophy	AA-T										

# The California State University System (CSU)

The CSU system is composed of 23 campuses which serve more than 315,000 students. CSU has more than 1,400 bachelor's and master's degree programs in over 200 different subject areas and a variety of teaching and school service credential programs. CSU campuses offer undergraduate and graduate programs providing liberal arts education as well as preparation for occupations such as business, engineering, the arts, and science and health professions.

A community college student may transfer a maximum of 70 semester units to a campus of the CSU. Courses that are transferable to the CSU are designated as (CSU) in the description of courses in this catalog. Please be cautioned that some of these courses will only transfer as elective credit.

### Eligibility for Admission to the CSU System

All CSU campuses have the same admission requirements for transfer students. Some exceptions occur at campuses or in programs where there are more applicants than can be admitted. In general, however, a student will qualify for most campuses and programs if the student has a 2.0 GPA or better in all transferable units and meets one of the following standards:

- 1. If a student was eligible for admission to the CSU from high school—i.e., had satisfied the subject requirements and achieved the required scores on the eligibility index—a student is eligible to transfer at any time, provided that a 2.0 GPA is maintained in transferable college courses.
  - **NOTE**: Consult the CSU Application Packet for information on required high school subjects and eligibility index.
- 2. If a student earned the required scores on the eligibility index, but had not satisfied the required college preparatory high school subjects, a student may take college courses in the subjects that were missing and be eligible to transfer upon their completion, provided the student maintains a 2.0 GPA in transferable courses.
- 3. If a student was ineligible for admission from high school because the student lacked required subjects and did not achieve the required scores on the eligibility index, the student must do three things:
  - a. Complete 56-60 transferable semester units at AVC (depending on the campus selected);
  - b. Establish a minimum 2.0 GPA at AVC; and,
  - c. Complete a minimum of 37 semester units from the CSU General Ed. Requirements. Of these 39 units a student must include courses from A-1, A-2, A-3 and B-4 with a minimum evaluative grade of "C" before he/she matriculates to a CSU campus.

# **General Education Requirements for the CSU System**

The California State University General Education Breadth (CSU GE) requirements have been designed to complement the major program and electives completed by each baccalaureate candidate, to assure that graduates have made noteworthy progress toward becoming truly educated persons.

Courses approved for CSU GE should be responsive to the need for students to have developed knowledge of, or skills related to, quantitative reasoning, information literacy, intellectual inquiry, global awareness and understanding, human diversity including ethnic studies, civic engagement, communication competence, ethical decision-making, environmental systems, technology, lifelong learning and self-development, and physical and emotional health throughout a lifetime.

To qualify for full certification, a student must satisfactorily complete 39 lower-division semester units or the quarter unit equivalent as follows: CSU GE Areas A – E, for students completing an AD-T  $\it or$  CSU GE transfer requirements prior to Fall 2022; CSU GE Areas A – F for first-time college student beginning Fall 2021 or thereafter. CSU GE certification indicates that a transfer student has met CSU lower-division GE requirements.

Students can submit a request for CSU GE certification with the AVC Transcript Office. Certifications are sent along with the student's official transcript to the CSU campus. Students are encouraged to monitor the documentation timelines from the CSU as to when the CSU GE certification has to be received at the transfer institution.

### Ethnic Studies- Effective Fall 2021

The general education requirements for the CSU System include the newly established CSU GE Area F Ethnic Studies. This revision/new requirement applies to students who enroll for the Fall 2021 semester and thereafter.

Commencing with students graduating in the 2024–25 academic year, the California State University shall require, as an undergraduate graduation requirement, the completion of, at minimum, one three-unit course in Ethnic Studies.

For additional information, speak with a counselor.

### **CSU GE Breadth for STEM Majors**

Students pursuing certain ADTs may be eligible to complete "GE Breadth for STEM," which defers one lower-division course in CSU GE Area C and one lower-division course in CSU GE Area D until after transfer. The GE Breadth for STEM option is applicable only to majors for which the Transfer Model Curriculum specifies GE Breadth for STEM.

CSU GE Breadth for STEM certification as part of the AD-T requires the completion of the following requirements:

- a. All courses in Areas A, B, E and F of the traditional GE curriculum; and
- b. One course in Area C1 Arts and one course in Area C2 Humanities; and
- c. One course in Area D.

STEM:

Biology, AS-T

# A. English Language Communication and Critical Thinking (9 units)

Select at least 3 units from each of the following sub-categories.

A-1 \*\*Oral Communication

COMM 101, 103

A-2 \*\*Written Communication

ENGL 10

A-3 \*\*Critical Thinking

COMM 115

ENGL 102, 103

PHIL 101, 106, 110, 201

\*\* Courses in this area must be completed with a grade of "C" or better to be certified.

Please note: Students who were following a CSU GE pattern prior to Fall 2021, do not have to complete the CSU Area F requirement at this time. Instead, the student will complete 9 units in CSU Area D (see list for approved courses).

B. Scientific Inquiry and Quantitative Reasoning (9-12

units)

Select at least one course from physical sciences, one course from life sciences, and one course from mathematics/quantitative reasoning. One science course shall include a laboratory component/activity.

### B-1 Physical Science

ASTR 101

CHEM 101\*, 102\*, 110\*, 120\*, 210\*, 220\*

ERSC 101\*

GEOG 101, 102

GEOL 101, 102

PHYS 101\*, 102\*, 110\*, 120\*, 211\*

PSCI 101\*

#### B-2 Life Science

ANTH 101

BIOL 101, 102\*, 103\*, 104, 110\*, 120\*, 201\*, 202\*, 204\*, 205\*

#### **B-3** Laboratory Activity

ANTH 101L

ASTR 101L

BIOL 101L

GEOG 101L, 102L

GEOL 101L, 102L

#### B-4 \*\*Mathematics/Quantitative Reasoning

CIS 121

MATH 110, 115, 116, (120), 124, 128, 135, 140, 148, 150, 160, 220, 230, 250

- \* Class includes a laboratory component. Credit will also be granted for Area B-3.
- \*\* Courses in this area must be completed with a grade of "C" or better to be certified.

### C. Arts and Humanities (9 units)

Select one course from the arts and one course from the humanities. Select the remaining units from C-1 or C-2. No more than 4 units of performance or art activity classes shall be chosen. Performance/activities are indicated in **bold & italics**.

#### C-1 Arts (Art, Dance, Music, Theatre)

ART 100, 101, 102, 103, 104, 106, 113, 132, 135, 137, 140, 145, 163, 170,

213

COMM 112, 114

DA 101

FTV 101, 107, 108, 201, 203, 251

HIST 115

MUS 101, 105, 111, 121, 126, 131, 132, 142, 151, 153, 153B, 160, 166, 185,

**231, 232,** 251A, 251B, 253A, 253B

MUSC 102, 103, 107, 108, *173*, *220A*, *223*, *273* 

**PHOT 107** 

PHTC 101, 150, 201

THA 101, 102, 110, 130, 225

#### C-2 Humanities (Literature, Philosophy, Foreign Languages)

CHIN 101, 102, 201, 202

COMM 112, 217, 219

DFST 101, 102, 201, 202

ENGL 102, 111, 112, 221, 222, 225, 227, 230, 231, 235, 242, 253, 256, 257,

259, 265, 279

FREN 101, 102, 201, 202, 203

FTV 201, 203, 251

GER 101, 102, 201, 202

HIST 101, 102, 104, 105, 107, 108, 110, 111, 113, 115, 118, 119

LATN 101, 102, 201

MUSC 108

NF 150

PHIL 105, 106, 108, 109

PHOT 107

SPAN 101, 102, 110SS, 201, 202, 203, 210SS, 220SS

THA 239

#### D. Social Sciences (6 units)

Select from at least two different disciplines.

AJ 206

ANTH 102, 103, 110, 112, 140

BUS (212)

CFE 102, (103)

DFST (105), (106)

ECON 100, 101, 102, 110

GEOG 105, 106, 110

HIST 101, 102, 104, 105, 107, 108, 110, 111, 113, 114, 116, 118, 119

POLS 101, 103, 200, 201, 202, 203

PSY 101, 200, 201, 212, 230, 232, 233, 234, 235, 236

SOC 101, 105, 110, 111, 112, 115, 116, 120, (200)

#### E. Lifelong Learning and Self-Development (3 units)

Select 3 units, or DD 214 for 4 units

DA 108, 111

CFE 102

**COMM 107** 

HD 101, 102, 105

HE 101, 120

NF 100, 103, 150

PSY 212, 236

SOC 111, 116, 120

### F. Ethnic Studies (3 units)

Ethnic Studies courses for AVC are pending approval. CSU GE Breadth requirements were revised to include CSU GE Area F effective Fall 2021. This revision/new requirement applies to students who enroll for the Fall 2021 semester and thereafter. Commencing with students graduating in the 2024–25 academic year, the California State University shall require, as an undergraduate graduation requirement, the completion of, at minimum, one three-unit course in Ethnic Studies.

For additional information, speak with a counselor.

#### **Requirements for American Institutions** (6 units)

Select one pair. Courses used to satisfy the American Institutions requirement may also apply to Category D above.

HIST 107 and POLS 101

HIST 108 and POLS 101

HIST 110 and POLS 101

HIST 111 and POLS 101

PLEASE NOTE: Newly approved courses effective Fall 2021 indicated in paranthesis.

### **Major Requirements at CSU Campuses**

Refer to CSU catalogs and consult a counselor. CSU catalogs are available in the Transfer Center, (SSV 101).

### **Independent Colleges and Universities**

Admission and graduation requirements for independent schools vary according to the institution. To determine specific requirements, check the catalog of the school of your choice. Antelope Valley College's Transfer Center has a catalog file of many independent institutions.

Please note: Students who were following a CSU GE pattern prior to Fall 2021, do not have to complete the CSU Area F requirement at this time. Instead, the student will complete 9 units in CSU Area D (see list for approved courses).

# **Associate Degree**

6

### Liberal Arts and Sciences: Option I, II, or III

This degree will provide students with an opportunity to earn an AA degree in one of three major areas of study: Math and Sciences; Social/Behavioral Sciences; or Arts and Humanities. It is designed for students who wish to explore different disciplines (subject areas) *before* deciding on a definite major program prior to transferring to a four-year university, or for students who may not be planning to transfer but wish to earn a degree in a particular area of study that interests them.

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; however, through careful educational planning with a counselor, this degree would offer a solid foundation in the transfer process. Students should consult with a counselor for specific information regarding their intended major at the university of their choice. Courses that were approved for IGETC at the time the courses were taken may be substituted in the LAS majors regardless of catalog rights.

### **Degree Requirements:**

Requirements for the Liberal Arts and Sciences Degree (*Option I, II, or III*) may be satisfied by completing a total of 60 units comprised of the following:

- a minimum of 18 core course units chosen exclusively from *one of the options* listed below. Student must receive a minimum grade of "C" or better in all required core courses in order to qualify for the degree;x
- 21 units of AVC/General Education (GE) requirements; and
- enough elective units to complete the required balance of 60 total units.

Students who intend to transfer are strongly encouraged to complete either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth (CSU GE) requirements. (See Graduation/Associate Degree Requirements.)

Double Counting: While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major or area of emphasis requirement.

### **Math and Sciences - Option I:**

The following area of study allows students to take courses that will prepare them for possible majors within the teaching field in addition to the many fields of Science, including the Allied Health, Nursing preparation, Health Sciences, and related fields. Courses in mathematics emphasize mathematical and quantitative reasoning skills. Courses in the sciences examine the physical universe—its life forms and its natural phenomena—allowing students to learn about the methodologies of science as an investigative tool and to understand the influence scientific knowledge has on society.

# Select a minimum of 18 units from the following courses:

Choose at least 6 units from courses listed below:

ANTH 101, 101L ASTR 101, 101L BIOL 101, 103, 110, 120, 201, 202, 204 CHEM 101,101L, 102, 110, 120 ERSC 101 GEOG 101 GEOL 101, 101L, 102 PHYS 101, 102, 110, 120, 211 PSCI 101

AND at least 6 units from the courses listed below: MATH 115, 116, 124, 128, 140, 148, 150, 160, 220, 230, 250

### **Social/Behavioral Sciences - Option II:**

#### **Program Learning Outcomes**

- 1. Demonstrate an awareness of the theories and methods of inquiry used by professional social and behavioral scientists.
- Critically evaluate the behaviors, attitudes, values, and beliefs of diverse cultures.
- 3. Synthesize existing knowledge and evaluate research.

The following area of study allows students to take courses that will prepare them for possible majors within the fields of Psychology, History, Sociology, Political Science, and related disciplines. Courses in the social and behavioral sciences explore a variety of theories, perspectives, and experiences as to how people have behaved and continue to behave in response to particular times, places, events, and societies. The courses are designed to stimulate critical thinking and encourage students to evaluate how societies and social sub groups operate in the world.

#### Select at least 18 units from the following courses:

AJ 206
ANTH 102, 103, 112
ECON 100, 101, 102, 110
GEOG 105, 110
HIST 101, 102, 104, 105, 107, 108, 110, 111, 113, 114, 119
POLS 101, 103, 200, 202, 203
PSY 101, 200, 201, 212, 232, 233, 234, 235, 236
SOC 101, 105, 110, 112, 115, 116

### **IT Cybersecurity**

Students who complete the IT Cybersecurity Associates degree will become more knowledgeable and enhanced employability in cybersecurity and computer networking. The IT Cybersecurity Associates degree prepares students for a career working with associate-level cybersecurity analysts within security operations centers, including detecting cybersecurity breaches and effectively responding to security incidents. This degree requires 60-61 units to be completed.

Required Courses (21 units):	units
CA 157, Introduction in Linux	3
CA 165, Digital Forensics Fundamentals <i>or</i>	3
CA 166, Cloud Security Fundamentals	3
CA 170, Virtualization and Cloud Essentials	3
CA 171, Introduction to Networking	3
CA 175, Administering Windows Server	3
CA 182, Network Security	3
CA 183, Seurity Counter Measures	3
•	Total 21

Program Floatives (Saloet 12 unutis).	ınits
	111115
CA 107, Microcomputer Hardware and Software Support	3
CA 131, Relational Database Management and Design	3
CA 159, SUSE Linux Server Administration	3
CA 176, Windows Server Networking	3
CA 179, Cybersecurity Operations -CCNA-Cyberops	3
CA 185, Network Security - CCNA Security	3

Recommended Plan of Study	
Fall, First Semester	units
BIP 110, Keyboarding I	1
BIP 120, Keyboarding II	1
BIP 130, Keyboarding III	1
CA 107, Microcomputer Hardware and Software Support	3
CA 157, Introduction to Linux	3
ENGL 101, Academic Composition	3
HD 101, College and Life Management	3
T	otal 15
Spring, Second Semester	
CA 153, Windows Install & System Support	3
CA 170, Virtualization and Cloud Essentials	3
CA 171, Introduction to Networking	3
MATH 102, Intermediate Algebra or higher	4
T	otal 13
Summer	
BUS 212, Women in Organizations	3
MUSC 102, History of Jazz	3
POLS 101, Amer Political Institutions	3
•	Total 9
Fall, Third Semester	
BIOL 104, Environmental Biology	3
CA 175, Administering Windows Server	3
CA 182, Network Security	3
CA 183, Security Countermeasures	3
T	otal 12
Spring, Fourth Semester	
CA 165, Digital Forensics Fundamentals	3
CA 166, Cloud Security Fundamentals	3
CA 179, Cybersecurity Operations -CCNA-Cyberops	3
CA 185, Network Security - CCNA Security	3
T	otal 12
Degree T	otal 61

# **Computer Applications Courses**

### CA 103 \*INTRODUCTION TO COMPUTERS AND DIGITAL TECHNOLOGY

3 units

4 hours weekly [2.5 lecture, 1.5 lab]

This course is designed to introduce students to digital technology and the features of a microcomputer, how a microcomputer operates, and how to select a microcomputer that best fits individual needs. The course includes an examination of information systems and their role in business. Through handson operation of a computer, students will develop computer-based solutions to business problems utilizing the major features of popular software applications, including word processors, spreadsheets, database managers, presentation managers, and Internet browsers. (CSU, UC, AVC)

### CA 107 \*MICROCOMPUTER HARDWARE AND SOFTWARE SUPPORT

3 units

4 hours weekly [2.5 lecture, 1.5 lab]

Advisory: Completion of CA 103, CA 221 or CIS 101.

This course is intended to provide students with a workable knowledge that is required for the installation, setup, and troubleshooting of hardware and software related to personal computers and peripheral devices. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional will be introduced. This course will help students prepare for the A+ Certification Exam. **BEFORE ENROLLING** students should be able to create folders, format disks, copy files, rename files, create shortcuts, and use Windows Explorer. This course will involve problem solving and troubleshooting. Students should also be familiar with various operating systems and the installation of application software. (CSU, AVC)

# CA 111 \*WORD PROCESSING-MICROSOFT WORD

3 units

4 hours weekly [2.5 lecture, 1.5 lab]

Advisory: Completion of CA 103 or CA 221 and OT 101, and the ability to type 30 wpm.

This course covers the concepts of word processing emphasizing Microsoft Word. Topics covered include preparing documents, text formatting and editing, management of files and folders, formatting paragraphs, using multiple windows, and standard letter and punctuation styles. This vocationally oriented course will serve students seeking a certificate, associate degree, or desiring to transfer to a four-year institution. **BEFORE ENROLLING**, students should have used a word processing program to create, save, retrieve, edit, and print. (CSU, AVC)

# Associate in Science in Computer Science for Transfer

The Associate in Science in Computer Science for Transfer (AST in Computer Science) degree is to provide students with a foundational knowledge of computer science, to enhance their problem-solving skills, sharpen their critical and the opportunity to seamlessly transfer to a California State University in advanced standing as a Computer Science major. Additionally, the degree can prepare students in areas of science and engineering.

The Associate in Science in Computer Science for Transfer (AS-T in Computer Science) degree meets the requirements of SB 1440 for Associate Degrees for Transfer (ADT). These degrees are intended to make it easier for students to transfer to California State University campuses but do not exclude admittance to other colleges or universities.

To earn the Associate in Science in Computer Science for Transfer (AS-T in Computer Science) degree a student must complete the following:

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

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis.

Required Courses	units
CIS 111, Intro Programming & Algorithms	3
CIS 113, Data Structures	3
CIS 121, Computer Mathematics	3
CIS 123, Assembly Language & Computer Architecture	3
MATH 150, Calculus & Analytic Geometry	5
MATH 160, Calculus & Analytic Geometry	4
PHYS 110, General Physics	4
BIOL 110, General Molecular Cell Biology or	5
BIOL 120, Gen Organ, Eco, and Evo Biol or	5
CHEM 110, General Chemistry or	5
PHYS 120, General Physics	4

\*This degree may only be earned by completing the Intersegmental General Education Transfer Curriculum (IGETC) Requirements.

Please consult a counselor for additional information.

Recommended Plan of Study	
Summer	
GE requirement area UC elective	1
GE requirement area IGETC 3A	
(recommended FTV 108)	3
GE requirement area IGETC 1c	3
Tot	al 9
First Semester u	ınits
CIS111 - Intro Programming & Algorithms	3
CIS 123, Assembly Language and Computer Architecture	3
MATH 150, Calculus and Analytic Geometry (IGETC 2)	5
GE requirement area IGETC 1a (ENGL 101)	3
Tota	1 14
Second Semester	
CIS 113, Data Structures	3
MATH 160, Calculus & Analytic Geometry	4
GE requirement area IGETC 5b	
(recommended BIO 104)	3
GE requirement area IGETC 1b	
(recommended ENGL 103)	3
Tota	1 13
Third Semester	
CIS 121, Computer Mathematics	3
PHYS 110, General Physics (IGETC 5a/5c)	4
GE requirement area IGETC 3A/H	
(recommend MUSC 102 or MUSC 103 or MUSC 107 or	
MUSC 108)	3
GE requirement area IGETC 4	
(recommended GEOG 105)	3
Tota	1 12

#### Total 13

	10441 10
Fourth Semester	
BIOL 110, General Molecular Cell Biology or	
BIOL 120, Gen Organ, Eco, and Evo Biol or	
CHEM 110, General Chemistry or	
PHYS 120, General Physics	4-5
GE requirement area IGETC 3H	
(recommended HIST 110 or HIST 111)	3
GE requirement area IGETC 4	
(recommended SOC 110)	3
GE requirement area IGETC 4	
(recommended POLS 101)	3
	<b>Total 13-14</b>
	Degree Total 60

# **Associate Degree**

### Associate in Arts in Economics for Transfer

The Associate in Arts in Economics for Transfer (AA-T in Economics) degree program has been developed to provide the student with a fundamental understanding of the field of Economics, which emphasizes economic analysis, institutions and policies in American, regional, and urban settings. Economics is concerned with the study of how people and societies produce various commodities and distribute them for consumption, now or in the future, among various persons and groups in society.

The Associate in Arts in Economics for Transfer (AA-T in Economics) degree meets the requirements of SB 1440 for Associate Degrees for Transfer (ADT). These degrees are intended to make it easier for students to transfer to California State University campuses but do not exclude admittance to other colleges or universities.

To earn an Associate in Arts in Economics for Transfer (AA-T in Economics) degree a student must complete the following:

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

ADTs also require that students must earn a "C" or better in all courses required for the major or area of emphasis.

Required Course (14 units):	units
ECON 101, Principles of Macroeconomics	3
ECON 102, Principles of Microeconomics	3
MATH 115, Statistics	4
MATH 148, Calculus for Business & Economics	4

Required Electives A (Select 3-10 units):	units
MATH 124, Finite Math	4
MATH 150, Calculus and Analytic Geometry <i>and</i>	
MATH 160, Calculus and Analytic Geometry	9
ACCT 201, Financial Accounting	4
ACCT 205, Managerial Accounting	4
BUS 113, Business Communications	3
BUS 201, Business Law	3
CA 221, Computer Concepts & Applications in Business of	r
CIS 101, Introduction to Computer Information Science	3-4

Required Electives B (Select 3-5 units): or select any course from List A not already used:	units
ECON 100, Survey of Economics	3
ECON 110, Economics of the Underclass	3
MATH 250, Calculus and Analytic Geometry	4
MATH 220, Linear Algebra	4

Some courses required for the major may also satisfy general education requirements. Consult with a counselor for additional information.

Except in cases of a prerequisite requirement, it is not required to take courses in exactly this sequence; they are recommended in this order to facilitate success.

### Recommended Plan of Study

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First Semester	units
Required Elective A (MATH 124)	4
Required Elective B (ECON 100)	3
CSU GE requirement Area A2	3
CSU GE requirement Area B1&B3 or B2&B3	4
	Total 14
Second Semester	
ECON 102, Principles of Microeconomics (CSU GE D)	3
MATH 148, Calculus of Business and Economics	4
CSU GE requirement Area A1	3
CSU GE requirement Area C1	3
CSU GE requirement Area E	3
•	Total 16
Third Semester	
ECON 101, Principles of Macroeconomics	3
CSU GE requirement Area A3	3
CSU GE requirement Area C2	3
CSU GE requirement Area D (POLS 101 Recommended	) 3
CSU Transferable Electives	3
CSU GE requirement Area F	3
	Total 15
Fourth Semester	
MATH 115, Statistics (CSU GE B4)	4
CSU GE requirement Area B1 (or B2)	3
CSU GE requirement Area C1/C2	3
CSU Transferable Electives: HIST 107, 108, 110 or 111	
(CSU GE D & AIR)	3
CSU Transferable Electives	2
•	Total 15

CSU GE or IGETC Pattern 55-58 CSU Transferable Elective Units to reach Degree Total 60

### **Economics Courses**

### **ECON 100 \* SURVEY OF ECONOMICS**

3 units

3 hours weekly

Advisory: Completion of ENGL 101 or placement by multiple measures. A general education course surveying the American economy from both microeconomic and macroeconomic perspectives. The course is not intended for business or economics majors. Topics include business cycles; unemployment; inflation; international trade; income distribution; market structure and performance; and the economic behavior of firms, households, and government. (CSU, UC, AVC)

# **Fire Technology Courses**

# FTEC 211 \*FIRE BEHAVIOR AND COMBUSTION

3 units

3 hours weekly

*Corequisite:* Completion or concurrent enrollment in FTEC 111. Theory and fundamentals of how and why fires start, spread, and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. (C-ID: FIRE 140 X) (CSU, AVC)

# Film and Television Courses

# FTV 155 \*FILM FESTIVAL ANALYSIS

1 unit

27 hours total

A course introduces students to contemporary independent film and its makers through direct participation in the Antelope Valley Independent Fim Festival. Students will evaluate a wide variety of strategies used in visual storytelling as well as have the opportunity to interact directly with working professionals in the film industry. Recommended for transfer and degree bound students as well as anyone with a general interest in off-Hollywood film. (CSU, AVC)

www.avc.edu (661) 722-6300 History 13

# **Associate Degree**

#### **Associate in Arts in History for Transfer**

The Associate in Arts in History for Transfer (AA-T in History) degree is a comprehensive introductory history program that includes the study of world and Western Civilization as well as American History. The AA-T in History degree is supplemented by substantive courses such as Contemporary United States History: Vietnam; African American History; Women in American History; Cultural History of Mexico; History of California; and the History of Latin America and the Caribbean. These courses cover a wide range of subjects; clearly there is something to satisfy everyone's interest. Students are encouraged to go beyond simple memorization of names and dates and to actually get involved with the past. Assignments emphasize research skills, speculative analysis, and original thinking and the ability to compare and contrast the past with current events. Students emerge from these classes with the sense that the study and evaluation of the past need not be stagnant; rather it is an ever evolving process.

The Associate in Arts in History for Transfer (AA-T in History) degree meets the requirements of SB 1440 for Associate Degrees for Transfer (ADT).

These degrees are intended to make it easier for students to transfer to California State University campuses, but do not exclude admittance to other colleges or universities.

To earn an Associate in Arts in History for Transfer (AA-T in History) degree a student must complete the following:

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

Required Courses	units
HIST 107, U.S. History, 1607-1877	3
HIST 108, U.S. History from 1865	3
Required Electives A (Select 6 units total):	units
HIST 101, Western Civil., From Human Beginnings Until 1	
or HIST 104, Introduction to World Civilizations, From	
Human Beginnings until 1500	3
HIST 102, Western Civilization, 1750-Pres	
or HIST 105, Introduction to World Civilizations	,
1500-Present	3

Required Electives B (6 units total):	ınits
Area 1 (Select 3 units):	
HIST 104, Introduction to World Civilizations, From Human	1
Beginnings until 1500	3
HIST 105, Introduction to World Civilizations, 1500-Present	3
HIST 110, African American History, 1450-1877	3
HIST 111, African American History, 1877-Present	3
HIST 113, Women in American History	3
HIST 115, Cultural History of Mexico	3
HIST 119, History of Latin America and the Caribbean	3
Area 2 (Select 3 units):	
HIST 114, History of California	3
HIST 118, American West History, 1806-Present	3

Some courses required for the major may also satisfy general education requirements. Consult with a counselor for additional information.

Except in cases of prerequisite requirement, it is not required that courses be taken in exactly this sequence; they are recommended in this order to facilitate success.

Recommended Plan of Study	
First Semester	units
HIST 107, U.S. History, 1607-1877 (CSU GE D)	3
CSU GE requirement Area A1	3
CSU GE requirement Area B4	3-5
CSU GE requirement Area C2	3
	<b>Total 12-14</b>
Second Semester	
HIST 108, U.S. History from 1865 (CSU GE D)	3
Required Elective A	3
CSU GE requirement Area A2	3
CSU GE requirement Area B1/B3	3-4
CSU GE requirement Area C1	3
	<b>Total 15-16</b>
Third Semester	
Required Elective A	3
Required Elective B Area 1	3
CSU GE requirement Area A3	3
CSU GE requirement Area B2/B3	3
CSU GE requirement Area C	3
	Total 15
Fourth Semester	_
Required Elective B Area 2	3
CSU GE requirement Area F	3
CSU GE requirement Area E	3
*CSU Transferable Electives	3-6
	<b>Total 12-15</b>

\*Electives should be taken from other courses within the major or foreign language.

**CSU Transferable Elective Units to reach Degree Total 60** 

**CSU GE or IGETC Pattern 55-58** 

# **Kinesiology-Theory Courses**

# KINT 102 \*OFFICIATING- BASKETBALL AND VOLLEYBALL

(formerly KIN 193)

3 units

3 hours weekly [2 lecture, 1 lab]

Students will analyze and interpret the rules and regulations for the sports of football and basketball at the high school level. Discussions will also include the mechanics of officiating these sports. Trends, techniques of officiating, and issues of the games will also be discussed. (CSU, UC, AVC)

# KINT 103 \*OFFICIATING- BASEBALL, SOFTBALL, TRACK AND FIELD

(formerly KIN 194)

3 units

3 hours weekly [2 lecture, 1 lab]

Students will analyze and interpret the rules and regulations for the sports of baseball and track and field at the high school level. Discussions will also include the mechanics of officiating these sports. Trends, techniques of officiating, and issues of the games will also be discussed. (CSU, UC, AVC)

# **Intercollegiate Athletic Courses**

# IATH 280 INTERCOLLEGIATE MEN'S VOLLEYBALL

(formerly KIN 270)

1-3 units

54-162 hours total

Limitation on Enrollment: Physical examination and tryout required. The course is designed for the student-athlete who wishes to compete at the varsity intercollegiate level in men's volleyball. Advanced men's volleyball skills and techniques will be emphasized. The course is designed to assist the athlete in acquiring the necessary conditioning needed for competition. All phases of advanced offensive and defensive strategies will be presented. The course will teach the athletes the playing rules and code of conduct. (CSU, UC, AVC) (R2)

# IATH 285 INTERCOLLEGIATE WOMEN'S VOLLEYBALL

(formerly KIN 265)

1-3 units

3-9 hours weekly

Limitation on Enrollment: Physical examination and tryout required. The course is designed for the student-athlete who wishes to compete at the varsity intercollegiate level in women's volleyball. Advanced women's volleyball skills and techniques will be emphasized. The course is designed to assist the athlete in acquiring the necessary conditioning needed for competition. All phases of advanced offensive and defensive strategies will be presented. The course will teach the athletes the playing rules and code of conduct. (CSU, UC, AVC) (R2)

www.avc.edu (661) 722-6300 **Mathematics 15** 

## **Mathematics Courses**

## **MATH 115 STATISTICS**

4 units

4 hours weekly

**Prerequisite:** Completion of MATH 102 or placement by multiple measures.

The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education. (C-ID: MATH 110) (CSU, UC, AVC)

# MATH 116 INTRODUCTION TO STATISTICS USING R

4 units

4 hours weekly

**Prerequisite:** Completion of MATH 102 or placement by multiple measures.

Equivalency: Math 115.

This course introduces students to statistical thinking and literacy through the analysis of large real data bases using robust statistical computer software. Students will be introduced to the common traditional statistical methods taught in an introductory statistics course using the statistical software R. Probability techniques, hypothesis testing, and predictive techniques will be used to facilitate decision-making. Topics will include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi square and t tests. Results will be reported using R-markdown authoring in the RStudio program. (CSU, UC, AVC)

#### **Medical Assistant**

Medical assistants are multiskilled health professionals specifically educated to work in ambulatory settings performing administrative and clinical duties. The practice of medical assisting directly influences the public's health and well-being, and requires mastery of a complex body of knowledge and specialized skills requiring both formal education and practical experience that serve as standards for entry into the profession. The Associate in Science in Medical Office Assisting students who complete the degree in medical office assisting may have enhanced employment opportunities in the field. They may have priority for positions in physicians' offices, including office manager, case manager and trainer.

Required Courses (48 units):	units
CA 103, Intro. to Computers and Dig. Tech.	3
CA 111, Word Processing-Microsoft Word	3 3 3
MOA 101, Beginning Medical Terminology	3
MOA 102, Advanced Medical Terminology	3
MOA 110, Beginning Medical Office Assisting Skills	4
MOA 111, Advanced Medical Office Assisting Skills	4
OT 102, Keyboarding II	3
OT 121, Spreadsheets for the Office	3
OT 150, Basic Principles of Coding for the Medical Office	
OT 152, Beg. Medical Insurance	3
OT 205, Medical Office Procedures	3
BIOL 100, Elem Human Anatomy & Physiology	
ENGL 101, Academic Composition	3
MATH 102, Intermediate Algebra or higher	4
Program Elective	3
To	tal 48
Program Electives (3 units):	units

	Total 4
<b>Program Electives (3 units):</b>	unit
COMM 101, Intro to Public Speaking	
COMM 103, Process of Communication	
COMM 107, Introduction to Personal Communication	
NF 100, Nutrition	
OT 199, Occupational Work Experience	1-

Recommended Plan of Study	
First Semester	units
BIOL 100, Elem. Human Anatomy and Physiology	
(GE requirement Area A)	3
CA 103, Intro to Computers & Dig Tech	3
ENGL 101, Academic Composition (GE Area D1)	3
MATH 102, Intermediate Algebra or higher (GE Area D2)	4
NF 100, Nutrition (GE Area E)	3
To	tal 16
Second Semester	
CA 111, Word Processing-Microsoft Word	3
COMM 101, Intro to Public Speaking	3
MOA 101, Beginning Medical Terminology	3
OT 102, Keyboarding II	3
OT 121, Spreadsheets for the Office	3
OT 205, Medical Office Procedures	3
To	tal 18
Third Semester	
MOA 102, Advanced Medical Terminology	3
MOA 110, Beginning Medical Office Assisting Skills	4
OT 150, Basic Principles of Coding for the Medical Office	3
GE requirement Area B	3
GE requirement Area C	3
Total	16-18
Fourth Semester	
MOA 111, Advanced Medical Office Assisting Skills	4
OT 152, Beg. Medical Insurance	3
GE requirement Area F	3-4
Program Elective	3-4
	13-15
Degree Total	60-64

# **Medical Assisting Courses**

# MOA 102 ADVANCED MEDICAL TERMINOLOGY

3 units

3 hours weekly

**Prerequisite:** Completion of MOA 101 with a grade of "C" or better. Completion of ENGL 101 with a grade of "C" or better. The focus of this course is continued development of understanding and application of medical language to practical situations that occur in hospitals, clinics, physicians' offices, medical records, and medical communications. (CSU, AVC)

# **Vocational Nursing Courses**

# VN 109 FUNDAMENTALS OF PATIENT CARE FOR VOCATIONAL NURSES

2.25 units

121.5 hours total

Limitation on Enrollment: Formal admission to VN Program.

Prerequisites: Completion of BIOL 100, PSY 101, and NF 100.

Corequisite: Concurrent enrollment in VN 110 (formerly VN 101)

A course in the fundamental nursing skills needed to care for the hospitalized or long-term care patient. The course includes clinical practice in a hospital or long-term care facility. Emphasis is on safety principles and basic patient care skills. NOTE: No grade will be given for this class; students will receive "pass" or "no pass" only. Qualifying Certified Nursing Assistants are exempt from this course. Prior approval must be obtained from the Director of Nursing. (AVC)

# VN 110 SELF CARE FUNDAMENTALS, PHARMACOLOGY

12.25 units

364.5 total hours [148.5 lecture, 216 clinical]

Limitation on Enrollment: Formal admission to VN program. Prerequisites: Completion of BIO 100, PSY 101, and NF 100. Corequisite: Concurrent enrollment in VN 109 unless exempt. Fundamental nursing principles of adult patient care, basic principles of the nursing process, self-care theory, nutrition, pharmacology, gerontology, and adult growth and development are integrated throughout the course. (AVC)

# VN 111 VOCATIONAL NURSING IN THE CHILD-BEARING FAMILY AND PEDIATRIC PATIENT

5.25 units

175.5 total hours [54 lecture, 121.5 clinical]

Limitation on Enrollment: Formal admission to VN program. Prerequisite: Completion of VN 112 with a "C" or better. Principles of vocational nursing care of the mother during child-bearing, the newborn, and the pediatric patient. The pediatric component will have emphasis on assessment and growth and development. (AVC)

# VN 112 MEDICAL-SURGICAL NURSING FOR THE ADULT AND CHILD

14 units

459 hours total [148.5 lecture, 310.5 clinical]

**Limitation on Enrollment:** Formal admission to VN program. **Prerequisite:** Completion of VN 110 with a grade of "C" or better.

Principles of medical-surgical nursing of the adult and the child. Emphasis will be on diseases and conditions of the endocrine, respiratory, reproductive, integumentary, gastrointestinal, hematological, musculoskeletal, and renal systems. (AVC)

# VN 113 NURSING LEADERSHIP IN MEDICAL-SURGICAL NURSING

8.25 units

274.5 total hours [85.5 lecture, 189 clinical]

**Limitation on Enrollment:** Formal admission to Vocational Nursing Program.

**Prerequisite:** Completion of VN 111 with a grade of "C" or better.

Principles of medical-surgical nursing of the adult and child with leadership integrated throughout the course. Emphasis will be on diseases and conditions of the cardiovascular and neurological systems, and mental health disorders. (AVC)

### **Theatre Arts Courses**

### THA 111 \*THEATRE HISTORY I

3 units

3 hours weekly

The study of the history of theatre from the Origins of Theatre-East and West- through the 18th Century. The history and development of theatre are studied in relationship to cultural, political, and social conditions of the time. Plays are read for analysis of structure, plot, character, and historical relevance. (CSU, UC, AVC)

# THA 119A \*REHEARSAL AND PERFORMANCE: NEW WORKS AND ONE ACTS

1 unit

54 lab hours total

Limitation on Enrollment: Audition required.

Students will participate in a departmental production, performing a role in a short play/new work or serving in a specific production-related function assigned by the director. The number of units awarded is based on the total time required for the assigned role or function. (CSU, AVC) (R3)

# THA 119B \*REHEARSAL AND PERFORMANCE: NEW WORKS AND ONE ACTS

2-4 units

108–216 hours total

Limitation on Enrollment: Audition required.

Students will participate in a departmental production, performing a role in a short play/new work or serving in a specific production-related function assigned by the director. The number of units awarded is based on the total time required for the assigned role or function. (CSU, AVC) (R3)