

2012-13 Catalog Addendum Summary/Table of Contents

Subject	Replace/Addition	2012-13 Catalog Page(s)	2012-13 Addendum Page(s)
Learning Support Centers Table	Addition	36	2
Administration of Justice Major	Replace	70-71	3-4
Astronomy Major	Addition	77	5
Business Major	Replace	82-84	6-8
Chemistry Major	Replace	85	9
Digital Media Major	Replace	92-100	10-17
History Major	Replace	112	18
Kinesiology Major	Replace	115	19-20
Physics Major	Replace	128	21

Addendum to the 2012-13 Catalog

This table is an addition to the content on page 36

COLLEGE OF SAN MATEO LEARNING SUPPORT CENTERS

CENTER	LOCATION	LEAD FACULTY	SUPPORT STAFF
Accounting Skills Center	South Hall (14), Room 204	Rosemary Nurre	Not applicable
Anatomy and Physiology Center	Science Building, Room 217	Theresa Martin	Not applicable
Assistive Technology Center	College Center, Room 120	Carolyn Fiori	Sue Roseberry, Instructional Aide
Business Computer Center	South Hall (14), Rooms 101, 103, and 105	Patricia Brannock	Russell Cunningham, Instructional Aide
CIS Computer Center	Emerging Technologies Building (19), Rooms 124 and 126	Melissa Green	Cory Putnam, Instructional Aide
Communication Studies Center	College Center, Learning Center, Room 220	Yaping Li George Kramm	Michael Manneh, Instructional Aide
CSM Learning Center	College Center, Room 220	Jennifer Mendoza, Director of the Learning Center	Patricia (Pepper) Powell, Instructional Aide
Digital Media Computer Center	College Center, Room 161	Patti Appel Diana Bennett	Michael McDaniel, Instructional Aide
Foreign Language Center	North Hall (18), Room 112	Richard Castillo	Not applicable
Integrated Science Center	Science Building, Room 110	Kathy Diamond	Dean Drumheller, Lab Technician
Math Resource Center	North Hall (18), Room 202 [Central Hall (16), Room 111 as a satellite location]	Lena Feinman	Not applicable
Nursing Skills Center	Health and Wellness Building, Rooms 360 and 380	Jane McAteer	Jenny Kinsel, Lab Technician
Reading and ESL Center	North Hall (18), Rooms 101 and 103	Nancy Paolini (ESL) Carole Wills (Reading)	Anna St. Amand, Instructional Aide Colleen Olle, Instructional Aide
Writing Center and English 800 Center	North Hall (18), Rooms 102, 104, 106, and 108	Juanita Alunan Daniel Keller Kathleen Steele	Lindsey Bynum, Instructional Aide Michele Hagggar, Instructional Aide Greg Lagang, Instructional Aide Valerie Young, Instructional Aide

3/6/12, approved by the Learning Support Centers Lead Faculty Group, updated 8/21/12

Replaces Administration of Justice section on pages 70–71

ADMINISTRATION OF JUSTICE

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program 60–70 transferable units

California State University
University of California
Independent Colleges and Universities

AS Associate in Science Degree Administration of Justice 60 units

AS-T Associate in Science Degree for Transfer/SB1440 Administration of Justice 60 CSU transferable units

CA Certificate of Achievement Administration of Justice 24 units Basic Police Academy 22 units

University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. Transfer majors may be listed as Administration of Justice, Criminal Justice, Criminology, Law and Society, or other listings. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

The Administration of Justice Program prepares students for jobs in the field of criminal justice. The program at CSM is designed to educate students on the many aspects of justice administration – from the human, social and moral problems to the larger scope of justice systems.

Through the expertise of the faculty and the exposure to professional personnel from the criminal justice system, students can expect to be prepared for a career in various fields including criminal justice, law enforcement, corrections, social services, probation, and law.

The criminal justice system offers employment in various municipal, county and state agencies in California, to individuals who have the ability to work well with all types of people, observe details others might miss, and make sound decisions in times of crisis.

The two-year degree covers a broad range of information and professional skills in criminal law, corrections, and the American justice system. While this degree is intended for transfer, it also may lead to employment or advancement within the justice system. Students planning to transfer to a four-year university should complete the Associate Degree.

AS Major in Administration of Justice

Upon completion of degree requirements, students will be able to:

1. Identify and classify the various components and goals of the Criminal Justice System, and explain how the components function as a team.
2. Recognize and discuss the development and practical application of law in society.
3. Explain and demonstrate the importance of developing interpersonal and written communication skills necessary to function within the Criminal Justice System and society at large.
4. Describe and demonstrate the value and necessity of ethics, integrity, and professionalism in law enforcement careers.

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 21 semester units

A grade of "C" or higher is required for each course applied to the major.

- ADMJ 100 Introduction to the Criminal Justice System 3 units
- ADMJ 102 Principles and Procedures of the Justice System 3 units
- ADMJ 104 Concepts of Criminal Law 3 units
- ADMJ 106 Legal Aspects of Evidence 3 units
- ADMJ 120 Criminal Investigation and the Justice System 3 units

Plus, 6 units from the courses listed below:

- ADMJ 108 Community Relations 3 units
- ADMJ 125 Juvenile Procedures 3 units
- ADMJ 185 Introduction to Forensics 3 units

AS-T Major in Administration of Justice

Upon completion of degree requirements, students will be able to:

1. Identify and classify the various components and goals of the Criminal Justice System, and explain how the components function as a team.
2. Recognize and discuss the development and practical application of law in society.
3. Explain and demonstrate the importance of developing interpersonal and written communication skills necessary to function within the Criminal Justice System and society at large.
4. Describe and demonstrate the value and necessity of ethics, integrity, and professionalism in law enforcement careers.

Major requirements: 18-19 semester units.

The AS-T major in Administration of Justice prepares students for transfer into bachelor's degree programs in Administration of Justice and similar areas. Completion of this AS-T meets minimum eligibility for transfer to the California State University system. For more information go to page 62 of the 2012-13 Catalog.

Complete CSU General Education and major requirements as noted below. A grade of "C" or higher is required for each course applied to the major. Major course requirements may also be applied to meet general education requirements.

Required Core Courses:

- ADMJ 100 Introduction to the Criminal Justice System . . . 3 units
- ADMJ 104 Concepts of Criminal Law 3 units

Plus, select 6 units from the following courses:

- ADMJ 102 Principles & Procedures of the Justice System . . 3 units
- ADMJ 106 Legal Aspects of Evidence. 3 units
- ADMJ 108 Community Relations and the Justice System . . 3 units
- ADMJ 120 Criminal Investigation 3 units
- ADMJ 125 Juvenile Procedures 3 units
- ADMJ 185 Introduction to Forensic Science 3 units

Plus, select 6 units from the following courses:

- COMM 130 Interpersonal Communication 3 units
- SOCI 100 Introduction to Sociology. 3 units
- PSYC 100 General Psychology 3 units
- PSYC 121 Basic Statistical Concepts 3 units . . OR
- MATH 200 Elementary Probability and Statistics 4 units

General Education requirements:

Select courses to complete CSU General Education OR IGETC for CSU. This degree does not require the CSM AA/AS General Education pattern on pages 64 & 65 of the 2012-13 Catalog.

CSU GE:

- Area A1 Oral Communication 3 units
- Area A2 Written Communication 3 units
- Area A3 Critical Thinking 3 units
- Area B1 Physical Science 3 units
- Area B2 Life Science 3 units
- Area B3 Science Lab 1 unit
- Area B4 Math Concepts 3 units
- Area C1 Arts 3 units
- Area C2 Humanities. 3 units
- Area C1 or C2 3 units
- Area D Social, Political, and Economic Institutions 9 units
- Area E Lifelong Understanding 3 units

OR

IGETC/CSU:

- Area 1A English Composition. 3 units
- Area 1B Critical Thinking/Composition. 3 units
- Area 1C Oral Communication. 3 units
- Area 2 Math Concepts. 3 units
- Area 3A Arts. 3 units
- Area 3B Humanities. 3 units
- Area 3A or 3B. 3 units
- Area 4 Social and Behavioral Science. 9 units
- Area 5A Physical Science 3 units

- Area 5B Biological Science. 3 units
- Area 5C Science Lab - Either 5A or 5B must have a lab component 1 unit
- Electives:
- Additional CSU transferable courses based on student interest to reach 60 units total.

CA Administration of Justice
24 semester units

A grade of "C" or higher is required for each course applied to the certificate.

Complete major requirements listed under Associate in Science: Major in Administration of Justice. Plus, completion of the General Education requirement as outlined in Area 1, Group A of IGETC.

CA Basic Police Academy
22 semester units

A grade of "C" or higher is required.

- ADMJ 145 Basic Police Academy 22 units

This 880 hour course of training is certified by the California Commission of Peace Officer Standards and Training (POST) to the statutory basic training requirements. This training is presented on the College of San Mateo campus by our regional academy trainer, South Bay Regional Training Center. For more information, contact South Bay at (408) 270-6458.

POST (California Commission on Peace Officers Standards and Training)

Job opportunities within the law enforcement field require certification by POST of a candidate's work preparation. Reserve officers are hired by local law enforcement agencies only after completing a POST-certified program such as that offered by College of San Mateo.

For regular police officer positions, the hiring agency might choose to hire the individual and then pay for his/her training. It is more often the case that the agency will seek out candidates who have completed training in a POST-certified program. College of San Mateo's Administration of Justice program is oriented to comply directly with POST certification standards, placing our program graduates in an advantageous position when applying for jobs in the law enforcement field.

Upon successful completion of each of the following courses, students will receive a certification of course completion from the Administration of Justice department.

PC 832 Training Courses

- ADMJ 771 PC 832: Arrest and Control Training. 3 units
- ADMJ 775 PC 832: Firearms Training. 0.5 unit

Regular Basic Course Modular Format

- ADMJ 780 Regular Basic Course Module III. 9.5 units
- ADMJ 781 Regular Basic Course Module II. 13 units

This page is an addition that follows the Art program requirements on page 77

ASTRONOMY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program 60– 70 transferable units

California State University
University of California
Independent Colleges and Universities

CA Certificate of Achievement

Astroimaging and Observatory Operation (AOOC) . . .27–31 units

University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

CA Astroimaging and Observatory Operation (AOOC)

At the heart of astronomy research are observatory operations and astroimaging techniques. Observatories all around the world are in need of technicians who can fulfill those tasks. Yet there are not many institutions that can provide the necessary training for such technicians. The College of San Mateo Astronomy Department, with its roll-off-roof observatory, containing a wide selection of refracting and reflecting telescopes, as well as various imaging instrumentation, provides the training for students, who would like to pursue such a career. The students' training is enriched by access to a well-equipped forty-foot domed, state-of-the-art planetarium, along with a dedicated faculty and staff, active in astronomical research. This program is designed to introduce the students to the operation of various telescopes and to the implementation of important astroimaging techniques such as spectroscopy and photometry, along with sophisticated software to process images. While the learning of the techniques is hands-on, the underlying principles are emphasized. Furthermore, this certificate program is designed such that students can, with a slight modification, apply the course load of this program toward higher degrees in astronomy or astrophysics.

27-31 semester units

A grade of "C" or higher is required for each course applied to the certificate.

Astronomy requirements:

- ASTR 100 Introduction to Astronomy 3 units
- ASTR 101 Astronomy Laboratory 1 unit
- ASTR 103 Observational Astronomy Lab 1 unit
- ASTR 125 Stars and Galaxies 3 units
- ASTR 200 Introduction to Astrophysics 3 units
- ASTR 203 Astroimaging Techniques 4 units
- ASTR 204 Application of Astroimaging Techniques. 4 units

Physics requirements:

- PHYS 210 General Physics I OR
- PHYS 250 Physics with Calculus I 4 units
- PHYS 220 General Physics II OR
- PHYS 270 Physics with Calculus III 4 units

*Students planning to pursue an undergraduate degree in Physics, Astronomy or Astrophysics should take PHYS 250 and 270

Mathematics requirements:

- MATH 130 Analytic Trigonometry 4 units
- Or placement in Math 222 or Math 251

(MATH 130 is sufficient for students who plan to take PHYS 210 and 220. Students who plan to take PHYS 250 and 270 will also need MATH 222, 251, 252, and 253.)

Replaces Business section on pages 82–84

BUSINESS

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program 60–70 transferable units

California State University
University of California
Independent Colleges and Universities

AA Associate in Arts Degree

Business Administration,
Option 1 (Non-transfer program) 60 units
Business Administration,
Option 2 (Transfer program). 60 units
Business Information Processing
Option 1: Microcomputer/Office Assistant 60 units
Option 2: Microcomputer/Database and
Spreadsheet Functions 60 units

AS-T Associate in Science Degree for Transfer/SB1440

Business Administration 60 CSU transferable units

CA Certificate of Achievement

Business Information Processing
Option 1: Microcomputer/Office Assistant 23–24.5 units
Option 2: Microcomputer/Database and
Spreadsheet Functions 24 units

CS Certificates of Specialization

Office Assistant I 8–9.5 units
Office Assistant II. 11 units

Recommended high school preparation:

Coursework in Mathematics, English, Accounting, and use of micro-computers, including spreadsheet and word processing applications.

AA Major in Business Administration, Option 1 (Non-transfer)

Career opportunities for Business Administration majors are diverse and many. The major prepares students for careers in business disciplines which include sales, marketing, public relations, and human resources. Many graduates find employment within the manufacturing industries: automotive, aerospace, commercial; investment banking; consulting services; retailing; and information technology and telecommunications. Others secure employment in federal, state, or local government agencies. Still others work for non-profit or private foundations and professional organizations. Administrative assistant, bookkeeper, buyer, employment interviewer, and sales

agent are some of the careers for which the non-transfer option helps prepare the student.

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 24–26 semester units

A grade of "C" or higher is required for each course applied to the major.

ACTG 100 Accounting Procedures. 3 units . OR
ACTG 121 Financial Accounting. 4 units
BUS 100 Contemporary American Business 3 units
BUS 101 Human Relations I 3 units
BUS 115 Business Mathematics 3 units
BUS 201 Business Law I 3 units
BUS 401 Business Communications 3 units
BUS 295 Computer Systems in Business 4 units . OR
CIS 110 Introduction to Computer and
Information Science 3 units

Plus, select 3 units from a BUSW series

AA Major in Business Administration, Option 2 (Transfer Program)

With a B.A. or advanced degree, career opportunities extend to include accountant, administrative assistant, budget analyst, management consultant, claims agent, controller, credit analyst, financial manager, financial planner, hospital administrator, insurance agent, lawyer, loan officer, securities analyst, and trust officer.

Additional fields for which this option helps prepare the student are advertising/marketing, international business, banking, business publications, computer operations, and computer software implementation.

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 20–24 semester units

A grade of "C" or higher is required for each course applied to the major.

ACTG 121 Financial Accounting 4 units
ECON 100 Principles of Macroeconomics 3 units
ECON 102 Principles of Microeconomics 3 units
MATH 200 Statistics. 4 units

Plus, select 6–10 units from the following courses:

ACTG 131 Managerial Accounting 4 units
BUS 100 Contemporary American Business 3 units
BUS 201 Business Law I 3 units
BUS 295 Computer Systems in Business 4 units
MATH 125 Elementary Finite Math 3 units
MATH 241 Applied Calculus 1. 5 units
MATH 251 Calculus with Analytic Geometry I 5 units

AS-T Major in Business Administration

The AS-T major in Business Administration prepares students for transfer into bachelor’s degree programs in Business Administration and similar areas. With a bachelor’s degree or advanced degree, career opportunities include accountant, administrative assistant, budget analyst, management consultant, claims agent, controller, credit analyst, financial manager, financial planner, hospital administrator, insurance agent, lawyer, loan officer, securities analyst, and trust officer. Additional fields for which the options helps prepare the student are advertising/marketing, international business, banking, business publications, computer operations, and computer software implementation.

Major requirements: 26-31 semester units

Complete CSU General Education and major requirements as noted below. A grade of "C" or higher is required for each course applied to the major. Major course requirements may also be applied to meet general education requirements.

Required Core (17 units)

- ACTG 121 Financial Accounting 4 units
- ACTG 131 Managerial Accounting 4 units
- ECON 100 Principles of Macroeconomics 3 units
- ECON 102 Principles of Microeconomics 3 units
- BUS 201 Business Law I 3 units

List A: Select one course (3–5 units)

- MATH 241 Applied Calculus I 5 units
- MATH 200 Elementary Probability and Statistics 4 units
- MATH 125 Finite Math 3 units

List B: Select two courses (6–9 units)

- Any List A course not used above
- BUS 295 Computer Systems in Business
- Either BUS 100 Contemporary American Business . 3 units . . OR
- BUS 401 Business Communications

General Education requirements:

Select courses to complete CSU General Education OR IGETC for CSU. This degree does not require the CSM AA/AS General Education pattern on pages 64 and 65 of the 2012-13 Catalog.

CSU GE:

- Area A1 Oral Communication 3 units
- Area A2 Written Communication 3 units
- Area A3 Critical Thinking 3 units
- Area B1 Physical Science 3 units
- Area B2 Life Science 3 units
- Area B3 Science Lab 1 unit
- Area B4 Math Concepts 3 units
- Area C1 Arts 3 units
- Area C2 Humanities 3 units
- Area C1 or C2 3 units
- Area D Social, Political, and Economic Institutions 9 units
- Area E Lifelong Understanding 3 units

OR

IGETC/CSU:

- Area 1A English Composition 3 units
- Area 1B Critical Thinking/Composition 3 units
- Area 1C Oral Communication 3 units
- Area 2 Math Concepts 3 units
- Area 3A Arts 3 units
- Area 3B Humanities 3 units
- Area 3A or 3B 3 units
- Area 4 Social and Behavioral Science 9 units
- Area 5A Physical Science 3 units
- Area 5B Biological Science 3 units
- Area 5C Science Lab - Either 5A or 5B must have a lab component 1 unit

Electives:

Additional CSU transferable courses based on student interest to reach 60 units total.

AA Major in Business Information Processing Option 1: Microcomputer/Office Assistant

Career opportunities available to Business Information Processing graduates include employment in both entry-level positions and mid-level office management. Other areas of career opportunities include sales, marketing, public relations, and human resources.

Students develop the ability to organize and manage work tasks and information through the use of computer/office technology. These programs offer training in decision-making and administrative duties that are required for promotion.

Among career opportunities for those skilled in microcomputer word processing are office assistant, administrative staff assistant, executive secretary, senior secretary, secretary supervisor, and secretarial services entrepreneur.

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 23–24.5 semester units

A grade of "C" or higher is required for each course applied to the major.

- BUS 101 Human Relations I 3 units
- BUS 115 Business Mathematics 3 units
- BUS 315 Keyboarding I 3 units . . OR
- BUS 317 Keyboarding Skill-Building 1.5 units
- BUS 326 Electronic Filing and Records Management 1.5 units
- BUS 401 Business Communication 3 units
- BUSW 105 Introduction to Microcomputers 1.5 units
- BUSW 114 Windows Fundamentals I 1.5 units
- BUSW 214 Word Processing I Using WORD for Windows 1.5 units

- BUSW 215 Word Processing II Using
WORD for Windows 1.5 units
- BUSW 383 Business Presentations Using
Power Point for Windows 1.5 units
- BUSW 415 Spreadsheet I Using Excel for Windows. 1.5 units
- BUSW 530 Introduction to Internet 1.5 units
- CRER 127 Career Choices: Job Search 0.5 unit

**CA Business Information Processing Option 1:
Microcomputer/Office Assistant**
23–24.5 semester units

Complete major requirements listed under Associate in Arts – Major in Business: Business Information Processing Option 1 Microcomputer/ Office Assistant. A grade of “C” or higher is required for each course applied to the certificate.

**AA Major in Business Information
Processing Option 2: Microcomputer/
Data Base and Spreadsheet Functions**

Among career opportunities for those skilled in microcomputer data-base and spreadsheet functions are technical support specialist, PC applications support specialist, PC telephone customer service representative, computer support aide, and consultant/trainer.

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 24 semester units

A grade of “C” or higher is required for each course applied to the major.

- ACTG 100 Accounting Procedures. 3 units
- ACTG 144 Quick Books: Set-up and Service Business 1.5 units
- ACTG 145 Quick Books: Payroll and Merchandising. 1.5 units
- BUS 100 Contemporary American Business 3 units
- BUS 115 Business Mathematics 3 units
- BUSW 105 Introduction to Microcomputers 1.5 units
- BUSW 114 Windows Fundamentals I. 1.5 units
- BUSW 214 Word Processing Using
WORD for Windows 1.5 units
- BUSW 415 Spreadsheet I Using Excel for Windows. 1.5 units
- BUSW 416 Spreadsheet II Using Excel for Windows 1.5 units
- BUSW 464 Database Management Fundamentals
Using Access for Windows 3 units
- BUSW 530 Introduction to the Internet 1.5 units

**CA Business Information Processing
Option 2: Microcomputer/Data Base
and Spreadsheet Functions**
24 semester units

Complete major requirements listed under Associate in Arts – Major in Business: Business Information Processing Option 2 Microcomputer/ Data Base and Spreadsheet Functions. A grade of “C” or higher is required for each course applied to the certificate.

CS Office Assistant I
8–9.5 semester units

A grade of “C” or higher is required for each course applied to the certificate.

- BUS 317 Keyboarding Skill-Building. 1.5 units
- BUS 316 Keyboarding II 3 units ..OR
- BUSW 214 Word Processing Using
WORD for Windows 1.5 units
- BUSW 114 Windows Fundamentals I. 1.5 units
- BUSW 415 Spreadsheet I Using EXCEL for Windows. 1.5 units
- BUSW 530 Introduction to the Internet 1.5 units
- CRER 127 Career Choices: Job Search 0.5 unit

CS Office Assistant II
11 semester units

A grade of “C” or higher is required for each course applied to the certificate.

- BUS 317 Keyboarding Skill-Building 1.5 units
- BUSW 114 Windows Fundamentals I. 1.5 units
- BUSW 214 Word Processing I Using
WORD for Windows 1.5 units
- BUSW 215 Word Processing II Using
WORD for Windows 1.5 units
- BUSW 383 Business Presentations Using
Power Point for Windows 1.5 units
- BUSW 415 Spreadsheet I Using Excel for Windows. 1.5 units
- BUSW 530 Introduction to Internet 1.5 units
- CRER 127 Career Choices: Job Search. 0.5 unit

Replaces Chemistry section on page 85

CHEMISTRY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program

60 – 70 transferable units

California State University
University of California
Independent Colleges and Universities

AS Associate in Science Degree

Chemistry 60 units

Recommended high school preparation:

Coursework in Chemistry, Biology, Physics, Mathematics

University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

The Chemistry major prepares students to transfer to four-year institutions for continued study in the field of chemistry. While an A.S. degree may be sufficient for an individual to secure employment as an environmental technician, laboratory technician, safety manager, sanitarian, or water-quality analyst, most careers in the field require a B.S. or advanced degree. Analytical chemist, biochemist, biotechnologist, dentist, educator, forensic specialist, environmental/ industrial health engineer, pharmacist, physician, research chemist, and veterinarian are some of the careers for which an Associate degree in Chemistry prepares a student who subsequently obtains a university degree in the field. Approximately two-thirds of all chemists work for manufacturing firms. Chemists are also employed with federal, state and local governments, such as the departments of Defense, Health and Human Resources, and Agriculture. Some chemists work for research organizations and educational institutions.

AS Major in Chemistry

Upon completion of degree requirements, students will be able to:

1. Demonstrate preparedness to transfer to a 4 year institution
2. Effectively explain general chemistry and organic chemistry theories and concepts. (Effective Communication)
3. Perform quantitative analysis relating but not limited to graphical and numerical data obtained from laboratory experiments, and apply general chemistry and organic chemistry theories to solve problems. (Quantitative Skill)
4. Critically analyze and apply general chemistry and organic chemistry concepts. (Critical Thinking)

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 24–25 semester units

A grade of “C” or higher is required for each course applied to the major.

CHEM 210	General Chemistry I	5 units
CHEM 220	General Chemistry II	5 units
CHEM 231	Organic Chemistry I	5 units
CHEM 232	Organic Chemistry II	5 units
PHYS 210/211	General Physics I / Calculus Supplement	5 units. . OR
PHYS 250	Physics with Calculus	4 units

Replaces Digital Media section on pages 92–100

DIGITAL MEDIA

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program 60-70 transferable units

California State University
University of California
Independent Colleges and Universities

AA Associate in Arts Degree

- Digital Media: Digital Audio
- Digital Media: Digital Video Production
- Digital Media: Graphic Design
- Digital Media: Journalism
- Digital Media: Multimedia
- Digital Media: Television Producing
- Digital Media: Web Design
- Digital Media: Web Developer

CA Certificate of Achievement

- Digital Media: Graphic Design
- Digital Media: Graphic Production
- Digital Media: Journalism
- Digital Media: Multimedia
- Digital Media: Web Design
- Digital Media: Web Developer

CS Certificate of Specialization

- Digital Media: Digital Audio
- Digital Media: Digital Video
- Digital Media: Graphic Design
- Digital Media: Graphic Production
- Digital Media: Lighting
- Digital Media: Multimedia
- Digital Media: Television and Radio Broadcasting
- Digital Media: Video Journalism
- Digital Media: Web Design/Web Developer

University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for Digital Media for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

Broadcast and Electronic Media

CSM's Broadcast and Electronic Media program is helping to train the next generation of media makers, equipping them with technical skills, an ethical conscience, and an understanding of how media affects society. This 21st century program prepares students for a career in broadcasting through professional hands-on training. Students in Broadcast and Electronic Media can choose from three A.A. Degrees and four Certificates of Specialization, earn transfer credits, or just build their career skills. Students have the opportunity to explore a variety of possible career choices within the broadcasting industry: TV and video producing, directing, lighting, camera operation (in the studio and field), video editing, scriptwriting, on-air talent, audio recording and mixing, and radio programming. Students can expect rigorous training and real world projects.

TV training takes place in CSM's state-of-the-art TV studio, which is located inside a full-time broadcast station, KCSM-TV. Some classes produce programming that is broadcast on KCSM, so students work on TV shows that will air in a top-ten media market. Students enrolled in radio production will produce programming for a web-based college radio station.

AA Major in Digital Media: Digital Audio

The Digital Audio degree prepares students for entry level work in the radio industry or audio production. This degree focuses on: training students in sound recording and mixing; creating radio programming; and studying the intersection of audio and visual media. Students receive hands-on training for work in recording studios, audio production companies, and radio stations.

Upon completion of degree requirements, students will be able to:

1. Demonstrate a working knowledge of the practical and theoretical concepts used in sound recording for radio, television, and other electronic media.
2. Analyze the artistic and technical aspects of audio productions.

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 27.5 semester units

A grade of "C" or higher is required for each course applied to the major.

DGME 100 Media in Society	3 units
DGME 102 Media Law and Ethics	3 units
DGME 112 TV Studio Production	OR
DGME 113 Digital Video Production	3 units
DGME 118 Digital Audio Production	3 units
DGME 150 Advanced Audio: Radio Production	OR
DGME 152 Advanced Digital Audio: Pro Tools	3 units
MUS 290 Electronic Music I	3 units
MUS 291 Electronic Music II	2 units
MUS 293 Audio for Visual Media	2.5 units
DGME 250 Digital Media Practicum	3 units
DGME 255 Portfolio	2 units

CS Digital Media: Digital Audio

Upon completion of certificate requirements, students will be able to:

1. Select and configure recording equipment for a recording session.
2. Record using digital audio technology.
3. Mix and transcode a digital audio production.

12 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 118 Digital Audio Production	3 units
DGME 150 Advanced Audio: Radio Production	3 units
DGME 152 Advanced Digital Audio: Pro Tools.	3 units
MUS 290 Electronic Music I	3 units

AA Major in Digital Media: Digital Video Production

The Digital Video Production degree prepares students for entry level work in TV and video production. This degree concentrates on broadcast level TV production and shooting and editing digital video. There are hundreds of production companies and TV stations throughout California that employ qualified directors of photography, video journalists, and video editors who have the type of training this program offers.

Upon completion of degree requirements, students will be able to:

1. Demonstrate technical proficiency in video production and postproduction,
2. Analyze the artistic and technical aspects of video productions such as composition, sound, lighting, and continuity.

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 29 semester units

A grade of "C" or higher is required for each course applied to the major.

DGME 100 Media in Society	3 units
DGME 102 Media Law and Ethics	3 units
DGME 260 Newswriting and Reporting	3 units
DGME 112 TV Studio Production	3 units
DGME 113 Digital Video Production	3 units
DGME 118 Digital Audio Production	3 units
DGME 120 Advanced Video and Editing	3 units
DGME 130 Lighting for Studio and Field	3 units
DGME 155 Video Journalism	3 units
DGME 255 Portfolio	2 units

CS Digital Media: Digital Video

Upon completion of certificate requirements, students will be able to:

1. Use video editing to tell a story.
2. Enhance and improve video with purposeful graphics.

9 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 113 Digital Video Production	3 units
DGME 120 Advanced Video and Editing	3 units
DGME 143 Motion Graphics	3 units

AA Major in Digital Media: Graphic Design

Graphic Design prepares students for entry-level work in the visual media industry. The curriculum includes basic visual literacy and visual communication skills, the complete software package necessary for employment, typography, graphic design theory and application, and production classes that provide real-world hands-on learning experiences.

The skills that graphic designers possess transcend media boundaries. They may work in print media such as publishing, advertising and package design or three-dimensional media such as environmental graphics, exhibit or display design, or signage. They may design for electronic media such as television, the web, or multimedia or they may create motion graphics and titling for film and video. They may work in information design and interface design.

They may design packaging, books, magazines, and posters, all forms of advertising, corporate communications, corporate identity, environmental and retail design, web design, education design, or nonprofit design. Their creativity and skills are necessary wherever a message and an audience meet, regardless of the media.

Upon completion of degree requirements, students will be able to:

1. Synthesize visual solutions to graphic problems by integrating information and ideas.
2. Design and produce original solutions to graphic problems using technology and software central to the graphics industry effectively.
3. Analyze, compare and contrast the effectiveness of their own original design work and the work of others.

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 31 semester units

A grade of "C" or higher is required for each course applied to the major.

DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 211 Media Design I: Illustrator	3 units
DGME 212 Media Design II: Photoshop	3 units
DGME 168 Web Design II: Dreamweaver	3 units
DGME 220 Typography	3 units

DGME 230 Publication Design and Production with InDesign 3 units
 DGME 235 Graphic Design Theory and Application 4 units
 DGME 240 Digital Publishing 4 units
 DGME 250 Digital Media Practicum. 3 units
 DGME 255 Portfolio. 2 units

CA Digital Media: Graphic Design

The Graphic Design certificate prepares students for entry-level work in the visual media industry. The curriculum includes basic visual literacy and visual communication skills, the complete software package necessary for employment, typography, graphic design theory and application, and production classes that provide real-world hands-on learning experiences.

The skills that graphic designers possess transcend media boundaries. They may work in print media such as publishing, advertising and package design or three-dimensional media such as environmental graphics, exhibit or display design, or signage. They may design for electronic media such as television, the web, or multimedia or they may create motion graphics and titling for film and video. They may work in information design and interface design.

They may design packaging, books, magazines, and posters, all forms of advertising, corporate communications, corporate identity, environmental and retail design, web design, education design, or nonprofit design. Their creativity and skills are necessary wherever a message and an audience meet, regardless of the media.

Upon completion of certificate requirements, students will be able to:

1. Create original graphic design projects using comprehensive design, production, and business techniques.
2. Create an original portfolio in order to pursue employment or college transfer opportunities .
3. Collaborate effectively with project team members and industry professionals.
4. Demonstrate a holistic understanding and practical ability to complete an industry standard graphic design project from inception to completion.

27 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design 3 units
 DGME 211 Media Design I: Illustrator. 3 units
 DGME 212 Media Design II: Photoshop 3 units
 DGME 215 History of Graphic Design. 3 units
 DGME 220 Typography 3 units
 DGME 230 Publication Design and Production with InDesign. 3 units
 DGME 235 Graphic Design Theory and Application 4 units
 DGME 250 Digital Media Practicum. 3 units
 DGME 255 Portfolio 2 units

CS Digital Media: Graphic Design

Upon completion of certificate requirements, students will be able to:

1. Create original graphic design projects using comprehensive design techniques.
2. Communicate effectively to present graphic design solutions to peers and clients.
3. Demonstrate a holistic understanding and practical ability to create an industry standard graphic design project from inception to completion.

13 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design 3 units
 DGME 215 History of Graphic Design. 3 units
 DGME 220 Typography 3 units
 DGME 235 Graphic Design Theory and Application 4 units

AA Major in Digital Media: Journalism

CSM's Journalism program provides a robust learning environment where hands-on experience and training in media ethics prepare students for further study and careers in media industries. Students collaborate on the production of The San Matean, the award-winning campus newspaper and website, in a real-world exploration of how media function. Among the skills they develop are reporting, editing, news photography, online editing, video reporting, and page design. Students are provided a rich exploration of media issues, ethics, and other vital journalism basics. The program can help students pursue an array of career opportunities, including work for advertising agencies, corporate communications departments, magazines.

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 24 semester units

A grade of "C" or higher is required for each course applied to the major.

DGME 100 Media in the Society. 3 units
 DGME 101 Writing Across the Media 3 units
 DGME 113 Digital Video Production 3 units
 DGME 118 Digital Audio Production. 3 units
 DGME 167 Web Design I: Fireworks. 3 units
 DGME 260 Newswriting and Reporting 3 units
 DGME 261 Advanced Newswriting and Reporting. 3 units
 DGME 265 Newspaper and Online News Production 3 units

CA Digital Media: Journalism

CSM's Journalism program provides a robust learning environment where hands-on experience and training in media ethics prepare students for careers in media industries. Students collaborate on the production of The San Matean, the award-winning campus newspaper and website, in a real-world exploration of how media function.

Among the skills they develop are reporting, editing, news photography, online editing, video reporting, and page design. Students are provided a rich exploration of media issues, ethics, and other vital journalism basics. The program can help students pursue an array of career opportunities, including work for advertising agencies, corporate communications departments, magazines.

Upon completion of certificate requirements, students will be able to:

1. Communicate effectively by producing beat reports and formulating story ideas based on campus and off-campus research.
2. Demonstrate effective teamwork and project planning by working within a student-centered hierarchy on print and online journalism projects. Students learn to collaborate and assign individual duties within their group.
3. Develop story and photo ideas and original ways of presenting materials for the newspaper and website.
4. Produce an authentic newspaper and website.
5. Gather content and design coverage for print and online within a First Amendment context.
6. Produce video and audio content for the website.

21 semester units

A grade of “C” or higher is required for each course applied to the certificate.

DGME 100 Media in Society	3 units
DGME 113 Digital Video Production	3 units
DGME 118 Digital Audio Production	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 260 Newswriting and Reporting	3 units
DGME 261 Advanced Newswriting and Reporting	3 units
DGME 265 Newspaper and Online News Production	3 units

CS Digital Media: Video Journalism

Upon completion of certificate requirements, students will be able to:

1. Produce video that clearly communicates information for specific audiences.
2. Write and report a typical video news package.
3. Explain the difference between video journalism and more traditional forms of journalism.

15 semester units

A grade of “C” or higher is required for each course applied to the certificate.

DGME 101 Writing Across the Media	3 units
DGME 113 Digital Video Production	3 units
DGME 120 Advanced Video and Editing	3 units
DGME 155 Video Journalism	3 units
DGME 260 Newswriting and Reporting	3 units

AA Major in Digital Media: Multimedia

Multimedia designers combine design and technical knowledge to create information and communication technology-based products that entertain, educate, or inform the user. This includes entertainment products such as computer games, education and training materials such as electronic kiosks in museums and trade shows, DVD-ROM games and “edutainment” programs, and interactive presentations used in business settings.

The duties of a multimedia designer may include animation, storyboarding, digital audio, digital video, project management, accessibility, and liaising with clients.

Multimedia designers work in the film and TV industries, advertising and marketing firms, web companies, government agencies, academic organizations and non-profit organizations, or may work as independent multimedia designers.

Upon completion of degree requirements, students will be able to:

1. Demonstrate multimedia editing software
2. Differentiate and construct multimedia formats
3. Differentiate digital media file formats
4. Evaluate the limitations of digital media
5. Know legal and ethical issues

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 32 semester units

A grade of “C” or higher is required for each course applied to the major.

DGME 102 Media Law and Ethics	3 units
DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 165 Digital Animation: Flash	3 units
DGME 166 Web Authoring: ActionScript	3 units
DGME 113 Digital Video Production	3 units
DGME 118 Digital Audio Production	3 units
DGME 143 Motion Graphics	3 units
DGME 220 Typography	3 units
DGME 250 Digital Media Practicum	3 units
DGME 255 Portfolio	2 units

CA Digital Media: Multimedia

Multimedia designers combine design and technical knowledge to create information and communication technology-based products that entertain, educate, or inform the user. This includes entertainment products such as computer games, education and training materials such as electronic kiosks in museums and trade shows, DVD-ROM games and “edutainment” programs, and interactive presentations used in business settings.

The duties of a multimedia designer may include animation, storyboarding, digital audio, digital video, project management, accessibility, and liaising with clients.

Multimedia designers work in the film and TV industries, advertising and marketing firms, web companies, government agencies, academic organizations and non-profit organizations, or may work as independent multimedia designers.

Upon completion of certificate requirements, students will be able to:

1. Describe multimedia concepts at various stages of development relating to the multimedia process and use of appropriate software.
2. Demonstrate the ability to work in teams effectively.
3. Apply critical thinking and creative problem-solving skills to a variety of multimedia and production cases.
4. Employ theoretical knowledge, skills and attitudes to real world issues / situations.
5. Develop and evaluate student project-based learning activities.
6. Demonstrate proficiency with multimedia processes and software tools.

24 semester units

A grade of “C” or higher is required for each course applied to the certificate.

DGME 102 Media Law and Ethics	3 units
DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 113 Digital Video Production	3 units
DGME 143 Motion Graphics	3 units
DGME 165 Digital Animation	3 units
DGME 166 Web Authoring: ActionScript	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 168 Web Design II: Dreamweaver	3 units

CS Digital Media: Multimedia

Upon completion of certificate requirements, students will be able to:

1. Describe multimedia concepts at various stages of development relating to the multimedia process and use of appropriate software.
2. Demonstrate the ability to work in teams effectively.
3. Apply critical thinking and creative problem-solving skills to a variety of multimedia and production cases.
4. Employ theoretical knowledge, skills, and attitudes to real world issues / situations.
5. Demonstrate proficiency with multimedia processes and software tools.

12 semester units

A grade of “C” or higher is required for each course applied to the certificate.

DGME 113 Digital Video Production	3 units
DGME 143 Motion Graphics	3 units
DGME 165 Digital Animation: Flash	3 units
DGME 166 Web Authoring: ActionScript	3 units

AA Major in Digital Media: Television Producing

The Television Producing degree prepares students for entry level work as a media producer. This degree focuses on creating regular TV programming, writing, and producing video. Hands-on courses provide training in camera operation, news reporting, video editing and on-air talent, including voiceover and on-camera announcing.

Upon completion of degree requirements, students will be able to:

1. Produce television segments that serve target viewers
2. Identify possible effects of media productions on audiences

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 29 semester units

A grade of “C” or higher is required for each course applied to the major.

DGME 100 Media in Society	3 units
DGME 101 Writing Across the Media	3 units
DGME 102 Media Law and Ethics	3 units
DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 112 TV Studio Production	3 units
DGME 113 Digital Video Production	3 units
DGME 120 Advanced Video and Editing	3 units
DGME 128 On-Air Talent	3 units
DGME 155 Video Journalism	3 units
DGME 255 Portfolio	2 units

AA Major in Digital Media: Web Design

Web designers are responsible for creating the look and feel of World Wide Web pages for a client’s website. This involves developing an interface design that effectively communicates the ideas being promoted by the website. A web designer may take part in the initial planning of a website, meeting with the clients to discuss ideas for the layout and organization of the site, and other matters concerning the overall design and accessibility of the site. Web designers may also be involved with programming and project management.

The work environments of web designers include working for large and medium sized corporations, web design and development firms, government agencies, academic organizations, non-profit organizations, and internet companies, or working as independent web designers.

Upon completion of degree requirements, students will be able to:

1. Demonstrate web editing software
2. Differentiate and construct web graphic formats
3. Differentiate the different scripting languages
4. Evaluate the limitations of the web
5. Know legal and ethical issues

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 26 semester units

A grade of “C” or higher is required for each course applied to the major.

DGME 102 Media Law and Ethics	3 units
DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 168 Web Design II: Dreamweaver.	3 units
DGME 169 Web Design III: CSS.	3 units
DGME 165 Digital Animation: Flash	3 units
DGME 220 Typography	3 units
DGME 250 Digital Media Practicum.	3 units
DGME 255 Portfolio	2 units

CA Digital Media: Web Design

Upon completion of certificate requirements, students will be able to:

1. Describe design concepts at various stages of development relating to the design process and use of appropriate software.
2. Demonstrate the ability to work in teams effectively.
3. Apply critical thinking and creative problem-solving skills to a variety of design and production cases.
4. Employ theoretical knowledge, skills and attitudes to real world issues/situations.
5. Develop and evaluate student project-based learning activities.
6. Demonstrate proficiency with design processes and software tools.

24 semester units

A grade of “C” or higher is required for each course applied to the certificate.

DGME 102 Media Law and Ethics.	3 units
DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 165 Digital Animation: Flash	3 units
DGME 166 Web Authoring: ActionScript.	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 168 Web Design II: Dreamweaver.	3 units
DGME 169 Web Design III: CSS.	3 units
DGME 220 Typography	3 units

CS Digital Media: Web Design/Web Developer

Upon completion of certificate requirements, students will be able to:

1. Describe developer concepts at various stages of development relating to the developer process and use of appropriate software.
2. Demonstrate the ability to work in teams effectively.
3. Apply critical thinking and creative problem-solving skills to a variety of developer and production cases.
4. Employ theoretical knowledge, skills, and attitudes to real world issues / situations.
5. Demonstrate proficiency with developer processes and software tools.

12 semester units

A grade of “C” or higher is required for each course applied to the certificate.

DGME 165 Digital Animation: Flash	3 units
DGME 166 Web Authoring: ActionScript.	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 168 Web Design II: Dreamweaver.	3 units

AA Major in Digital Media: Web Developer

Web developers are masters at optimizing website structure and interactivity. Web developers develop database tools and custom applications to enable the site to deliver the highest quality experience to the user.

Web developer duties may include programming, markup, scripting, databases, web security, web business management, and web accessibility.

Web developer work environments include working for large and medium sized corporations, web design and development firms, government agencies, academic organizations, non-profit organizations, and internet companies, or working as independent web developers.

Upon completion of degree requirements, students will be able to:

1. Demonstrate web editing software
2. Differentiate and construct web graphic formats
3. Differentiate the different scripting languages
4. Evaluate the limitations of the web
5. Know legal and ethical issues

Complete General Education and other requirements listed for the Associate degree and

Major Requirements: 33 semester units

A grade of "C" or higher is required for each course applied to the major.

DGME 102 Media Law and Ethics	3 units
DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 168 Web Design II: Dreamweaver	3 units
DGME 169 Web Design III: CSS	3 units
DGME 165 Digital Animation	3 units
DGME 166 Web Authoring: ActionScript	3 units
CIS 111 Introduction to Internet Programming	3 units
CIS 114 Internet Programming: JavaScript/Ajax	4 units
DGME 250 Digital Media Practicum	3 units
DGME 255 Portfolio	2 units

CA Digital Media: Web Developer

Upon completion of certificate requirements, students will be able to:

1. Describe developer concepts at various stages of development relating to the developer process and use of appropriate software.
2. Describe developer concepts at various stages of development relating to the developer process and use of appropriate software.
3. Apply critical thinking and creative problem-solving skills to a variety of developer and production cases.
4. Employ theoretical knowledge, skills, and attitudes to real world issues/situations.
5. Develop and evaluate student project-based learning activities.
6. Demonstrate proficiency with developer processes and software tools.

21 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 102 Media Law and Ethics	3 units
DGME 165 Digital Animation: Flash	3 units
DGME 166 Web Authoring: ActionScript	3 units
DGME 167 Web Design I: Fireworks	3 units
DGME 168 Web Design II: Dreamweaver	3 units
DGME 169 Web Design III: CSS	3 units
CIS 111 Introduction to Internet Programming	3 units

CA Digital Media: Graphic Production

The Graphic Production certificate prepares students for entry-level work in the visual media industry. The curriculum includes basic visual literacy and visual communication skills, the complete software package necessary for employment, typography, graphic design theory and application, and production classes that provide real-world hands-on learning experiences.

Graphic production is required in print media such as publishing, advertising and package design and in three-dimensional media such as environmental graphics, exhibit or display design, or signage. Graphic production is also a part of electronic media such as television, the web, or multimedia including motion graphics and titling for film and video.

Upon completion of certificate requirements, students will be able to:

1. Create original graphic design / web design projects using comprehensive production and business techniques.
2. Create an original portfolio in order to pursue employment or college transfer opportunities.
3. Collaborate effectively with project team members and industry professionals.
4. Demonstrate a holistic understanding and practical ability to complete an industry standard graphic design / web design project from inception to completion.

27 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 211 Media Design I: Illustrator	3 units
DGME 212 Media Design II: Photoshop	3 units
DGME 213 Media Design III: Advanced Photoshop and Illustrator	3 units
DGME 220 Typography	3 units
DGME 230 Publication Design and Production with InDesign	3 units
DGME 168 Web Design II: Dreamweaver	3 units
DGME 240 Digital Publishing	4 units
DGME 250 Digital Media Practicum	3 units
DGME 255 Portfolio	2 units

CS Digital Media: Graphic Production

Upon completion of certificate requirements, students will be able to:

1. Produce graphic design / web design projects using comprehensive production techniques .
2. Demonstrate the ability to communicate effectively to team members or clients regarding graphic design / web design production techniques and solutions.
3. Demonstrate a holistic understanding and practical ability to complete production cycles of graphic design / web design projects.

12 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 211 Media Design I: Illustrator	3 units
DGME 212 Media Design II: Photoshop	3 units
DGME 230 Publication Design and Production with InDesign	3 units
DGME 168 Web Design II: Dreamweaver	3 units

CS Digital Media: Lighting

Upon completion of certificate requirements, students will be able to:

1. Create a lighting design for a typical TV studio set.
2. Apply aesthetic principles to create a specific mood/tone.
3. Demonstrate use of shadow to shape perception.

9 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 103 Thinking Visually: Fundamentals of Two-Dimensional Design	3 units
DGME 112 TV Studio Production	OR
DGME 113 Digital Video Production	3 units
DGME 130 Lighting for Studio and Field	3 units

CS Digital Media: Television and Radio Broadcasting

Upon completion of certificate requirements, students will be able to:

1. Demonstrate developing proficiency in video production.
2. Cooperate in and contribute to a team environment.
3. Produce a block of radio programming.

15 semester units

A grade of "C" or higher is required for each course applied to the certificate.

DGME 100 Media in Society	3 units
DGME 112 TV Studio Production	3 units
DGME 113 Digital Video Production	3 units
DGME 118 Digital Audio Production	3 units
DGME 150 Advanced Audio: Radio Production	3 units

Replaces History section on page 112

HISTORY

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program 60–70 transferable units

California State University
University of California
Independent Colleges and Universities

AA-T Associate in Science Degree for Transfer/SB1440

History 60 CSU
transferable units

University Transfer Program

Use Assist (www.assist.org) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

AA-T Major in History

The AA-T major in History prepares students for transfer into bachelor's degree programs in history and similar areas.

History course work in general is helpful to the student who intends to eventually pursue graduate studies in such diverse fields as history, education, and law. Most career opportunities associated with this discipline require the minimum of a B.A. degree. Some business firms and government agencies seek persons with a broad overview and perspective of historical phases and processes of change.

In addition to a career as a historian, career possibilities include anthropologist, antique dealer, archivist, attorney, book dealer, correspondent, customs inspector, college administrator/professor, foreign service officer, fund raiser, librarian, museum curator/technician, news editor, researcher/ research analyst, theologian/clergy member, title examiner, and writer.

Major requirements: 18 semester units.

Complete CSU General Education and major requirements as noted below. A grade of "C" or higher is required for each course applied to the major. Major course requirements may also be applied to meet general education requirements.

Required Core Courses:

HIST 100 Western Civilization I 3 units
HIST 101 Western Civilization II 3 units
HIST 201 United States History I 3 units
HIST 202 United States History II 3 units

Plus, two courses, one from each group (6 units):

Group A: Any diversity course defined as:

HIST 260 Women in American History 3 units
ETHN 101 Introduction to Ethnic Studies I 3 units
ETHN 102 Introduction to Ethnic Studies II 3 units
ETHN 440 Cultural Experience of Asian-American Writers 3 units
SPAN 110 Elementary Spanish 5 units
SPAN 111 Elementary Spanish I 3 units
SPAN 112 Elementary Spanish II 3 units
SPAN 120 Advanced Elementary Spanish 5 units
SPAN 121 Advanced Elementary Spanish I 3 units
SPAN 122 Advanced Elementary Spanish II 3 units
SPAN 130 Intermediate Spanish 5 units
CHIN 111 Elementary Chinese I 3 units
CHIN 112 Elementary Chinese II 3 units
CHIN 121 Advanced Elementary Chinese I 3 units
CHIN 122 Advanced Elementary Chinese II 3 units
CHIN 131 Intermediate Chinese I 3 units
CHIN 132 Intermediate Chinese II 3 units

Group B: Any history course or any non-history course from the humanities or social sciences related to history articulated as fulfilling CSU GE Area C or D or any introductory level social science course articulated as fulfilling CSU GE Area D:

HIST 102 History of American Civilization 3 units
HIST 260 Women in American History 3 units
HIST 310 California History 3 units
HIST 315 History of San Mateo County 3 units
HIST 350 History of the American West 3 units
ADMJ 100 Introduction to the Criminal Justice System. . . . 3 units
ANTH 110 Cultural Anthropology 3 units
ANTH 180 Magic, Science and Religion 3 units
ANTH 370 Olmec, Maya and Aztec People 3 units
BUS. 125 International Business 3 units
COMM 130 Interpersonal Communication 3 units
ECON 100 Principles of Macroeconomics 3 units
ECON 102 Principles of Microeconomics 3 units
GEOG 110 Cultural Geography 3 units
GEOG 150 World Regional Geography 3 units
PLSC 100 Introduction to Political Science 3 units
PSYC 100 General Psychology 3 units
PSYC 105 Experimental Psychology 3 units
PSYC 110 Courtship, Marriage, and Family 3 units
PSYC 200 Developmental Psychology 3 units
PSYC 201 Child Development 3 units
PSYC 220 Introduction to Psychobiology 3 units
PSYC 225 Theories of Personality 3 units
PSYC 300 Social Psychology 3 units
PSYC 410 Abnormal Psychology 3 units

SOCI 100 Introduction to Sociology	3 units
SOCI 105 Social Problems	3 units
SOCI 110 Courtship, Marriage and Family	3 units
SOCI 141 Race and Ethnic Relations.	3 units
SOCI 200 Urban Sociology	3 units
SOCI 340 Human Sexuality.	3 units
DGME 100 Media and Society	3 units
DGME 102 Media Law and Ethics.	3 units

General Education requirements:
 Select courses to complete CSU General Education OR IGETC for CSU.
 This degree does not require the CSM AA/AS General Education pattern on pages 64 & 65 of the 2012-13 Catalog.

CSU GE:

Area A1 Oral Communication	3 units
Area A2 Written Communication	3 units
Area A3 Critical Thinking	3 units
Area B1 Physical Science.	3 units
Area B2 Life Science	3 units
Area B3 Science Lab	1 unit
Area B4 Math Concepts	3 units
Area C1 Arts	3 units
Area C2 Humanities.	3 units
Area C1 or C2	3 units
Area D Social, Political, and Economic Institutions	9 units
Area E Lifelong Understanding	3 units

OR

IGETC/CSU:

Area 1A English Composition.	3 units
Area 1B Critical Thinking/Composition.	3 units
Area 1C Oral Communication.	3 units
Area 2 Math Concepts.	3 units
Area 3A Arts.	3 units
Area 3B Humanities.	3 units
Area 3A or 3B.	3 units
Area 4 Social and Behavioral Science.	9 units
Area 5A Physical Science	3 units
Area 5B Biological Science.	3 units
Area 5C Science Lab - Either 5A or 5B must have a lab component	1 unit

Electives:

Additional CSU transferable courses based on student interest to reach 60 units total.

Replaces AA-T Major in Kinesiology section on page 115

KINESIOLOGY

AA-T Major in Kinesiology

Upon completion of degree requirements, students will be able to:

1. Demonstrate a working knowledge of body mechanics as it relates to physical activity, fitness and health.
2. Explain the impact of physical activity and inactivity on fitness and health.

Major requirements: 20–24 semester units

The AA-T major in Kinesiology prepares students for transfer into bachelor's degree programs in kinesiology and similar areas.

Complete CSU General Education and major requirements as noted below. A grade of "C" or higher is required for each course applied to the major. Major course requirements may also be applied to meet general education requirements.

Group A: Complete the following courses (15 units):

KINE 101 Introduction to Kinesiology	3 units
BIOL 250 Human Anatomy	4 units
BIOL 260 Introductory Physiology	5 units

And select 3 units from the following with a maximum of one unit from any one area:

Aquatics:

AQUA 127 Swim Conditioning	0.5 or 1 unit
AQUA 133 Individual Swim Conditioning	0.5 or 1 unit
AQUA 135 Aqua Exercise	0.5 or 1 unit

Dance:

DANC 117 Tap Dance.	0.5 or 1 unit
DANC 121 Contemporary Modern Dance	0.5 or 1 unit
DANC 131 Jazz Dance I	0.5 or 1 unit
DANC 132 Jazz Dance II	0.5 or 1 unit
DANC 141 Beginning Ballet	0.5 or 1 unit
DANC 143 Intermediate Ballet.	0.5 or 1 unit

Fitness:

FITN 116 Body Conditioning.	0.5 or 1 unit
FITN 134 Track and Trail Aerobics	0.5 or 1 unit
FITN 201 Beginning Weight Training	0.5 or 1 unit
FITN 202 Intermediate Weight Training	0.5 or 1 unit
FITN 206 Circuit Weight Training	0.5 or 1 unit
FITN 207 Periodized Weight Training	0.5 or 1 unit
FITN 225 Athletic Conditioning	0.5 or 1 unit
FITN 226 Plyometric Training	0.5 or 1 unit
FITN 235 Cross Training Boot Camp	0.5 or 1 unit
FITN 237 Total Core Training	0.5 or 1 unit
FITN 301 Spinning.	0.5 or 1 unit
FITN 312 Spinning Heart Rate	0.5 or 1 unit

- FITN 334 Yoga 0.5 or 1 unit
- FITN 335 Pilates..... 0.5 or 1 unit
- FITN 338 Yoga/Pilates Fusion 0.5 or 1 unit
- FITN 339 Pilates Circuit Training 0.5 or 1 unit

Individual Sports:

- INDV 120 Badminton 0.5 or 1 unit
- INDV 251 Beginning Tennis 0.5 or 1 unit
- INDV 252 Beginning/Intermediate Tennis 0.5 or 1 unit
- INDV 254 Intermediate Tennis 0.5 or 1 unit

Team Sports:

- TEAM 110 Basketball..... 0.5 or 1 unit
- TEAM 148 Indoor Soccer 0.5 or 1 unit

Group B: Select two courses from the following (5-9 units)

- MATH 200 Elementary Probability and Statistics 4 units
- BIOL 100 Introduction to the Life Sciences 3 units
- BIOL 195 Biology Field Laboratory..... 1 unit
- CHEM 210 General Chemistry 5 units
- PHYS 210 General Physics 4 units
- KINE 120 First Aid/CPR..... 1 unit

General Education requirements:

Select courses to complete CSU General Education OR IGETC or CSU. This degree does not require the CSM AA/AS General Education pattern on pages 64 and 65 of the 2012-13 Catalog.

CSU GE:

- Area A1: Oral Communication 3 units
- Area A2 Written Communication 3 units
- Area A3 Critical Thinking 3 units
- Area B1 Physical Science 3 units
- Area B2 Life Science 3 units
- Area B3 Science Lab 1 unit
- Area B4 Math Concepts 3 units
- Area C1 Arts 3 units
- Area C2 Humanities..... 3 units
- Area C1 or C2 3 units
- Area D Social, Political, and Economic Institutions 9 units
- Area E Lifelong Understanding 3 units

OR

IGETC/CSU:

- Area 1A English Composition 3 units
- Area 1B Critical Thinking/Composition 3 units
- Area 1C Oral Communication 3 units
- Area 2 Math Concepts..... 3 units
- Area 3A Arts 3 units
- Area 3B Humanities..... 3 units
- Area 3A or 3B 3 units
- Area 4 Social and Behavioral Science 9 units

- Area 5A Physical Science 3 units
- Area 5B Biological Science 3 units
- Area 5C Science Lab - Either 5A or 5B
must have a lab component. 1 unit

Electives:

Additional CSU transferable courses based on student interest to reach 60 transferable units total.

Replaces AS Major in Physics section on page 128

PHYSICS

AS Major in Physics

Upon completion of degree requirements, students will be able to:

1. Apply the Laws of Physics to real-world problems
2. Collect and analyze data to verify physical principles
3. Be prepared for upper division course at a 4-year college

Complete General Education and other requirements listed for the Associate degree and

Major requirements: 18 semester units

A grade of "C" or higher is required for each course applied to the major.

PHYS 250	Physics with Calculus I	4 units
PHYS 260	Physics with Calculus II	4 units
PHYS 270	Physics with Calculus III	4 units

Plus, 6 units selected from the following courses:

CHEM 210	General Chemistry I	5 units
CHEM 220	General Chemistry II	5 units
CHEM 231	Organic Chemistry I	5 units
CHEM 232	Organic Chemistry II	5 units
CIS 255	Programming Methods: Java	4 units
CIS 278	Programming Methods: C++	4 units
MATH 200	Elementary Probability and Statistics	4 units
MATH 251	Calculus with Analytic Geometry I	5 units
MATH 252	Calculus with Analytic Geometry II	5 units
MATH 253	Calculus with Analytic Geometry III	5 units
MATH 270	Linear Algebra	3 units
MATH 275	Ordinary Differential Equations	3 units