

**FASH 195 Field Studies in Fashion (2)**

4 hours lecture/laboratory

**Note:** May be taken 2 times**Transfer acceptability:** CSU

Fashion industry on site: process of designing, manufacturing, marketing, and merchandising of fashion apparel and related accessories.

**FASH 197A Fashion Merchandising Workshop (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Covers areas of the fashion merchandising industry which are rapidly changing or require current short term specific training.

**FASH 197B Fashion Manufacturing Workshop (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Covers areas of the fashion manufacturing industry which are rapidly changing or require current short term specific training.

**FASH 197C Fashion Design Workshop (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Covers areas of the fashion design industry which are rapidly changing or require current short term specific training.

**FASH 295 Directed Study in Fashion (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson/director**Note:** May be taken 4 times**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Fashion subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**Filipino**

See Tagalog

**Fire Technology (FIRE)**

Contact Public Safety Programs for further information.

(760) 744-1150, ext. 1722

Office: PSTC, 182 Santar Place, San Marcos

**Associate in Arts Degrees -**

AA Degree requirements are listed in Section 6 (green pages).

- Fire Technology - Emergency Management
- Fire Technology - General

**Certificates of Achievement -**

Certificate of Achievement requirements are listed in Section 6 (green pages).

- Fire Technology - Emergency Management
- Fire Technology - General

**PROGRAMS OF STUDY****Fire Technology - Emergency Management**

Prepares student for career in Emergency Management.

**A.A. DEGREE MAJOR OR  
CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
FIRE 100	Fire Protection Organization	3
FIRE 115	Hazardous Materials I	3
FIRE 120	Building Construction for Fire Protection	3
FIRE 131	Emergency Preparedness	3
FIRE 132	Fundamentals of Emergency Management	3
FIRE 133	Disaster Mitigation	3
Electives (Select 12 units)		
FIRE 51	Fire Academy Preparation	2
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Fire Service Skills	.5-5
FIRE 105	Fire Hydraulics	3
FIRE 118	Fire Prevention Technology	4
FIRE 125	Fire Apparatus and Equipment	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter I Academy	18
FIRE 152	Driver Operator Academy	4.5
FIRE 160	Wildland Fire Control I	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
FIRE 168	Volunteer Fire Fighter Academy	4
FIRE 175	Fire Command IA	2.5
FIRE 176	Fire Command IB	2.5
FIRE 180	Fire Prevention IA	2.5
FIRE 181	Fire Prevention IB	2.5
FIRE 185	Fire Management I	2.5
FIRE 190	Fire Investigation IA	2.5
FIRE 193	Fire Instructor IA	2.5
FIRE 194	Fire Instructor IB	2.5
FIRE 197A	Fire Technology General Topics	.5-5
FIRE 197B	Fire Technology Command Topics	.5-5
FIRE 197C	Fire Technology Field Topics	.5-5
<b>TOTAL UNITS</b>		<b>30</b>

**Fire Technology - General**

Prepares students for a career in fire suppression, fire prevention and/or fire protection.

The following courses may be substituted: CHEM 100 will substitute for FIRE 115; PHYS 102 or 120 or PHSC 100 will substitute for FIRE 165.

**A.A. DEGREE MAJOR OR  
CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
FIRE 100	Fire Protection Organization	3
FIRE 118	Fire Prevention Technology	4
FIRE 120	Building Construction for Fire Protection	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
Elective Courses (Select 15 units)		
FIRE 51	Fire Academy Preparation	2
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Fire Service Skills	.5-5
FIRE 105	Fire Hydraulics	3
FIRE 115	Hazardous Materials I	3
FIRE 125	Fire Apparatus and Equipment	3
FIRE 131	Emergency Preparedness	3
FIRE 132	Fundamentals of Emergency Management	3
FIRE 133	Disaster Mitigation	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter I Academy	18
FIRE 152	Driver Operator Academy	4.5
FIRE 160	Wildland Fire Control I	3

FIRE 168	Volunteer Fire Fighter Academy	4
FIRE 175	Fire Command IA	2.5
FIRE 176	Fire Command IB	2.5
FIRE 180	Fire Prevention IA	2.5
FIRE 181	Fire Prevention IB	2.5
FIRE 185	Fire Management I	2.5
FIRE 190	Fire Investigation IA	2.5
FIRE 193	Fire Instructor IA	2.5
FIRE 194	Fire Instructor IB	2.5
FIRE 197A	Fire Technology General Topics	.5-5
FIRE 197B	Fire Technology Command Topics	.5-5
FIRE 197C	Fire Technology Field Topics	.5-5
EME 106	Emergency Medical Tech Basic (Lecture)	6
CE 100	Cooperative Education	1-4
<b>TOTAL UNITS</b>		<b>31</b>

### COURSE OFFERINGS

Due to safety concerns, as well as minimum requirements by regulatory agencies, potential students should be aware that some courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills.

Courses numbered under 100 are not intended for transfer credit.

#### **FIRE 51 Fire Academy Preparation (2)** 4 hours lecture/laboratory

**Note:** May not be taken as an audit. May be taken 4 times  
This course prepares individuals for the demanding requirements of the Fire Academy. It will also prepare students for the Physical Ability test that is required to pass the North County Regional Fire Test. It breaks the test down into components, so that the student can more skillfully pass the exam. There will be time spent on application preparation and interview skills.

#### **FIRE 71 Trench Rescue (.5)** 1 ½ hours laboratory

**Note:** Pass/No Pass grading only; may not be taken as an audit. May be taken 4 times

Comprehensive instruction with extensive hands-on application of the techniques necessary to safely effect a rescue from an excavation or trenching cave-in. Topics include: critical considerations while responding to trenching emergencies; establishing and operating the Incident Command System; evaluation of cave-in scenes; specialized tool usage; shoring techniques; below grade safety procedures; patient packaging; and patient removal techniques. Upon successful completion of the course, students will receive a California State Fire Marshal certificate.

#### **FIRE 72 Swiftwater Rescue (.5)** 1 ½ hours laboratory

**Note:** Pass/No Pass grading only; may not be taken as an audit. May be taken 4 times

This course is intended for the training of fire service personnel in water rescue techniques. Topics include: Swiftwater rescue, submerged vehicles, drownings, use of engine/truck company equipment for water rescue, use of rafts and boats, and underwater search and recovery. Upon completion of the course, students will receive a California State Fire Marshal certificate.

#### **FIRE 98 Fire Service Skills (.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5)** 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 hours lecture/laboratory

**Note:** Pass/No Pass grading only; may not be taken as an audit. May be taken 4 times

This course covers fire service basic topics in the classroom for review and manipulative training for skills maintenance. All subjects will have to do with the duties and responsibilities of the fire services, in order to maintain a state of readiness.

#### **FIRE 100 Fire Protection Organization (3)** 3 hours lecture

**Transfer acceptability:** CSU

Provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire

departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

#### **FIRE 105 Fire Hydraulics (3)** 3 hours lecture

**Recommended preparation:** FIRE 100 and MATH 60

**Transfer acceptability:** CSU

Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problems; underwriter's requirements for pumps.

#### **FIRE 115 Hazardous Materials I (3)** 3 hours lecture

**Transfer acceptability:** CSU

A review of basic chemistry; storage, handling, laws, standards, and fire fighting practices pertaining to hazardous materials.

#### **FIRE 118 Fire Prevention Technology (4)** 4 hours lecture

**Transfer acceptability:** CSU

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation and fire safety education. Provides skills necessary for California Fire Service Training and Education system, Certified Firefighter I and Fire Inspector I. Meets requirements for CFSTES Fire Prevention IA and IB classes. Contains knowledge required for State Fire Training, Firefighter I Certification.

#### **FIRE 120 Building Construction for Fire Protection (3)** 3 hours lecture

**Transfer acceptability:** CSU

The study of the components of building construction that relate to fire/life safety. The development and evolution of building and fire codes will be studied in relationship to past fires/collapses in residential, commercial, and industrial occupancies.

#### **FIRE 125 Fire Apparatus and Equipment (3)** 3 hours lecture

**Transfer acceptability:** CSU

Driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.

#### **FIRE 130 Fire Protection Equipment and Systems (3)** 3 hours lecture

**Transfer acceptability:** CSU

Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.

#### **FIRE 131 Emergency Preparedness (3)** 3 hours lecture

**Prerequisite:** A minimum grade of 'C' in FIRE 100

Emergency preparedness related to natural and man-made disasters. Planning concepts and the planning process; awareness and education programs and strategies for the fire student, business, and industry.

#### **FIRE 132 Fundamentals of Emergency Management (3)** 3 hours lecture

**Prerequisite:** A minimum grade of 'C' in FIRE 131

Emergency management systems related to career opportunities, tasks, function and responsibilities of the emergency management program director; the role in mitigation, preparedness, response and recovery. History of the civil defense department post World War II and the current emergency management system.

**FIRE 133 Disaster Mitigation (3)***3 hours lecture***Prerequisite:** A minimum grade of 'C' in FIRE 131

Knowledge and skills required to develop programs to reduce losses from future emergencies caused by natural and man-made disasters.

**FIRE 145 Fire Fighting Tactics and Strategy (3)***3 hours lecture***Transfer acceptability:** CSU

Review of fire chemistry, equipment, and manpower; basic fire fighting tactics and strategy; methods of attack; preplanning fire problems.

**FIRE 151 Fire Fighter I Academy (18)***36 hours lecture/laboratory***Prerequisite:** A minimum grade of 'C' in EME 106 or certification as an EMT I, and admission to the Fire Fighter I Academy program**Transfer acceptability:** CSU

A 576 hour fire fighter academy course which will meet the requirements mandated by the California Office of State Fire Marshal for Certified Fire Fighter I training. Covers fire ground procedures, tactics, strategy, safety methods, fire dynamics, equipment usage and deployment, and subject material pertaining to the role of fire fighters within the fire service.

**FIRE 152 Driver Operator Academy (4.5)***9 hours lecture/laboratory***Recommended preparation:** FIRE 100 and 151**Transfer acceptability:** CSU

Comprehensive instruction in all aspects of operating fire apparatus. This includes fire apparatus construction and maintenance; driving laws; safe driving practices; fire pump theory; fire pump service testing; hydraulic laws and formulas as applied to the fire service; developing effective fire streams; identification and use of the various hose, nozzles, and fittings used in the fire service; water supply; nationally recognized standards for fire apparatus and equipment.

**FIRE 160 Wildland Fire Control I (3)***3 hours lecture***Transfer acceptability:** CSU

Provides employed firefighters or fire service majors with a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior, and control techniques.

**FIRE 165 Fundamentals of Fire Protection Chemistry (3)***3 hours lecture***Recommended preparation:** FIRE 100**Transfer acceptability:** CSU

Provides the student with fundamental information and knowledge of the physical and chemical characteristics of matter, fire, hazardous materials, and basic extinguishment theory.

**FIRE 168 Volunteer Fire Fighter Academy (4)***8½ hours lecture/laboratory***Transfer acceptability:** CSU

Basic fire fighting skills needed to begin a career in the fire service. Meets State Fire Marshal requirements.

**FIRE 175 Fire Command IA (2.5)***2½ hours lecture***Transfer acceptability:** CSU

Instruction and simulation time pertaining to the initial decision and action processes at a working fire. Topics include the fire officer, fire behavior, fireground resources, operations, and management.

**FIRE 176 Fire Command IB (2.5)***2½ hours lecture***Transfer acceptability:** CSU

A descriptive analysis in tactics and strategies and scene management principles for incidents involving hazardous materials. Emphasizes identification and hazard mitigation, decontamination, protective clothing, environmental concerns, and legal issues.

**FIRE 180 Fire Prevention IA (2.5)***2½ hours lecture***Transfer acceptability:** CSU

A broad, technical overview of fire prevention codes and ordinances, inspection practices, and key hazards.

**FIRE 181 Fire Prevention IB (2.5)***2½ hours lecture***Transfer acceptability:** CSU

The relationship of life safety codes and requirements to building construction principles and building occupancy classifications. The engineering solutions to various hazards, enforcing the solution, and public relations as affected by fire prevention in handling complaints.

**FIRE 185 Fire Management I (2.5)***2½ hours lecture***Transfer acceptability:** CSU

Prepares or enhances the first line supervisor's ability to supervise subordinates. It introduces key management concepts and practices utilized, and includes discussions about decision making, time management, leadership styles, personnel evaluations, and counseling guidelines.

**FIRE 190 Fire Investigation IA (2.5)***2½ hours lecture***Transfer acceptability:** CSU

Provides the participants with an introduction and basic overview of fire scene investigation. The focus of the course is to provide information on fire scene indicators and to determine the fire's origin.

**FIRE 193 Fire Instructor IA (2.5)***2½ hours lecture***Transfer acceptability:** CSU

The first of a two-course series. Topics include the Occupational Analysis, course outline, concepts of learning, levels of instruction, behavioral objectives, lesson plan development, psychology of learning, and instructor evaluation. Student teaching demonstrations are required of all.

**FIRE 194 Fire Instructor IB (2.5)***2½ hours lecture***Transfer acceptability:** CSU

The second in a two-course series. Topics include preparing course outlines, establishing levels of instruction, constructing behavioral objectives and lesson plans, developing instructional aids, fundamentals of testing and measurements, test planning, evaluation techniques and tools. Student teaching demonstrations are required of all.

**FIRE 197A Fire Technology General Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Topics in Fire technology General. See Class Schedule for specific topic offered. Course title will designate subject covered.

**FIRE 197B Fire Technology Command Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Topics in Fire Technology Command. See Class Schedule for specific topic offered. Course title will designate subject covered.

**FIRE 197C Fire Technology Field Topics (.5-5)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Topics in Fire Technology Field. See Class Schedule for specific topic offered. Course title will designate subject covered.