

# FIRE TECHNOLOGY (FIRE)

## **FIRE-101 Introduction to Fire Technology** **3 Units (LEC 48-54)**

This course provides an introduction to fire protection; career opportunities; 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; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; fire strategy and tactics.

### **Transfers to CSU only**

## **FIRE-102 Fundamentals of Fire Prevention** **3 Units (LEC 48-54)**

This course provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of fire codes and standards, plans review, fire inspections, fire and life safety education, and fire investigation.

### **Transfers to CSU only**

## **FIRE-106 Fundamentals of Fire Behavior and Combustion** **3 Units (LEC 48-54)**

This course provides the student with fundamental information and knowledge of the physical and chemical characteristics of matter, fire, hazardous materials, extinguishing agents and fire control techniques.

### **Transfers to CSU only**

## **FIRE-107 Fire Apparatus and Equipment** **3 Units (LEC 48-54)**

This course introduces the student to the Driver/Operator job position in the fire service. This course will analyze fire apparatus design, specifications and performance capabilities; effective utilization of apparatus in fire service emergencies. This course will allow students to solve hydraulics calculations and examine the physical characteristics of water and water supply systems.

### **Transfers to CSU only**

## **FIRE-108 Fundamentals of Fire Investigation** **3 Units (LEC 48-54)**

This course provides information for determining causes of fires that may be accidental, incendiary, natural, or undetermined. This course also provides information on different types of arson fires, related laws, recognizing and preserving evidence, interviewing witnesses and suspects, arrest and detention procedures, court procedures, and giving court testimony.

### **Transfers to CSU only**

## **FIRE-109 Fundamentals of Fire Protection and Equipment** **3 Units (LEC 48-54)**

This course 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.

**Prerequisite/Corequisite:** FIRE-101 (with a grade of C or better).

### **Transfers to CSU only**

## **FIRE-115 Building Construction for Fire Protection** **3 Units (LEC 48-54)**

This course studies the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancy.

**Recommended Preparation:** Completion of FIRE-101 or concurrent enrollment in FIRE-101 or be a volunteer or career firefighter.

### **Transfers to CSU only**

## **FIRE-117 Hazardous Materials First Responder Operational** **1 Unit (LEC 16-18)**

This course provides public safety workers and first responders with an improved capability to respond to Hazardous Materials events in a safe and competent manner.

### **Transfers to CSU only**

## **FIRE-121 Fundamentals of Wild Land Fire Fighting** **3 Units (LEC 48-54)**

This course provides fundamental information on all aspects of wild land fire fighting including wild land fire safety, fire behavior, and the incident command system and resource usage. The course also describes new advances in technology used in wild land fire suppression such as fire-blocking gels and the use of GPS.

### **Transfers to CSU only**

## **FIRE-299 Special Projects: Fire Technology** **1-3 Unit (IS 16-54)**

Students with previous course work in the program may do special projects that involve research and special study. The actual nature of the project must be determined in consultation with the supervising instructor.

**Prerequisite:** Two Fire Technology classes must be completed prior to enrollment; a contract must be completed with the instructor prior to enrollment.

### **Transfers to CSU only**

## **FIRE-522 Principles of Fire and Emergency Services Safety and Survival (formerly FIRE-122)** **3 Units (LEC 48-54)**

This course introduces the basic principles and history related to the National Firefighter Life Safety Initiatives focusing on the need for cultural and behavioral change throughout the emergency services. Field trips may occur when available. (formerly FIRE-122)

### **Transfers to CSU only**

**FIRE-549 Work Experience Education: Fire Technology**  
**0.5-8 Units WEE 24-432**

This experiential learning course places students in supervised internships related to their academic major or career interests. Through hands-on work experience, students will build upon classroom-based learning and develop transferable skills. Internship work sites must be approved by the college prior to enrollment.

**Other Enrollment Criteria:** Each student must be enrolled for the full semester and have completed one course in the discipline. Student must also complete a WEE Orientation and Training Plan (Agreement) prior to registration. Please refer to the Work Experience Student Handbook for specific information.

**Transfers to CSU only**

**Offered as Pass/No Pass Only**