

# FIRE TECHNOLOGY (AS DEGREE S2105)

## Technology and Health Division

### Degree S2105

The Fire Science major has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a bachelor's degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

This degree requires the completion of General Education coursework plus the following:

## Required Courses

| Course Prefix                          | Course Name   | Units            |
|--|---|------------------|
| <b>Core Courses</b>                    |   |                  |
| FIRE 1                                 | Fire Protection Organization                                  | 3                |
| FIRE 2                                 | Fire Prevention Technology                                    | 3                |
| FIRE 3                                 | Fire Protection Equipment and Systems                         | 3                |
| FIRE 4                                 | Building Construction for Fire Protection                     | 3                |
| FIRE 5                                 | Fire Behavior and Combustion                                  | 3                |
| FIRE 13                                | Principles of Fire and Emergency Services Safety and Survival | 3                |
| <b>Required Electives</b>              |   |                  |
| Choose two courses from the following: |   | 5.5-22.5         |
| FIRE 6                                 | Hazardous Materials/ICS                                       |                  |
| FIRE 7                                 | Fire Fighting Tactics and Strategy                            |                  |
| FIRE 8                                 | Fire Company Organization and Management                      |                  |
| FIRE 9                                 | Fire Hydraulics   |                  |
| FIRE 10                                | Arson and Fire Investigation                                  |                  |
| FIRE 11                                | Fire Apparatus and Equipment                                  |                  |
| FIRE 12                                | Wildland Fire Control   |                  |
| FIRE 86                                | Basic Fire Academy  |                  |
| KINF 53                                | Physical Training for the Basic Fire Academy                  |                  |
| <b>Total Units</b>                     |   | <b>23.5-40.5</b> |

## Accreditation

Mt. San Antonio College Basic Fire Academy is recognized by the California State Fire Marshal and the State Board of Fire Services as an Accredited Regional Training Program.

Contact:

Office of the State Fire Marshall  
715 P. Street  
Sacramento, CA 95814

PO Box 944246  
Sacramento, CA 94244-2460  
Tel: (916) 902-9738  
<https://www.osfm.fire.ca.gov/>

## Program Learning Outcomes

*Upon successful completion of this program, a student will be able to:*

- Define fire department organization, culture, and methods of communication of entry level fire department personnel.

- Analyze and assess firefighter hazards, and demonstrate safe practices by using minimum standard safety procedures.
- Demonstrate knowledge of fire prevention efforts and a resulting reduction of life and property loss.
- Demonstrate knowledge of strategy and tactics required for the proper selection and safe use of firefighting methods, techniques, tools, and equipment.
- Identify fire chemistry and behavior for the purpose of predicting fire dynamics and flame spread characteristics.
- Identify components of built-in and portable fire protections systems and alarm and notification devices.
- Demonstrate knowledge of the 5 basic types of construction. Identify the components and hazards related to each type.
- Demonstrate knowledge of Leadership and Management concepts as they relate to emergency and non-emergency situations.

Review Student Learning Outcomes (SLOs) for this program.