## FIRE SCIENCE ASSOCIATE OF SCIENCE

The Fire Science Associate of Science program prepares students for a career in fire prevention and protection. Graduates will be eligible for employment in entry-level positions including, but not limited to, firefighter, fire officer, fire investigator, and Emergency Medical Technician.

| Required Courses - Major:   |   | Units   |
|---|---|---------|
| FSC 111   | Fire Protection Organization  | 3       |
| FSC 112   | Fire Behavior & Combustion  | 3       |
| FSC 113   | Fire Protection Equipment & Systems                                 | 3       |
| FSC 114   | Building Construction for Fire Safety                               | 3       |
| FSC 115   | Hazardous Materials Response for Public Safety                      | 3       |
| EMS 135*  | Emergency Medical Technician  | 0 - 7   |
| *Current EMT I license can be substituted for this required course. |   |         |
| Plus 9 additiona  | Il units selected from the following:                               | Units   |
| CED 196   | Occupational Work Experience Education                              | 1 - 8   |
| FSC 50A   | Training I: Instructional Methodology                               | 2.5     |
| FSC 51  | Training Instructor IB - Psychomotor Lesson Delivery                | 2.5     |
| FSC 65  | Incident Command System (ICS) 300                                   | 1.5     |
| FSC 68  | Basic Firefighter Academy   | 9       |
| FSC 70A   | Company Officer 2A: Human Resources Management for Company Officers | 2.5     |
| FSC 70B   | Company Officer 2B: General Administrative Functions                | 1.5     |
| FSC 70C   | Company Officer 2C: Fire Inspections and Investigations             | 2.5     |
| FSC 70D   | Company Officer 2D: All-Risk Command Operations                     | 2.5     |
| FSC 70E   | Company Officer 2E: Wildland Incident Operations for Company        | 2.5     |
| FSC 80  | Low Angle Rope Rescue Operational                                   | 0.5     |
| FSC 81  | Surf Rescue Operations  | 1       |
| Total Major Units   |   | 24 - 31 |
| Total Degree Units  |   | 60      |

## **Program Level Student Learning Outcomes:**

- **1.** Analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and firefighter safety.
- 2. Demonstrate comprehension of laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
- **3.** Analyze the causes of fire, determine extinguishing agents and methods differentiate the stages of the fire and fire development, and compare methods of heat transfer.
- **4.** Identify and describe common types of building construction and conditions associated with structural collapse and freighter safety.
- **5.** Differentiate between fire detection and fire suppression systems.