

# FIRE SCIENCE

College of Rural and Community Development  
Community and Technical College  
907-455-2853  
[www.ctc.uaf.edu/programs/emergency/](http://www.ctc.uaf.edu/programs/emergency/)

## A.A.S. Degree

Minimum Requirements for Degree: 63-69 credits

The fire science program provides classroom education, hands-on training and practical vocational experience through local fire and rescue organizations.

Instructors provide a high level of technical expertise on a variety of emergency and fire science services. The primary goal of this program is to make our students the most attractive candidates for job openings and promotions within fire and other emergency services fields.

## Major — A.A.S. Degree

**Concentrations: Hazardous Materials Control, Municipal Fire Control, Public Safety and Wildland Fire Control**

### Hazardous Materials Control

1. Complete the general university requirements (page 112).
  2. Complete the A.A.S. degree requirements (page 112).
  3. Complete the following program (major) requirements:\*
  - a. Complete the following:
    - EMS F170—EMT: Emergency Medical Technician I.....6
    - FIRE F110—Introduction to Hazardous Waste Operations and Emergency Response.....3
    - FIRE F121—Fire Behavior and Combustion .....3
    - FIRE F131—Fire Fighter I Series I.....3
    - FIRE F133—Fire Fighter I Series II.....3
    - FIRE F135—Fire Fighter I Series III.....3
    - FIRE F137—Fire Fighter I Series IV .....3
    - FIRE F203—Hazardous Materials Chemistry I.....3
    - FIRE F207—Hazardous Materials Technician.....3
    - FIRE F209—Hazardous Materials Command/Safety Officer .....3
    - FIRE F210—Fire Administration I.....3
  - b. Complete 9 credits from the following major elective courses:
    - FIRE F212—Building and Fire Codes .....3
    - FIRE F215—Advanced Hazardous Materials Technician.....3
    - FIRE F216—Methods of Instruction for Emergency Services Training.....3
    - FIRE F220—Emergency Services Safety, Health and Survival.....3
    - FIRE F231—Hazardous Materials Tactical Operations.....3
    - FIRE F249—Computer Aided Management of Emergency Operations 3
    - FIRE F293—Special Topics .....3
  4. General electives.....6
  5. Minimum credits required .....69
- \* Students must earn a C- grade or better in each course.  
Note: Major electives and general electives must be approved by the student's advisor.

### Municipal Fire Control

1. Complete the general university requirements (page 112).
2. Complete the A.A.S. degree requirements (page 112).

3. Complete the following program (major) requirements:\*
  - a. Complete the following:
    - EMS F170—EMT: Emergency Medical Technician I.....6
    - FIRE F101—Principles of Emergency Services .....3
    - FIRE F105—Fire Prevention .....3
    - FIRE F107—Strategy and Tactics.....3
    - FIRE F117—Rescue Practices .....3
    - FIRE F121—Fire Behavior and Combustion .....3
    - FIRE F131—Fire Fighter I Series I.....3
    - FIRE F133—Fire Fighter I Series II.....3
    - FIRE F135—Fire Fighter I Series III .....3
    - FIRE F137—Fire Fighter I Series IV .....3
    - FIRE F202—Fire Protection Hydraulics and Water Supply.....3
    - FIRE F203—Hazardous Materials Chemistry I.....3
    - FIRE F206—Building Construction for Fire Protection.....3
    - FIRE F210—Fire Administration I.....3
    - FIRE F214—Fire Protection Systems.....3
  - b. Complete 6 credits from the following major specialty electives:
    - FIRE F115—Fire Apparatus and Equipment.....3
    - FIRE F123—Fire Investigations I.....3
    - FIRE F151—Wildland Fire Control I.....3
    - FIRE F205—Hazardous Materials Chemistry II.....3
    - FIRE F207—Hazardous Materials Technician.....3
    - FIRE F212—Building and Fire Codes .....3
    - FIRE F216—Methods of Instruction for Emergency Services Training.....3
    - FIRE F218—Advanced Rescue Practices .....3
    - FIRE F232—Fire Fighter II .....3
    - EMS F261—EMT: Emergency Medical Technician II.....3
  4. Minimum credits required .....69
- \* Students must earn a C- grade or better in each course.  
Note: Major electives must be approved by the student's advisor.

### Public Safety

1. Complete the general university requirements (page 112).
  2. Complete the A.A.S. degree requirements (page 112).
  3. Complete the following program (major) requirements:\*
  - a. Complete the following:
    - AVTY F231/EMS F257—Arctic Survival .....3
    - EMS F170—EMT: Emergency Medical Technician I.....6
    - EMS F176—Aeromedical Evacuations in Alaska .....1
    - FIRE F101—Principles of Emergency Services .....3
    - FIRE F105—Fire Prevention .....3
    - FIRE F117—Rescue Practices .....3
    - FIRE F127—Vessel Safety: Emergency Equipment and Procedures .....1
    - FIRE F131—Firefighter I, Series I.....3
    - FIRE F133—Firefighter I, Series II.....3
    - FIRE F135—Firefighter I, Series III .....3
    - FIRE F137—Firefighter I, Series IV .....3
    - FIRE F218—Advanced Rescue Practices .....3
    - JUST F110—Introduction to Justice .....3
    - JUST F340—Rural Justice in Alaska .....3
    - JUST F358—Juvenile Delinquency .....3
  - b. Complete 9 credits from the following major electives:
    - EMS F261—EMT: Emergency Medical Technician II.....3
    - FIRE F123—Fire Investigations I.....3
    - FIRE F151—Wildland Fire Control I.....3
    - FIRE F212—Building and Fire Codes .....3
    - FIRE F216—Methods of Instruction for Emergency Services Training.....3
    - JUST F345W—Police Problems .....3
    - JUST F352—Criminal Law .....3
    - JUST F354—Procedural Law .....3
  4. Minimum credits required .....68
- \* Students must earn a C- grade or better in each course.

## Wildland Fire Control

1. Complete the general university requirements (page 113).
  2. Complete the A.A.S. degree requirements (page 113).
  3. Complete the following program (major) requirements:\*
  - a. Complete the following:

EMS F170—EMT: Emergency Medical Technician I.....	6
FIRE F151—Wildland Firefighter I.....	3
FIRE F152 Wildland Firefighter II.....	3
FIRE F153—Wildland Firefighter III .....	2
FIRE F154 Basic Wildland Fire Safety.....	1.5
FIRE F155—Wildland Fire Behavior I .....	2
FIRE F157—Wildland Air Operations.....	3
FIRE F159—Wildland Fire Interface Operations.....	2
FIRE F176 Wildland Fire Ignition Operations .....	1
FIRE F251 Wildland Firefighter IV .....	3
FIRE F252—Wildland Fire Prevention I.....	3
FIRE F254—Incident Finance and Administration.....	1.5
FIRE F255—Wildland Fire Behavior II.....	2
  - b. Complete 15 credits from the following major elective courses:\*

FIRE F161—Incident Logistics Function .....	2
FIRE F163 Wildland Fire Dispatch I.....	2
FIRE F165—ICS and the Incident Planning Function.....	2
FIRE F170 Introduction to Incident Information .....	2
FIRE F216—Methods of Instruction for Emergency Services Training.....	3
FIRE F253 Wildland Fire Investigation I .....	3
FIRE F257—Wildland Fire Helicopter Management.....	2
FIRE F262—Wildland Fire Tactical Operations.....	2
FIRE F264—Incident Business Practices.....	1.5
FIRE F276 Prescribed Fire I.....	2
FIRE F277 Prescribed Fire II.....	2
FIRE F279 Prescribed Fire III .....	2

  4. Minimum credits required .....63
- \* Students must earn a C- grade or better in each course.
- Note: Major electives and general electives must be approved by the student's advisor.

## Minor

1. Complete the following:

FIRE F131—Firefighter I, Series I.....	3
FIRE F133—Firefighter I, Series II.....	3
FIRE F135—Firefighter I, Series III .....	3
FIRE F137—Firefighter I, Series IV .....	3
EMS F170—Emergency Medical Technician I.....	6
2. Minimum credits required .....18