

Structural Fire Science

Associate of Applied Science Degree

61 credit hours

The Associate of Science in Fire Science is a degree which will build a strong foundation of the essentials needed to work in the fire service industry, ensuring a comprehensive understanding of rudimentary technical skills. By incorporating a comprehensive curriculum of fire prevention, fire protection, hazardous materials response, and fire administration, the Associate of Science in Fire Science degree takes a multi-professional approach to policy integration and academic preparation in specialized fire service equipment and apparatus applications. Completion of all technical courses offered in this plan qualifies students for work as an entry level firefighter. In collaboration with the New Mexico Firefighting Academy students can earn International Fire Service Accreditation Council (IFSAC) certificates for 10 of the technical courses offered upon successful completion. Also, for those students already possessing IFSAC certification they are eligible to earn prior learning assessment credit (PLA). See Structural Fire Science PLA crosswalk and catalog for PLA policy. This degree will appeal to those students who desire to become firefighters, as well as those currently employed in the field looking to advance their knowledge base.

Upon program completion students will be able to:

- Students will be able to demonstrate a complete proficiency of all job performance requirements established in NFPA 1001, as applicable to this program.
- Students will be able to discuss the impact of the history of Fire Service as it relates to current industry trends.
- Students will be able to analyze effective fire prevention methods utilized in fire science organizations and the community.
- Students will be able to apply effective fire protection practices and strategies to various scenarios.
- Students will be able to evaluate the principles of fire chemistry, fire behavior, and safety practices in the fire service industry.

Any student who is ineligible for state, national, or industry licensure or certification is ineligible for entry into this program. Please contact an advisor prior to registration.

Institutional and Related Requirements – 3 hours

UNIV 101 - Freshman Seminar – 3

Note: If instructional/related requirements are waived, additional elective courses will be needed to meet the minimum hours required for the degree.

New Mexico General Education Common Core (NMGCEC) – 15 hours

I. Communication Effectively – 9 hours

ENG 102 - English Composition – 3

ENG 233 - Writing for Technical Professionals – 3

or ENG 104 - English Composition and Rhetoric – 3

COMM 101 - Interpersonal Communication - 3
or COMM 102 - Public Speaking – 3

IV. Social Science – 3 hours Recommended Courses:

PSCI 102 - American National Government – 3
PSY 101 - Introductory Psychology – 3
SOC 101 - Introductory Sociology – 3
or any Social Sciences listed in the NMGECC

V. Fine Arts or Humanities – 3 hours Recommended courses:

ART 131 - Art Appreciation – 3
ART 165 - Art History I – 3
ENG 211 - Introduction to Literature – 3
MUS 113 - Music Appreciation – 3
HUM 221 - Introduction to World Humanities – 3
HUM 222 - Introduction to Modern World Humanities – 3
or any Fine Arts or Humanities course listed in the NMGECC

Technical Requirements - 43 hours

BIOL 109 - Survey of Anatomy & Physiology for Allied Health -3
EMS 101 - Basic Life Support Provider (CPR) – 1
EMS 111/L - EMT Basic/Lab – 11
FIRE 103 - Fire Protection Hydraulics and Water Supply – 3
FIRE 111/L - Structural Firefighter I/Lab – 6
FIRE 112/L - Structural Firefighter II/Lab – 6
FIRE 117 - Hazardous Materials Awareness and Operations – 3
FIRE 119 - Basic Auto Extrication – 3
FIRE 204 - Structural Firefighting Tactics and Strategies – 3
FIRE 299 - Programmatic Capstone -1

Choose from the following – 3 hours

FIRE 104 - Introduction to Origin and Cause Determination – 1.5
FIRE 105 - Fire Investigator I – 3
FIRE 107 - Hose and Hydrant Testing – 1.5
FIRE 114 - Fire Command Strategy and Tactics – 3
FIRE 121 - Fire Service Administration 1 – 3
FIRE 122 - Fire Service Administration 2 – 3
FIRE 124 - Fire Service Instructor 1 – 3
FIRE 125 - Fire Service Instructor 2 – 3
FIRE 152 - Advanced Fire Behavior and Combustion – 3
FIRE 154 - Principles of Code Enforcement – 3
FIRE 156 - Fire Protection Systems – 3
OSH 200 - Occupational Safety and Health for Emergency Services – 3