

STRUCTURAL FIRE SCIENCE PROGRAMS

STRUCTURAL FIRE SCIENCE

Associate of Applied Science

62 credit hours

This program will build a strong foundation of the essentials needed to work in the fire service industry, ensuring an understanding of rudimentary technical skills. By incorporating comprehensive curriculum of fire prevention, fire protection, hazardous materials response, and fire administration, the program 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 NM Firefighting Academy students can earn International Fire Service Accreditation Council (IFSAC) certificates for 10 of the technical courses offered. Students already possessing IFSAC certification are eligible to earn prior learning assessment credit (PLA). See *Structural Fire Science PLA crosswalk and catalog for PLA policy*. This is for students who desire to become firefighters, as well as those currently employed in the field looking to advance their knowledge base.

Upon completion of the degree students will be able to:

- Demonstrate a complete proficiency of all job performance requirements established in NFPA 1001, as applicable to this program.
- Discuss the impact of the history of Fire Service as it relates to current industry trends.
- Analyze effective fire prevention methods utilized in fire science organizations and the community.
- Apply effective fire protection practices and strategies to various scenarios.
- 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 – 7 hours

ENGL 1110 – Composition I (3)

FYEX 1110 – First-year Seminar (3)

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

Technical Requirements – 40-43 hours

EMS 101 – Basic Life Support Provider (CPR) (1)

EMS 111/L – EMT Basic/Lab (12)

EMS 203 – Human Systems (3)

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 & Strategies (3)

Note: If technical requirements are met by approved prior learning assessment, additional electives in the technical area will be needed to meet the residency requirements of the degree.

Choose one from the following – 3 hours

FIRE 104 – Intro to Origin & 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 & 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)

New Mexico General Education Curriculum (NMGEC) – 15-17 hours (as itemized below)

Communications – 3 hours

ENGL 1120, 2210; and COMM 1130, 2120, 2150.

Mathematics – 4 hours

MATH 1130, 1220, 1230, 1510, 1520.

Science – 4 hours

Choose one from* ANTH 1120C; BIOL 1110/L, 1133C, 1215/L, 2110/L, 2210/L, 2310/L, 2610/L; CHEM 1215/L, 1225/L; GEOL 1120/L.

**see course description for Math prerequisite*

Social and Behavioral Sciences – 3 hours

CJUS 1110, 2140, 2360; ECON 1110, 2110, 2120; GEOG 1130; POLS 1120; PSYC 1110, 2110, 2120, 2130, 2140, 2260; SOCI 1110, 2310.

Flexible Three – 3 hours

Choose one courses from:

Any course from the NMGEC and/or BUSA 1110

**see course descriptions for English and Science course prerequisites.*

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