

FIRE SCIENCE TECHNOLOGY, Certificate - 6260

Transportation & Fire Science Department

CIP Code: 43.0203

The Fire Science Technology certificate is designed to provide individuals with the technical and professional knowledge required to make decisions regarding fire protection for both the public and private sectors. This curriculum also provides a solid foundation for continuous higher learning in fire protection, administration, and management. This curriculum follows the U.S. Fire Administration/National Fire Academy's Fire and Emergency Services Higher Education Model for Professional Development. Students may complete 75% of the certificate at the Harrisburg Campus through on-campus/in-person instruction. The remaining coursework must be completed through various modalities (e.g., hybrid, synchronous remote instruction and asynchronous instruction).

Career Opportunities

Graduates find work in volunteer and paid community fire services and in other governmental, insurance, business, and industrial settings. Job titles include fire fighters, fire safety specialists, industrial safety specialists, underwriters, plan reviewers and code enforcement officers. **(SOC Code: 33-2011 Fire Fighters)**

Competency Profile

This curriculum is designed to prepare students to:

- Identify the requirements of various fire protection environments and operate the equipment related to those environments
- Recognize the prevention and suppression of hazards by means of building inspections, hazard descriptions and the application of safety codes
- Explain the operations of fire extinguishing and warning systems
- Conduct fire investigations
- Manage a fire protection organization through effective use of manpower and equipment

PROGRAM REQUIREMENTS (TOTAL CREDITS = 30)

General Education		Major Requirements		Other Required Courses
ENGL 110 Foundations in Professional Writing	3	FIRE 101 Principles of Emergency Services	3	
		FIRE 102 Fire Prevention	3	
		FIRE 103 Principles of Fire & Emergency Services Safety & Survival	3	
		FIRE 105 Building Construction for Fire Protection	3	
		FIRE 106 Fire Behavior and Combustion	3	
		FIRE 203 Fire Protection Systems	3	
		FIRE 204 Fire Investigation I	3	
		FIRE 209 Fire & Emergency Services Administration	3	
		FIRE 210 Strategy and Tactics	3	
			27	

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I	
ENGL 110	3	FIRE 106	3
FIRE 101	3	FIRE 203	3
FIRE 102	3	FIRE 204	3
FIRE 103	3	FIRE 209	3
FIRE 105	3	FIRE 210	3

Note: The recommended sequencing reflects offerings that are scheduled in 7-week terms within each of the Fall and Spring semester blocks.