

# FIRE SCIENCE TECHNOLOGY, Associate in Applied Science Degree - 6636

Transportation & Fire Science Department

CIP Code: 43.0203

The Fire Science Technology AAS degree 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 (FESHE) Model for Professional Development. Students may complete this program at the Harrisburg Campus through various modalities (e.g., on-campus/in-person instruction, hybrid, synchronous remote instruction and/or 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 and underwriters, plan reviewer and code enforcement officers.

## 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 and hazard descriptions; the application of safety codes; and the use of proper procedures for hauling and storing hazardous materials
- 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 = 61)

General Education	Major Requirements	Other Required Courses	
ENGL 110 Foundations in Professional Writing	3	FIRE 102 Fire Prevention	3
		FIRE 103 Principles of Fire & Emergency Services Safety and Survival	3
COMM 101 Effective Speaking (or)	3		
COMM 203 Interpersonal Communication	(3)	FIRE 105 Building Construction for Fire Protection	3
Humanities & Arts Core Elective	3	FIRE 106 Fire Behavior and Combustion	3
Mathematics or Science Core Elective	3	FIRE 201 Fire Protection Hydraulics & Water Supply	3
Social & Behavioral Science Core Elective*	3	FIRE 202 Hazardous Materials Chemistry	3
First-Year-Seminar Elective – FIRE 101	3	FIRE 203 Fire Protection Systems	3
Wellness Elective	1	FIRE 204 Fire Investigation I	3
	<b>19</b>	FIRE 207 Educational Methodology	3
		FIRE 209 Fire & Emergency Services Administration	3
		FIRE 210 Strategy and Tactics	3
			<b>33</b>
		CHEM 100 Principles of Chemistry (or)	3
		PHSC 113 Intro to Physical Science	(3)
		CIS 105 Intro to Software for Business	3
		Free Elective	<u>3</u>
			<b>9</b>

\*Select from the following courses: ANTH 101 or 205; COMM 253; GEOG 201 or 230; HIST 102; PSYC 229; or SOCI 201, 202, 203 or 205.

## 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	Fall Semester II	Spring Semester II
CIS 105	3	COMM 101 or 203	3
ENGL 110	3	CHEM 100 or PHSC 113	3
FIRE 101	3	FIRE 102	3
FIRE 103	3	FIRE 105	3
FIRE 106	3	FIRE 203	3
		FIRE 201	3
		FIRE 202	3
		FIRE 209	3
		Humanities/Arts Core Elective	3
		Free Elective	3
		FIRE 204	3
		FIRE 207	3
		FIRE 210	3
		Math/Science Core Elective	3
		Social/Behavioral Science Core Elective*	3
		Wellness Elective	1