

**FIRE SCIENCE  
FIRE PROTECTION TECHNOLOGY (FPT)  
(HEGIS 5507)**

Public Safety has become a major concern in our society, and the complex technology of fire prevention and protection is evolving rapidly. Career and volunteer fire service personnel as well as people employed in insurance, risk management, emergency services, and municipal services have an increasing need to stay informed about cutting edge technology and other trends in this field.

The Fire Protection Technology Program provides fire fighters and related fire service personnel with specialized training. The curriculum has been developed by a local advisory committee to meet the needs of the area, including specialized fire science courses, as well as required liberal arts and science and general education courses. The program can be used as a basis for successful competition on municipal exams, volunteer fire company applications, and entry into a variety of industrial settings. Students are encouraged to meet with the Fire Sciences Program Chairperson to ensure their goals will be met.

Completion of this program does not preclude the student from pursuing a baccalaureate degree should he/she decide to do so. However, transfer policies vary from college to college and the student should be aware that additional course work in the general and liberal arts education area are likely to be required by the four-year institution.

An Associate in Applied Science (A.A.S.) degree is awarded upon completion of the requirements for this program.

Students who successfully complete the Associate in Applied Science (A.A.S.) degree in Fire Protection Technology will be able to:

- Explain the history of the fire service from its origin up to the present and the concept of chain of command.
- Describe the origin and role of fire prevention, fire codes and public education and the role they play in today's world.
- Define fire and combustion with its associated phenomenon and describe how to employ the proper extinguishing methods for all classes of fire.
- Cite and explain all applicable OSHA regulations and National Fire Protection Association (NFPA) standards.
- Define the different types of building construction and explain each one's characteristics as it relates to fire and gravity.
- Define and describe the fire suppression and detection systems currently employed in structures.
- Explain the properties of water as an extinguishing agent and be able to perform the calculations required for design and use of municipal water and fire protection systems.
- Cite and define applicable laws and legal issues, as they relate to emergency services.
- Employ chain of command, Standard Operating Procedures, Incident Command System and mission statements.

Course No.	Descriptive Title	Cr. Hrs.
<b>FIRST SEMESTER</b>		
ENG 101	Composition I	3
BHS 103	Social Problems	3
MAT 184	Algebra and Trig for Precalculus	3
FIR 100	Fire Science Intro Seminar	1
FIR 102	Fund. of Fire Protection	3
FIR 104	Fund. Of Fire Prevention	3
	<b>TOTAL</b>	<b>16</b>
<b>SECOND SEMESTER</b>		
ENG 102	Composition II	3
CHE 111 or CHE 121		4
FIR 110	Fire Behavior & Combustion	3
FIR 112	Occup. Health and Safety	3
FIR 114	Building Construction for Fire Protection	3
	<b>TOTAL</b>	<b>16</b>
<b>THIRD SEMESTER</b>		
EMB 105	Emergency Med Tech (a)	6
GOV 121 or HIS 104 or HIS 108		3
PHY 121	General Physics	4
FIR 204	Fire Protection Systems	3
	<b>TOTAL</b>	<b>16</b>
<b>FOURTH SEMESTER</b>		
WFE 101	Lifetime Wellness and Fitness	3
FIR 212	Fire Protection Hydraulics and Water Supply	3
	Fire Career Electives (b)	7
	Free Elective (c)	3-4
	<b>TOTAL</b>	<b>16-17</b>
	<b>TOTAL CREDIT HOURS</b>	<b>64</b>

- a. Current Certification acceptable for credits
- b. Fire Career Elective applicable course are:  
Selected New York State, Department of State, Office of Fire Prevention and Control's (OFPC) Fire Training courses with verification testing.  
Basic Firefighter Training (229 hour academy)  
FIR 214, FIR 222, FIR 224, FIR 226, FIR 228, SPA 101, SPE 101, PAR 207.
- c. See page 98 for a full description of the free elective requirement