

FIRE PROTECTION TECHNOLOGY

The Fire Protection Technology program prepares the students for a career in the fire service. The curriculum includes courses in building construction related to firefighter and life safety, history and philosophy of fire prevention, fire and life safety education, fire investigation, water-based fire suppression systems, special hazard, fire suppression systems, water supply for fire protection and portable fire extinguishers, career opportunities in fire protection and related fields, culture and history of emergency services.

Learning Outcomes: Upon successful completion of the program, students will be able to:

- Identify minimum qualifications and entry-level skills for fire fighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief’s interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture, and diversity.
- Analyze, appraise, and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 situations that shout “Watch Out”; and common factors associated with injuries and line of duty deaths.
- Identify and comprehend laws, regulations, codes, and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
- Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
- Identify and describe the apparatus used in the fire service and the equipment and maintenance of fire apparatus and equipment.
- Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety.
- Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.

Certificate of Achievement (Career Technical)

Certificate Requirements	Units
REQUIRED CORE:	18
FPTC 1 Principles of Emergency Services (3)	
FPTC 2 Fire Behavior and Combustion (3)	
FPTC 3 Principles of Fire/Emergency Services Safety and Survival (3)	
FPTC 4 Building Construction for Fire Prevention (3)	
FPTC 5 Fire Prevention (3)	
FPTC 6 Fire Protection Systems (3)	
TOTAL CERTIFICATE UNITS	18

Associate in Science Degree (Career Technical)

Associate Degree Major Requirements	Units
Certificate Requirements (as described above)	18
Select 12 units from the following:	12
FPTC 100 Rescue Systems 1: Basic Rescue Skills (1)	
FPTC 101 Introduction to Basic Firefighter I Academy (3)	
FPTC 102 Firefighter I Academy Observation and Certification Assessment (2)	
FPTC 104A Fire App Driver/Operator 1A: Emergency Vehicle Ops (1.5)	

FPTC 104B Fire App Driver/Operator 1B: Pump Operations (1.5)
FPTC 105A Firefighter I Academy (14.5)
FPTC 105B Firefighter I Academy Application(6)
FPTC 106 Firefighter II Academy – Advanced Firefighting (3.5)
FPTC 112D Instructor I – Instructional Methodology (1)
FPTC 112E Instructor II – Instructional Development (1)
FPTC 140 Incident Command System 300 (1.5)
FPTC 141 Incident Command System 400 (1)

TOTAL MAJOR UNITS **30**

Associate Degree Requirements (as described above) **30**

Complete Competency Requirements and MPC General Education Pattern for a total of 60 degree-applicable units (see pages 72-73, 76 in the 2017-18 MPC Catalog).

TOTAL DEGREE UNITS **60**
