



TCMI

FIRE SCIENCE PROGRAM

Fire Science Program Course Catalog

FFP 2120 Building Construction for the Fire Service:

This course will provide the student with a basic understanding of building design and construction methods and materials, which will aid in decision making processes related to fire prevention and fire control. Students will gain an understanding of construction principles and practices related to fire loads and behavior to make more effective, safer, and timely decisions to protect people and property from potential and actual fires.

This course is required for certification for Fire Officer I and Firesafety Inspector I

Prerequisite(s): None

FFP 2720 Company Officer:

This course is designed to help instruct and teach the student the roles and responsibilities of a company officer. This course will enhance the student's abilities through various areas of knowledge as well as solving the varied problems and situations they will be required to manage effectively in today's ever-changing fire service. The curriculum includes a review of fire department organization and administration, management theory, leadership, communications, motivation, and group dynamics.

This course is required for certification for Fire Officer I

Prerequisite(s): None

FFP 1740 Fire Service Course Delivery:

The curriculum draws from many recognized authorities in exploring the methods and mechanics of imparting information and adult learning principles. The course emphasizes techniques which have wide application in teach situations, as well as devices for specific training areas. The course also stresses measuring teaching effectiveness, and the use of media and visual aids.

This course is required for certification for Fire Officer I and Fire Instructor I

Prerequisite(s): None

FFP 1810 Firefighter Tactics and Strategies I:

This course will provide students with a basic understanding of factors involved in coping with a fire emergency and determining the best use of available resources in protecting lives and property. The course emphasizes the changing nature of an emergency and the ways in which the fire officer can evaluate the effectiveness of their proposed incident action plan. This course is required for certification for Fire Officer I

Prerequisite(s): NFA IS700 must be completed prior to attending the course. It can be taken online through FEMA/EMI.

[HTTPS://TRAINING.FEMA.GOV/EMIWEB/IS/IS700b.ASP](https://training.fema.gov/emiweb/is/is700b.asp)

FFP 2741 Fire Service Course Design

The curriculum draws from many recognized authorities in exploring the methods and mechanics of imparting information and adult learning principles. The course emphasizes techniques which have wide application in teach situations, as well as devices for specific training areas. The course also stresses measuring teaching effectiveness, and the use of media and visual aids.

Fire Service Course Delivery Covers Chapters 11 through 15 of the Fire and Emergency Services Instructor book. 9th Edition.

Recommended Book: IFSTA Fire and Emergency Services Instructor, 9th Edition.
ISBN: 978-0-87939-696-1, IFSTA Item #: 36342

Prerequisite(s): None

Continuing Educations Units (CEU!s): 45 hours towards Fire Safety Inspector I, Instructor I, II, III

Pre-Course Assignment: None

Required Materials: Computer and Internet access, USB portable storage device (thumb drive), and the required textbook.

FFP 1505 Fire Prevention Practices

The purpose of this course is to place emphasis on fire prevention through inspection, code enforcement, the use of model building and fire prevention codes, including detailed information on the legal, economic, and political aspects of the fire inspection process.

Recommended Book: IFSTA Fire Inspection and Code Enforcement (8th Edition)

ISBN #978-0-87939-605-3

Prerequisite(s): None

Continuing Educations Units (CEU's): 45 hours towards Fire Code Administrator, Fire Safety Inspector I, Instructor I, II, and III

FFP 1540 Private Fire Protection Systems I

This course provides an in-depth study of private fire protection and detection systems. Such systems include sprinkler and standpipe systems, chemical extinguishing systems, and fire detection systems and its devices. Each system is discussed as to its need, construction, preventative maintenance, and individual uses.

Recommended Book: IFSTA Fire Protection, Detection, and Suppression Systems (5th Edition)

ISBN #978-0-87939-599-5

Prerequisite(s): None

Continuing Educations Units (CEU's): 45 hours towards Fire Code Administrator, Fire Safety Inspector I, Instructor I, II, and III

FFP 2811 Firefighting Tactics and Strategies II

This course covers strategies and tactics involving multiple company operations, operations at complex buildings including commercial type structures and special hazard type incidents. The course is intended for officers who may be in command of emergency scenes involving the coordination and use of large amounts of personnel and equipment. Risk management planning and critical thinking skills are stressed throughout this class.

Recommended Book: IFSTA Structural Fire Fighting: Initial Response Strategy and Tactics (3rd Edition)

ISBN #978-0-87939-768-5

Prerequisite(s): FFP 1810 Firefighter Tactics and Strategies I

Continuing Educations Units (CEU's): 45 hours towards Instructor I, II, III