

Fire Protection Technician Fire Service Certification

Program Number: 10-503-2/30-503-2

Protective Services Program Cluster

Center for Human and Protective Services

Program offered at Madison Campuses

For information call: (608) 246-6911 or
(800) 322-6282 Ext. 6911

Fire Protection Technician

Associate in Applied Science Degree

The constant changes and growing complexities of modern living and the environment are creating a demand for college-trained people in the fire-service field.

Opportunities for graduates exist with municipal fire departments, insurance and government agencies, and in the field of industrial safety. This program of study is designed to meet the needs of personnel currently employed in fire service positions and those desiring preparation for employment. Classes should be taken in the sequence listed.

Unique Requirements for Admission

High school diploma, HSED or GED with a grade point average of 2.0 or equivalent or satisfactory completion of 12 college credits. Students should also have one year of high school algebra and one year of high school science.

Unique Requirements for Graduation

Students must achieve at least a 2.0 (C) grade in all program core courses and an overall 2.0 (C) grade point average.

Curriculum

Fire Protection Technician

FIRST YEAR

First Semester	Credits	Hrs/week Lec-Lab
10-106-190 Professional Development.....	1	2.25-.75
10-503-141 Firefighter 2/Hazardous Materials Operations AND..	1	1-0
10-503-142 Fire Fighting Principles OR.....	4	4-0
10-503-100 Fire Recruit Academy.....	(5)	(6-6)
10-531-101 Emergency Medical Technician-Basic.....	4	4-0
10-801-195 Written Communication OR.....	3	3-0
20-801-201 English 1*.....	(3)	(3-0)
10-804-110 Elementary Algebra with Applications OR.....	3	3-0
20-804-201 Intermediate Algebra*.....	(3)	(3-0)
Semester Total	16	

Second Semester

10-103-135 Windows XP.....	1	2.25-.75
10-503-139 Principles of Emergency ServicesΔ.....	3	3-0
10-503-143 Building ConstructionΔ.....	3	3-0
10-503-144 OSHA for the Fire ServiceΔ.....	3	3-0
10-801-196 Oral/Interpersonal Communication OR.....	3	3-0
20-810-201 Fundamentals of Speech Composition*.....	(3)	(3-0)
10-806-134 General Chemistry.....	4	3-2
10-807-151 Physical Education-Fire Safety Technician.....	1	1-1
Semester Total	18	

SECOND YEAR

First Semester

10-503-151 Fire PreventionΔ.....	4	4-0
10-503-152 Hazardous Materials TechnicianΔ.....	4	4-0
10-503-157 Fire InvestigationΔ.....	3	3-0
10-801-197 Technical Reporting OR.....	3	3-0
20-801-202 English 2*.....	(3)	(3-0)
10-809-199 Psychology of Human Relations OR.....	3	3-0
20-809-231 Introduction to Psychology.....	(3)	(3-0)
Semester Total	17	

Second Semester

10-503-147 Fire Protection SystemsΔ.....	4	4-0
10-503-148 Fire Administration 1Δ.....	3	3-0
10-503-155 Fire Protection HydraulicsΔ.....	4	4-0
10-503-156 Strategies, Tactics & Incident ManagementΔ.....	4	4-0
10-809-197 Contemporary American Society OR.....	3	3-0
20-809-203 Intro to Sociology.....	(3)	(3-0)
Semester Total	18	

*College transfer equivalent courses.

ΔPrerequisites required; consult department office.

Note: Students are placed in English or mathematics courses based on their scores on the COMPASS or ASSET test or on completion of the appropriate prerequisites.

Fire Service Certification

30-503-300 Fire Recruit Academy OR.....	5	6-6
10-503-100 Fire Recruit Academy.....	(5)	(6-6)
30-531-301 Emergency Medical Technician-Basic OR.....	4	4-4
10-531-101 Emergency Medical Technician-Basic.....	(4)	(4-4)
Total	9	



Program Courses

Fire Protection Technician Associate in Applied Science Degree

10-103-135 Windows XP 1 credit

Introduces the Windows XP operating system: work with common elements (windows, menus, toolbars, panes, dialog boxes and Help), use accessory programs, manage files/folders using My Computer and Explorer, customize using the Control Panel and maintain the computer.

10-106-190 Professional Development 1 credit

Research the job market, develop a job search/career portfolio, explore networking, prepare for employment tests and practice for job interviews. The portfolio includes a resume, cover letter, thank you letter, reference sheet, job application form, and work samples

10-503-139 Principles of Emergency Services 3 credits

Provides an overview to fire protection; career opportunities in the fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; and fire service nomenclature. Prerequisites: 10-503-141 and 10-503-142 or 30-503-300.

10-503-141 Firefighter 2/Hazardous Materials Operations 1 credit

This course meets the NFPA requirements for firefighters. Provides the first responders with the awareness and knowledge to identify hazardous materials and to safely respond to hazardous materials (hazmat) emergencies

10-503-142 Fire Fighting Principles 4 credits

Describes basic fire behavior, and techniques used to control structural and related fire emergencies, and life safety practices. Students perform all practical evolutions necessary to control and extinguish fires and otherwise meet all requirements for Firefighter 1 certification with the State of Wisconsin.

10-503-143 Building Construction 3 credits

Covers the basic principles of construction and specific classifications of construction as they relate to fire prevention, fire resistance, fire and smoke containment, and performance under fire conditions. Specific building styles, including high-rise and multi-family dwelling units, are also studied. Prerequisites: 10-503-141 and 10-503-142 or 30-503-300.

10-503-144 OSHA for the Fire Service 3 credits

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles and emergency situations involving fire, EMS, hazardous materials and technical rescue. Upon completion of this course, students should be able to establish and manage a safety program in an emergency service organization. Prerequisites: 10-503-141 and 10-503-142 or 30-503-300.

10-503-147 Fire Protection Systems 4 credits

Provides information relating to the features of design and operation of fire detection and suppression systems. Prerequisites: 10-503-151, 10-503-152 and 10-503-157

10-503-148 Fire Administration 1 3 credits

This course introduces the student to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer. Prerequisites: 10-503-151, 10-503-152 and 10-503-157

10-503-151 Fire Prevention 4 credits

Provides functional information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, and identification and correction of fire hazards. Meets all requirements for Fire Inspector 1 certification with the State of Wisconsin. Prerequisites: 10-503-139, 10-503-143 and 10-503-144.

10-503-152 Hazardous Materials Technician 4 credits

Examines characteristics relating to hazardous materials including problems of recognition and mitigation. Prepares students for Hazardous Materials Technician level. Prerequisites: 10-503-139, 10-503-143 and 10-503-144.

10-503-155 Fire Protection Hydraulics 4 credits

Provides a foundation of knowledge in order to understand the principles of the use of water in fire protection. Meets all the requirements for Driver Operator-Pumper certification with the State of Wisconsin. Prerequisites: 10-503-151, 10-503-152 and 10-503-157.

10-503-156 Strategies, Tactics & Incident Management 4 credits

Provides an in-depth analysis of the principles of emergency response through utilization of an incident management system. Prepares students to pursue current national ICS training requirements. Prerequisites: 10-503-151, 10-503-152 and 10-503-157.

10-503-157 Fire Investigation 3 credits

Provides learners with the fundamentals and technical knowledge needed for proper fire scene investigation. Prerequisites: 10-503-139, 10-503-143 and 10-503-144.

Fire Service Certification Less-Than-One-Year Diploma

30-503-300 Fire Recruit Academy 5 credits

200 hours of fire fighting training prepares students for the State of Wisconsin Firefighter 1 and Firefighter 2 certification examinations. Completion of the EMT Basic Course also will provide the student with a diploma in Fire Service Certification.

Note: The Fire Recruit Academy is accredited by the International Fire Service Accreditation Congress.

30-531-301 Emergency Medical Technician Basic 4 credits

Follows the U.S. Department of Transportation EMT-Basic course curriculum. Patient contact experience is required. This course meets requirements for certification with the National Registry of Emergency Medical Technicians and educational requirements for EMT licensure in Wisconsin. Prerequisite: CPR certification at professional level. Students must be at least 18 years old.

Career Potential:

- Firefighter
- Fire Protection Technician
- Fire Protection Systems Installer
- Industrial Safety Technician
- Property Risk Management Specialist

With additional education and/or work experience, graduates may find employment as:

- Fire Protection Consultant
- Fire Protection Equipment Sales Manager
- Industrial Safety Manager
- Municipal Safety Manager
- Property Loss/Risk Management Supervisor
- Fire Investigator
- Fire Marshal
- Fire Inspector
- Fire Officer

More detailed and updated information on this program may be available at: matcmadison.edu. The college reserves the right to make changes in the regulations and courses announced in this publication without notice.

Madison Area Technical College provides equal opportunity in education and employment.

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