

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. A COMPASS Reading score of 80 or higher is required for the Fire Recruit Academy 10-503-100 course and for the EMT-Basic 10-531-101 course. CPR certification at a professional level is also required for EMT Basic.

Students may want to consider taking the course Intro to Protective Services 10-503-101 prior to entering the Fire Protection Technician program. This course would satisfy the elective requirement for the program.

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
10-503-139	Principles of Emergency Services.....	3	3-0
10-503-143	Building Construction.....	3	3-0
10-531-101	Emergency Medical Technician-BasicΔ.....	4	4-0
10-801-195	Written Communication OR.....	3	3-0
20-801-201	English 1*.....	(3)	(3-0)
10-804-107	College Mathematics OR.....	3	4-0
20-804-201	Intermediate Algebra*.....	(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		19	

Second Semester

10-503-141	Firefighter 2/Hazardous Materials Operations AND . 1.....	1	1-0
10-503-142	Fire Fighting Principles OR.....	4	4-0
10-503-100	Fire Recruit AcademyΔ.....	(5)	(6-6)
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		16	

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)
10-809-197	Contemporary American Society OR.....	3	3-0
20-809-203	Intro to Sociology*.....	(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	5-0
10-503-156	Strategies, Tactics & Incident ManagementΔ.....	4	4-0
Elective.....		3	E
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 test or on completion of the appropriate prerequisite/s.

Fire Service Certification

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



Program Courses

Fire Protection Technician

Associate in Applied Science Degree

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.

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.

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: 10-503-139 and 10-503-143.

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.

Recommended Elective

10-503-101 Intro to Protective Services 3 credits

This protective services course is intended to present an overview of the career fields in Emergency Medical Services, Fire and Law Enforcement. Topics covered include CPR, Legal Context, Incident Command System, Defense and Arrest Tactics, Physical Fitness and Nutrition, Ethics and Professionalism.

***3 elective credits are required for the program and can be any three associate degree or college transfer credits of your choice.*

Fire Service Certification Less-Than-One-Year Diploma

10-503-100 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. Prerequisite: A COMPASS Reading score of 80 or higher..

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

10-531-101 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. Prerequisites: CPR certification at professional level and a COMPASS Reading score of 80 or higher. 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: madisoncollege.org. 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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