

# Fire Protection Technician

70-credit Associate of Applied Science Degree

## About the Program

As a firefighter, the student will be committed to protecting life, property and the environment through fire fighting and fire prevention activities. WCTC is designated as a Regional Fire Training Center and offers all levels of Wisconsin Firefighter Certification training. The college also boasts state-of-the-art training facilities, equipment and veteran firefighter instructors. An Associate of Applied Science degree or a minimum of 60 college credits is becoming a requirement for full-time employment at many fire departments and is often a minimum requirement for promotion through the ranks.

This degree program is designed to prepare students for a fire service career by providing education in areas pertinent to firefighters, Emergency Medical Technicians, and company officers. (This education includes activities related to fire suppression, fire prevention, hazardous materials, emergency medicine, and disaster planning, to name a few). The degree also provides the foundation for further education if the student desires to become a staff officer and pursue a Bachelor Degree from a four-year institution.

## Potential Job Titles

- Fire Fighter
- Code Enforcement Officer/Specialist
- Fire Inspector
- Fire Investigator
- Plans Reviewer
- Fire Protection Systems Sales
- Fire Service Equipment Sales

Required Courses		Credits
<b>First Semester</b>		
503-101	Legal Aspects of Fire Service	3
503-139	Principles of Emergency Service	3
503-142	Firefighting Principles	4
503-151	Fire Prevention	4
804-115	College Technical Math 1	5+
<b>Total semester credits</b>		<b>19</b>
<b>Second Semester</b>		
503-147	Fire Protection Systems	4
503-152	Hazardous Materials	4
531-102	Basic Emergency Medical Technician	4
806-178	Life Science Chemistry	5
<b>Total semester credits</b>		<b>17</b>
<b>Third Semester</b>		
503-115	Firefighter Safety & Health	2
503-143	Building Construction	3
503-157	Fire Investigation	3
801-195	Written Communication	3+
809-196	Introduction to Sociology	3+
	Elective	3
<b>Total semester credits</b>		<b>17</b>
<b>Fourth Semester</b>		
503-155	Fire Protection Hydraulics	4
503-156	Strategies, Tactics & Incident Mgmt	4
503-158	Fire Tech & Communications	3
801-196	Oral/Interpersonal Communication	3+
809-199	Psychology of Human Relations	3
<b>Total semester credits</b>		<b>17</b>
+ Proficiency exam available		
<i>Curriculum is current as of catalog printing. The most current curriculum requirements for graduation will be provided upon admission to program, or review at <a href="http://www.wctc.edu">www.wctc.edu</a>.</i>		

## Credit Transfer

Credits earned in the Fire Protection Technician program may be transferable to institutions offering baccalaureate degrees. Visit [www.wctc.edu/transfer](http://www.wctc.edu/transfer) for specific information. Since the details of credit transfers change from time to time, be sure to contact the intended college or university to verify credit transferability.

## Admission Process

- Fill out a WCTC application
- Send \$30 non-refundable application fee made payable to GTC
- Send high school transcript or GED/HSED
- Send any previous college transcripts

- Complete Skills Assessment test (COMPASS)
- Begin pursuing Financial Aid options with GTC
- Give consent for the release of confidential information
- Requires a criminal background check conducted by the Wisconsin Department of Justice
- Being a member of a fire department is highly recommended but is not an admissions requirement

For more information, call 262.691.5541.

**Fire Protection Technician  
Required Courses**

**503-101 Legal Aspects of Fire Service** 3  
An introduction to the Federal, State, and local laws that regulate emergency services; national standards influencing emergency services; standard of care, criminal law; tort law; liability; and, a review of relevant court cases.

**503-115 Firefighter Safety & Health** 2  
Become familiar with the basic concepts of occupational safety and health 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.

**503-139 Principles of Emergency Svcs** 3  
Gain an overview to fire protection, career opportunities in 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.

**503-142 Fire Fighting Principles** 4  
Learn basic fire behavior, techniques used to control structural and related fire emergencies, and life safety practices. Perform all practical evaluations necessary to control and extinguish fires and otherwise meet all requirements for Firefighter I certification with the State of Wisconsin.  
Prerequisites: Associate Dean approval

**503-143 Building Construction** 3  
Provides the components of building construction that relate to fire and life safety.

**503-147 Fire Protection Systems** 4  
Provides information relating to the features of design and operation of fire detection and suppression systems.

**503-151 Fire Prevention** 4  
Provides fundamental 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 I certification with the State of Wisconsin.

**503-152 Hazardous Materials** 4  
Examine the characteristics relating to hazardous materials including problems of recognition and mitigation. Prepares students to hazardous materials technician level.  
Prerequisites: 503-142 Fire Fighting Principles or 503-321 Wis State Cert Firefighter I

**503-155 Fire Protection Hydraulics** 4  
Provides a foundation of knowledge in order to understand the principles of the use of water in fire protection. Meets all of the requirements for Driver/Operator Pumper certification with the State of Wisconsin.  
Prerequisites: 503-142 Fire Fighting Principles or 503-321 Wis State Cert Firefighter I

**503-156 Strategies, Tactics & Inc Mgmt** 4  
Provides in-depth analysis of the principles of emergency response through utilization of an incident management system.  
Prerequisites: 503-142 Fire Fighting Principles or 503-321 Wis State Cert Firefighter I

**503-157 Fire Investigation** 3  
Provides the fundamentals and technical knowledge needed for proper fire scene investigations.

**503-158 Fire Tech & Communications** 3  
Become familiar with various aspects of fire service communications, including dispatching, fireground radio communications, 800 MHz radio systems, graphical information systems (GIS), global positioning systems (GPS) and other communications and related technologies. Gain exposure to new and emerging fire service technologies.

**531-102 Basic Emerg Medical Technician** 4  
Train in the emergency care procedures that will qualify students for certification as an emergency medical technician and for licensure as an ambulance attendant.  
Prerequisites: CPR-C; or Health Care Provider

**801-195 Written Communication** 3  
Study and practice the transfer of information, ideas, and experiences in written form through reports, letters, memoranda, and other documents. Gain proficiency in the areas of organization, clarity, accuracy, and directness.  
Prerequisites: COMPASS-Writing Skills or ACT-English or ASSET-Writing Skills or Accuplacer Sentence Skills or TABE Advanced Language or 831-103 Intro to College Writing or 851-771 Writing-Program Readiness

**801-196 Oral/Interpersonal Comm** 3  
Practice the necessary skills for effective speech delivery, listening, assertiveness, conflict resolution, teamwork, and general interpersonal communication.

**804-115 College Technical Math 1** 5  
Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; measurement systems; computational geometry; right and oblique triangle trigonometry; trigonometric functions on the unit circle; and operations on polynomials. Emphasis will be on the application of skills to technical problems. This course is the equivalent of successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B.

**806-178 Life Science Chemistry** 5  
Covers a wide range of topics including inorganic and organic. Topics included during the inorganic portion of the course include measurements and conversions, matter and the kinetic molecular theory, periodic table, chemical bonding, chemical reactions, solubility, gases, problem-solving and solutions, equilibrium and acid-base behavior. The organic chemistry portion introduces chemical structure as well as physical and chemical behavior of organic molecules. Many of these topics are related to the field of animal science.  
Prerequisites: 804-138 Physical Mathematics or 804-106 Intro to College Math or 804-169 Fundamentals of Mathematics or 804-110 Elem Algebra w Apps or 804-115 College Technical Math 1 or Associate Dean approval; and COMPASS-Reading Skills or 858-775 Reading-Program Readiness or 838-105 Intro Reading & Study Skills or TABE Advanced Reading or Accuplacer Reading Comprehensi or College Proficiency - Reading or Grandfathered Rdg Requirement or ACT-Reading

**809-196 Introduction to Sociology** 3  
Learn the basic concepts of sociology: culture, socialization, social stratification, multiculturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.  
Prerequisites: COMPASS-Reading Skills or 858-775 Reading - Program Readiness or 838-105 Intro Reading & Study Skills or TABE Advanced Reading or Accuplacer Reading Comprehensi or College Proficiency - Reading or Grandfathered Rdg Requirement or ACT-Reading

**809-199 Psychology of Human Relations** 3  
Examine the principles of interaction as applied to human relations at home and on the job. Explore topics such, as self concept personality development, learning, motivation, emotions, stress, human relations processes, and special relationships.  
Prerequisites: COMPASS-Reading Skills or 858-775 Reading - Program Readiness or 838-105 Intro Reading & Study Skills or TABE Advanced Reading or Accuplacer Reading Comprehensi or College Proficiency - Reading or Grandfathered Rdg Requirement or ACT-Reading

**Elective Options**

Any course at the associate degree level will meet the elective requirement.