

Fire Science Technology, AAS

Academic Year 2026-2027

Program Description:

This 60-credit hour degree prepares students for entry-level employment and/or potential further study in the fields of fire protection and prevention. Students completing this degree will have a foundation for the fields of fire protection, prevention, or public education through the study of the organization and function of fire prevention, and suppression techniques, fire behavior, combustible materials, extinguishing agents, hazardous and toxic material, fire command and fire management. The student will acquire knowledge in the design and operation of fire detection and alarm systems; fire protection features in building design and construction, wildland fire behavior and firefighting techniques; fire service organization, fire prevention, and theories of fire control. Students who successfully complete this program will exhibit competency in fire safety, building construction, fire administration, hydraulics, and legal issues in the fire service.

Program Outcomes:

Upon completion of this program students will be able to:

- Explain the history and basic principles of the fire service
- Demonstrate effective communication and interpersonal skills with supervisors, peers, and the public
- Explain the principles of fire development, cause and prevention
- Explain the principles of fire control through the utilization of personnel, equipment, extinguishing agents on the fire ground
- Apply knowledge of building construction, fire protection systems, and fire prevention codes to affect safer occupancies and fire control
- Apply the theory and principles for the use of water in fire suppression activities, including hydraulic principles.

Career Outlook and Salary forecast:

For the most current information please refer to the Bureau of Labor Statistics “Occupational Outlook Handbook” found at www.bls.gov/ooh/.

Program Admission Requirements:

Students will be scheduled to complete a background check and a pre-employment drug screening prior to beginning classes. Students who have been convicted of a felony or fail the drug screening are not eligible to participate in this program. Random drug screenings are a condition of continued employment as well as physical examinations.

Contact Information:

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www.mctc.edu

Mountwest Community & Technical College
Academic Year 2026-2027

03/03/2026

Fire Science Technology – Major Code CF20

Name:	ID Number 942-
Educational Counselor:	
Faculty Advisor:	

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
FIRE 101	Basic Firefighter I ¹		3		Fire Fighter- Level I (NFPA 1001) 1 st 8-week course		
FIRE 102	Basic Firefighter II ²		3		Fire Fighter II-Level II (NFPA 1001 and NFPA 1403) 2 nd 8-week course		
FIRE 103	Fire Behavior, Combustion, & Suppression ³		3				
FIRE 220	Fire Service Pump and Hydraulic Systems ⁴		3				
FIRE 296	Fire Science On-The-Job Training I ⁴		3				
			15				
FIRE 230	Incident Command Systems		3				
FIRE 201	Basic Firefighter III ⁵		3		Fire Officer I (NFPA 1021) 1 st 8-week course		
FIRE 202	Basic Firefighter IV)		3		Fire Officer II (NFPA 1021) 2 nd 8-week course		
FIRE 235	Fire Investigation and Risk Reduction ⁷		3				
FIRE 297	Fire Science On-The-Job Training II ⁴		3				
			15				
ENL 131	Business and Technical Writing ⁸		3				
IT 101	Fundamentals of Computers		3				
PSYC 200	General Psychology		3				
FIRE 240	Building Construction		3				
FIRE 298	Fire Science On-The-Job Training III ⁴		3				
			15				
COM 125	Interpersonal Communication		3				
MAT 135	Technical Mathematics		3				
FIRE 242	Hazardous Materials		3				
FIRE 245	Fire Services Administration & Org Mgt.		3				
FIRE 299	Fire Science On-The-Job Training IV ⁴		3				
			15				
	Hours required for Graduation		60				

¹ FIRE 101 has a corequisite of FIRE 102

² FIRE 102 has a prerequisite of FIRE 101

³ FIRE 103 has prerequisites of FIRE 101, 102, and CPR/First Aid certification.

⁴ FIRE 220, 296, 297, 298, and 299 have prerequisites of FIRE 101 and 102

⁵ FIRE 201 has prerequisites of FIRE 101, 102, and 103

⁶ FIRE 202 has prerequisites of FIRE 101, 102, and 201

⁷ FIRE 235 has prerequisites of FIRE 101, 102, 201, and 202

⁸ ENL 131 has a prerequisite of ACT 18, SAT 480, Accuplacer 250-300, or be placed in ENL 131E.