



2024-2025 Academic Year

Fire Science Technology

Associate in Applied Science Degree (A.A.S.)

B-STEM Division

Business, Science, Technology, Engineering and Math

[609.570.3482](tel:609.570.3482) admiss@mccc.edu

The associate degree program in **Fire Science Technology** provides students with the skills and knowledge to become highly competitive candidates for entry and/or advancement as professional and volunteer fire and emergency services personnel.

The [FIR 110](#) course (Fire Prevention and Code Enforcement I) meets the educational requirements of the New Jersey Division of Fire Safety for Fire Inspector. [FIR 209](#) (Fire Prevention and Code Enforcement II) meets the educational requirements for Fire Official. Students seeking a career in fire code enforcement are encouraged to check with the New Jersey Division of Fire Safety for other certification requirements.

Based on a national curriculum that promotes learning and advocacy of critical emergency service leadership and fire safety principles, the associate degree program integrates technical study with coursework in mathematics, English, physical science, and liberal arts to provide graduates with the necessary ancillary knowledge to advance into supervisory and/or management-level positions.

PROGRAM OUTCOMES

- Discuss the history, support organizations, resources, incident management, training, and emergency operations and relate how each plays a role within the fire service;
- Define and use basic terms and concepts associated with the chemistry and dynamics of fire;
- Apply principles of hydraulics, building construction, strategy, and tactics to fire ground operations;
- Communicate the relationship of fire prevention and fire inspection;
- Demonstrate the importance of public education in relation to fire prevention;
- Evaluate facilities to appraise code compliance and potential hazards, building construction issues, and presence of appropriate fire protection systems to help ensure life safety both pre-incident and during an incident;
- Employ safe work practices using recognized standards and regulations.

Students pursuing programs in fire science should be aware that various municipal and industrial fire service agencies establish physical, mental, and character requirements. Persons interested in this option are advised to gain an awareness of the specific requirements for their desired work setting. MCCC graduates are employed by city, state, and federal departments dedicated to the fire services field.

Since the degree program is designed to meet the needs of the part-time student, it normally will take a minimum of three years to complete. All fire science courses are offered in the evening.

Fire Science Technology is not designed as a transfer program and some credit loss may occur for those who intend to continue their education at a four-year institution. Students interested in transferring should contact the program advisor early in their coursework at MCCC.

Admission to the program requires a high school diploma or its equivalent and competency in English and mathematics as demonstrated by placement testing.

DEGREE CURRICULUM

2024-2025 Academic Year

FIRE.SCI.AAS

CIP 430201

The course sequence below represents a recommended example of how this degree program can be completed in two years, presuming a Fall Term start and satisfaction of all Developmental Studies (foundation courses) requirements and prerequisites. Actual approaches toward completion depend on each student's anticipated transfer institution, career objectives, or other individual circumstances.

Students are encouraged to meet regularly with an academic advisor or Success Coach to consider options, establish plans, and monitor progress.

Code	Course (lecture/lab hours)	Credits	To Do This Semester
FIRST SEMESTER			
<u>CSW 100</u>	College Success and Personal Wellness (2/0) <ul style="list-style-type: none"> Some exemptions apply. Consult academic advisor for details. 	2	✓ Meet with your faculty advisor to complete an academic plan. Make sure you are aware of any course prerequisites you may need to take, and how long it will take to complete your degree.
<u>ENG 101</u>	English Composition I (3/0)	3	
<u>FIR 101</u>	Introduction to Fire Science (3/0)	3	
<u>FIR 104</u>	Building Construction (3/0)	3	

MAT — Mathematics elective

3

- MAT 120 or 125 recommended. Select in consultation with an academic advisor.

✓ Use your online tools: Check your [MercerMail](#) daily, utilize features of Office 365, and get to know [Student Planning](#).

✓ Take advantage of [Learning Centers](#) or [Online Tutoring](#) to support your studies and assignments.

SECOND SEMESTER

FIR 202 Water Supply for Fire Protection (3/0)

3

✓ Transitioning to college can be challenging. Meet with your [Success Coach](#) for guidance and support.

FIR 204 Fire Fighting Tactics (3/0)

3

✓ Apply for [financial aid](#) by May 1.

FIR — Fire Science elective

3

- Select from FIR 205, 206, 208, 209, 211.

✓ Contact professors with questions and use their office hours to develop a connection. Talk with them to get the inside scoop on how your profession works.

— — Social Science or Humanities general education elective

3

CMN 111 Speech: Human Communication

OR

3

✓ Be sure to visit the [Career Services](#) office to explore jobs, internships, and career information and get help with your resume and other career tools.

ENG 102 English Composition II (3/0)

✓ Apply for Continuing Student scholarships at www.mccc.edu/m-scholarships.

THIRD SEMESTER

<u>PHY 111</u>	Physical Science Concepts (2/2)	3	<p>✓ Keep in contact with each professor and your faculty advisor. Make sure you are on track to graduate on time.</p> <p>✓ Work with Career Services to formulate plans for after you've earned this degree.</p> <p>✓ Develop team and leadership skills by getting involved in activities and clubs.</p> <p>✓ Apply for Continuing Student scholarships at www.mccc.edu/m-scholarships.</p> <p>✓ Manage your stress! Take advantage of the MCCC pool, Fitness Center, free yoga and Zumba. Reach out for counseling or other support if you need it. Your Success Coach can connect you with resources.</p>
<u>FIR 110</u>	Fire Prevention and Code Enforcement I (6/2)	7	
<u>FIR</u> —	Fire Science elective	3	
	<ul style="list-style-type: none"> Select from FIR 205, 206, 208, 209, 211. 		
— —	<u>General Education elective</u>	3	
	<ul style="list-style-type: none"> Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective. 		

FOURTH SEMESTER

<u>FIR 201</u>	Hazardous Materials I (3/0)	3	<p>✓ Get ready to start your career! Begin the job application process.</p> <p>✓ Discuss your career plans with your faculty advisor. S/he can help you transition successfully.</p>
<u>FIR 203</u>	Fire Protection Systems (3/0)	3	
<u>FIR</u> —	Fire Science elective	3	
	<ul style="list-style-type: none"> Select from FIR 205, 206, 208, 209, 211. 		

FIR — Fire Science elective 3

- Select from FIR 205, 206, 208, 209, 211.

— — General Education elective 3

- Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective.

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