



Northeastern Junior College

Fire Science Technology is the study of:

- The physical properties of fire
- Strategy and tactics of fire suppression and prevention
- Life Safety Engineering
- Fire Administration
- Fire and Public Education
- Hazardous Materials handling, response and transportation
- Arson investigation
- Emergency Medical Response and Transportation
- Disaster Management, Preplanning, and Recovery

The specialized knowledge gained through an education in fire science equips first responders with the skills and mental tools to effectively save lives and protect property and the environment. Careers in emergency services require courage, endurance, integrity and the ability to make good and quick decisions in emergencies. Teamwork is necessary to safely solve an emergency situation. The qualities of hard work and self discipline must be quickly mastered through both online and traditional residential learning opportunities. You will take these characteristics from the classroom to the fire station and throughout your life.

The Fire Science Technology program at NJC offers an Associate of Applied Science degree designed to meet the needs of personnel seeking entry into the fire career fields. Courses are accessible through traditional classroom, online and hybrid formats. The NJC program meets all of the criteria as adopted in the Fire and Emergency Services Higher Education (FESHE) curriculum model.

You may also apply prior knowledge and skills earned through other classroom experiences via our Credit for Prior Learning assessment.

You may find through your training experience that you have a desire to follow other career paths within the emergency services professions. Some of the exciting careers include:

- Firefighter
- Fire Investigator
- Special Rescue and Tactics Technician
- Fire Administration Manager/Chief
- Environmental Crimes Investigator
- Public Education Specialist

- Hazardous Materials Technician/Coordinator
- Industrial Safety Officer
- FEMA Response Agent
- Emergency Manager
- Paramedic

In order to provide best services and marketability it is our desire to graduate students with the following state certifications:

- Fire Fighter I
- Hazardous Materials Operations Level
- Wildland Fire Fighter (Red Card)
- Emergency Medical Technician Basic

## Required Courses

FST 102	Intro to Fire Science & Suppression	3.0
FST 103	Firefighter Occupational Health and Safety	3.0
FST 107	Hazardous Materials Operations (Level I)	3.0
FST 202	Firefighting Strategy and Tactics	3.0
FST 259	Wildland Firefighting Strategy and Tactics	3.0
FST 206	Fire Co Supervision and Leadership	3.0
HPR 102	CPR for Professionals	0.5
FST 100	Firefighter I	9.0
FST 104	Fire Protection Systems	3.0
FST 105	Building Plans and Construction	3.0
FST 106	Fire Inspection Practices	3.0
FST 204	Fire Codes and Ordinances	3.0
FST 201	Instructional Methodology	3.0
		<b>Total: 42.5</b>

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## General Education Courses

### English

ENG 121 English Composition I or ENG 131 Technical Writing - 3  
 COM 115 (Public Speaking) - 3 6.0

### Math

MAT 107 Career Math or higher level math course 3.0

### Science

BIO 106 Basic Anatomy and Physiology	4.0
<b>Social &amp; Behavioral Science</b>	
PSY 101 General Psychology I or PSY 102 General Psychology II	3.0
<b>Other</b>	
CIS 118 Intro to PC Applications	3.0
<b>Total: 19.0</b>	

**Elective Courses (select a minimum of 6 elective credits)**

FST 101	Firefighter II	6.0
FST 203	Fire Science Hydraulics	3.0
FST 205	Fire Cause Determination	3.0
FST 250	Chemistry for Fire Protection	3.0
FST 150	Introduction to Fire Prevention Education	3.0
FST 137	Vehicle Extrication	2.0
FST 253	Fire Ground Organization and Command	3.0
FST 254	Hazardous Materials Technician Level	3.0
EMS 115	First Responder	3.0
EMS 125	EMT Basic	9.0
EMS 170	EMT Basic Clinical	1.0

**Total Elective: 6.0 hours**

<b>Total hours for graduation: 67.5</b>
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<p><b>Note:</b> Students interested in a fire career that incorporates Emergency Medical Technician – Paramedic level work must successfully complete both Anatomy and Physiology I and II (BIO 201/202) courses.</p>
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## **Suggested Associate of Applied Science Degree Path – Structural Emphasis**

<b>Course</b>	<b>Title</b>	<b>Credits</b>
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### **1<sup>st</sup> Semester – Fall**

FST 102	Introduction to Fire Science & Suppression (A Term)	3
FST 103	Firefighter Occupational Health & Safety (B Term)	3
CIS 118	Introduction to PC Applications	3
BIO 106	Basic Anatomy & Physiology	4
HPR 102	CPR for Professionals	0.5
EMS 125/170	EMT Basic and clinical ( <i>possible elective</i> )	10.0

### **Cross-term courses (Mid-October through Mid-May)**

FST 100	Firefighter I	9
FST 107	Hazardous Materials Operations Level	3
FST 160	Candidate Physical Abilities Preparation Class	3

Successful completion of these courses is a requirement for placement as a cadet/intern in area fire stations. Please see advisor for prior approval.

### **2<sup>nd</sup> Semester – Spring**

PSY 101	General Psychology I <b>OR</b> PSY 102 General Psychology II	3
MAT 107	Career Math (or Higher Level)	3
FST 106	Fire Inspection Practices (A Term)	3
FST 202	Fire Fighting Strategy and Tactics (B Term)	3

### **3<sup>rd</sup> Semester – Fall**

ENG 121	English Composition <b>OR</b> ENG 131 Technical Writing I	3
FST 104	Fire Protection Systems (A Term)	3
FST 105	Building Plans and Construction (Full Term)	3
FST 201	Instructional Methodology (B Term)	3
FST 204	Fire Codes and Ordinances (B Term)	3

### **4<sup>th</sup> Semester – Spring**

COM 115	Public Speaking	3
FST 203	Fire Hydraulics (A Term) ( <i>possible elective</i> )	3
FST 205	Fire Cause Determination (A Term) ( <i>possible elective</i> )	3
FST 206	Fire Company Supervision & Leadership (B Term)	3
FST 250	Chemistry for Fire Protection (B Term) ( <i>possible elective</i> )	3
FST 259	Wildland Fire Fighting Strategy & Tactics (B Term)	3