

# Fire Service Technology & Fire Service Certificate (FST & FSTC)

## Fire Service Technology (FST)

The Fire Service Technology program at Cincinnati State prepares students for entry-level jobs in fire service as a firefighter/emergency medical technician (EMT).

This program meets National Fire Protection Association standards and objectives for Firefighter 1 and Firefighter 2. Graduates of the program earn an Associate of Applied Science degree.

For hands-on fire training class eligibility, students must:

- Successfully perform and complete the Fire Cadet Fitness Evaluation.
- Complete the State Application for Admission to a Fire Training Course. This application screens for age, criminal convictions, and substance abuse that may disqualify students from state certification. Documentation must be provided to the Ohio Department of Public Safety for questionable cases.
- Have the Physical Exam Form (for firefighters) completed by a qualified physician.
- Present copies of previous certifications held pertaining to firefighting and emergency medical services.

Graduates who complete the associate's degree may continue their education at the University of Cincinnati to earn a bachelor's degree.

The Fire Service Technology program is accredited by The Ohio Department of Public Safety, Department of Emergency Medical Services, P.O. Box 182073, 1970 West Broad Street, Columbus, OH 43218-2073. Phone: (614) 466-9447.

For more information, please contact the Health and Public Safety Division at (513) 569-1670.

To apply for this program at Cincinnati State, visit the Admissions (<http://www.cincinnati.state.edu/academics/admission/>) section of the College website.

## Fire Service Certificate (FSTC)

The Fire Service Certificate program provides specific education, training, and skills needed to obtain employment at a fire department. The Emergency Medical Technician course and the Firefighter 1 and Firefighter 2 courses that are part of the certificate prepare students for the State of Ohio's Certification exams.

Successful completion of the state exams is required before certification cards are issued by the State of Ohio.

The Fire Service certificate program offers a fast track to employment. All credits earned while completing this certificate also can be applied to the Fire Service Technology associate's degree.

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## Fire Service Technology (FST)

**Program Prerequisite:** MAT 093 Math Literacy, ENG 085 Applications of College Reading and Writing, or appropriate placement.

Semester 1		Lec	Lab	Credits
FYE 1XX		1	0	1
First Year Experience Elective (B)				
FST 101	Fire Cadet Fundamentals ( B )	1	2	2
FST 105	Firefighter Physical Preparedness ( T )	1	2	2
EMS 110	Emergency Medical Technician Theory and Practice ( T )	5	4	7
FST 136	Emergency Vehicle Operator ( T )	0	2	1
Semester 2				
FST 131	Firefighter Professional 1 ( B )	4	6	6
ENG 101	English Composition 1 ( G )	3	0	3
FST 123	Principles of Emergency Services ( B )	3	0	3
FST 120	Fire Behavior and Combustion ( T )	2	0	2
Semester 3				
FST 129	Fire Prevention ( T )	3	0	3
FST 132	Firefighter Professional 2 ( T )	3	6	5
1XX		2	2	3
Mathematics Elective (G)				
10X English Composition Elective (G)		3	0	3
Semester 4				
FST 126	Fire Protection Systems ( T )	2	0	2
FST 294	Internship 1: Fire Service Technology ( T )	1	40	2
FST 228	Legal Aspects of the Emergency Services ( T )	3	0	3
XXX XXX		3	0	3
Social Science Elective (G)				
XXX XXX		1	3	2
EMS / FST Elective (T)				
Semester 5				

FST 223	Principles of Fire and Emergency Services Safety and Survival ( T)	2	0	2
FST 226	Building Construction for Fire Protection ( T)	3	0	3
COMM 1XX Communication Elective ( B)		3	0	3
PHI 110	Ethics ( G)	3	0	3
<b>Total Credits:</b>		<b>52</b>	<b>67</b>	<b>64</b>

## Electives

### First Year Experience Elective

FYE 100	College Success Strategies: Overview	1
FYE 105	College Success Strategies: Overview and Application	2
FYE 110	College Success Strategies: Practice and Application	3

### Mathematics Elective

MAT 115	Pre-Statistics	3
MAT 120		
MAT 131	Statistics 1	3

### English Composition Elective

ENG 102	English Composition 2: Contemporary Issues	3
ENG 103	English Composition 2: Writing about Literature	3
ENG 104	English Composition 2: Technical Communication	3
ENG 105	English Composition 2: Business Communication	3

### Social Science Elective

PSY 110	Introduction to Psychology	3
SOC 105	Introduction to Sociology	3

### EMS / FST Elective

EMS 120	Paramedic Anatomy and Physiology	3
FST 258	Rapid Assistance and Self-Rescue Operations	2

### Communication Elective

COMM 105	Interpersonal Communication	3
COMM 110	Public Speaking	3

Some courses are offered in alternative versions identified with a letter after the course number-- for example, ENG 101 and ENG 101A.

- This curriculum displays only course numbers without the added letter.
- The alternative version, when available, meets the requirements of the course version without the added letter.

The letters G, B, and T (displayed after course titles or elective descriptions) identify types of courses required by the Ohio Department of Higher Education as part of an associate's degree curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

## Fire Service Certificate (FSTC)

**Program Prerequisites:** ENG 085 Applications of College Reading and Writing (minimum grade C) or appropriate placement.

Semester 1		Lec	Lab	Credits
FST 105	Firefighter Physical Preparedness	1	2	2
FST 101	Fire Cadet Fundamentals	1	2	2
FST 136	Emergency Vehicle Operator	0	2	1
EMS 110	Emergency Medical Technician Theory and Practice	5	4	7
Semester 2				
FST 131	Firefighter Professional 1	4	6	6
FST 123	Principles of Emergency Services	3	0	3
FST 120	Fire Behavior and Combustion	2	0	2
Semester 3				
FST 129	Fire Prevention	3	0	3
FST 132	Firefighter Professional 2	3	6	5
<b>Total Credits:</b>		<b>22</b>	<b>22</b>	<b>31</b>

## Fire Safety (FST, FSTL)

- Perform and function as a Firefighter 2 certified by Ohio Department of Public Safety (ODPS) and nationally accredited by National Board on Fire Service Professional Qualifications (commonly known as the Pro Boards).
- Perform and function as an Emergency Medical Technician (EMT) certified as an Ohio and National EMT.
- Demonstrate the importance and value of functioning as a team member at emergency scenes.
- Provide additional value to the community through non-emergency assistance involving life safety education, inspections, and support at community events.
- Promote and practice safety at all fire department and community functions.
- Display and promote a healthy lifestyle and environment.

## Faculty

### Advisor

Shawn Stacy, MS, EFO, NREMT-P  
shawn.stacy@cincinnati.state.edu

### Advisor/Co-op Coordinator

Phil Vossmeier, AAS, FF1, FF2  
philip.vossmeier@cincinnati.state.edu

## Courses

### **FST 101 Fire Cadet Fundamentals**

**2 Credits. 1 Lecture Hour. 2 Lab Hours.**

A course on fundamental concepts and skills that apply to the fire cadet. Topics include: safety procedures and equipment, self-discipline, fire ground principles, emergency communication and systems, and evolving technologies and trends in firefighting.

Prerequisites: Instructor Consent  
Instructor Consent Required

### **FST 103 Evolution of the Fire Service**

**2 Credits. 2 Lecture Hours. 0 Lab Hour.**

A course on the growth of the fire service from its creation through the 21st century. Topics include: changes in suppression methods, building codes, and rescue techniques; administrative philosophies; and personnel behaviors.

Prerequisites: None

### **FST 105 Firefighter Physical Preparedness**

**2 Credits. 1 Lecture Hour. 2 Lab Hours.**

A course on preparing individuals for the rigors of firefighting, including balanced physical conditioning that incorporates all basic factors of fitness.

Prerequisites: Instructor Consent  
Instructor Consent Required

### **FST 120 Fire Behavior and Combustion**

**2 Credits. 2 Lecture Hours. 0 Lab Hour.**

A course on theories and fundamentals of how and why fires start and spread, and how fires are controlled. Topics include: the chemistry of fire, combustion and heat transfer, stages of fire growth, toxic gases and smoke, and extinguishing agents.

Prerequisites: ENG 085 and MAT 093, or appropriate placements  
Ohio Transfer Assurance Guide Approved

### **FST 123 Principles of Emergency Services**

**3 Credits. 3 Lecture Hours. 0 Lab Hour.**

A course on fire protection as an industry. Topics include: philosophy and history of fire services, fire departments as part of local government, protection systems, regulations and laws, and introductory fire ground strategy and tactics.

Prerequisites: ENG 085 and MAT 093, or appropriate placements  
Ohio Transfer Assurance Guide Approved

### **FST 126 Fire Protection Systems**

**2 Credits. 2 Lecture Hours. 0 Lab Hour.**

A course on design and operation of fire alarm systems. Topics include: water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers.

Prerequisites: ENG 085 and MAT 093, or appropriate placements  
Ohio Transfer Assurance Guide Approved

### **FST 129 Fire Prevention**

**3 Credits. 3 Lecture Hours. 0 Lab Hour.**

A course on fundamental concepts of fire prevention. Topics include: history, philosophy, organization, and operation of a fire prevention bureau; use and application of codes and standards; plan review; fire inspections; fire and life safety education; and fire investigation.

Prerequisites: ENG 085 and MAT 093, or appropriate placements  
Ohio Transfer Assurance Guide Approved

### **FST 131 Firefighter Professional 1**

**6 Credits. 4 Lecture Hours. 6 Lab Hours.**

A course covering NFPA 1001 Firefighter 1 and 2 objectives. Topics include: ladders, personal protection clothing, self-contained breathing apparatus (SCBA), fire extinguishers, search and rescue, ropes and knots, and hoses and nozzles. Students must successfully complete FST 131 and FST 132 and earn a passing score on the state firefighter exam to obtain Ohio Firefighter II certification.

Prerequisites: ENG 085 or appropriate placement, and FST 101 and FST 105, and instructor consent  
Instructor Consent Required

### **FST 132 Firefighter Professional 2**

**5 Credits. 3 Lecture Hours. 6 Lab Hours.**

A continuation of FST 131, covering NFPA 1001 Firefighter 1 and 2 objectives. Topics include: fire streams and foam, auto extrication, fire control, fire protection systems, and pre-incident surveys. Students must earn a passing score on the state firefighter exam to obtain Ohio Firefighter II certification. PROBOARD accreditation is available for interested students.

Prerequisites: FST 131 and instructor consent  
Instructor Consent Required

### **FST 136 Emergency Vehicle Operator**

**1 Credit. 0 Lecture Hour. 2 Lab Hours.**

A course on safe driving practices while responding in emergency vehicles. Topics include: techniques for safe operation, post-collision analysis, and unsafe practices during emergency response. Students must have a valid driver's license.

Prerequisites: Instructor consent, and ENG 080 and MAT 093, or appropriate placements  
Instructor Consent Required

### **FST 161 Fire Officer 1**

**4 Credits. 4 Lecture Hours. 0 Lab Hour.**

A course on preparing for the role of company officer, using NFPA 1021 Fire Officers Professional Qualifications Level 1 objectives. Topics include: human resource management, community and government relations, inspections, investigations, emergency service delivery, and safety. This course is delivered in an online format.

Prerequisites: FST 142

### **FST 162 Fire Officer 2**

**4 Credits. 4 Lecture Hours. 0 Lab Hour.**

A continuation of FST 161, using standards defined for NFPA 1021 Fire Officers Professional Qualifications Level 2. This course is delivered in an online format.

Prerequisites: FST 161

### **FST 223 Principles of Fire and Emergency Services Safety and Survival**

**2 Credits. 2 Lecture Hours. 0 Lab Hour.**

A course on the history and basic principles of the national firefighter life safety initiatives, focusing on the need for cultural change throughout the emergency services.

Prerequisites: FST 142 or FST 145  
Ohio Transfer Assurance Guide Approved

**FST 226 Building Construction for Fire Protection**

**3 Credits. 3 Lecture Hours. 0 Lab Hour.**

A course on building construction in relation to firefighting and life safety. Topics include: elements of construction and design, building inspection factors, pre-planning fire operations, and safe operations during emergencies.

Prerequisites: FST 141

Ohio Transfer Assurance Guide Approved

**FST 228 Legal Aspects of the Emergency Services**

**3 Credits. 3 Lecture Hours. 0 Lab Hour.**

A course on legal issues related to emergency services. Topics include: the American legal system; recent court decisions, events, and statutes; Americans with Disabilities Act; Family Medical Leave Act; Fair Labor Standards Act; and HIPAA.

Prerequisites: FST 100

**FST 258 Rapid Assistance and Self-Rescue Operations**

**2 Credits. 1 Lecture Hour. 3 Lab Hours.**

A course on saving your own life or saving lives of other firefighters. Topics include: MAYDAY, fire ground safety, communications, self awareness, rapid entry team preparedness, and survival techniques.

Prerequisites: FST 132

**FST 265 Fire Service Instructor**

**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on techniques for teaching adult learners knowledge and skills required for the Fire Services field, using NFPA 1041 Instructor 1 and 2 objectives. Topics include: domains of learning, learning outcomes and objectives, classroom preparedness, student safety, and legal obligations. Students must have five years experience as a firefighter.

Prerequisites: FST 142 and Instructor consent

Instructor Consent Required

**FST 268 Fire Safety Inspector**

**3 Credits. 2 Lecture Hours. 3 Lab Hours.**

A course on fire safety inspection procedures and responsibilities, using NFPA 1031 objectives. Students who are members of an Ohio Fire Department may take the state exam for Fire Safety Inspector at the end of the course.

Prerequisites: FST 142

**FST 294 Internship 1: Fire Service Technology**

**2 Credits. 1 Lecture Hour. 40 Lab Hours.**

Students seeking an associate's degree participate in an unpaid field learning experience related to their degree. Students must follow applicable policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: FST 142 or FST 145 (minimum grade C for either)

Instructor Consent Required