

FIRE SCIENCE TECHNOLOGY (AAS)

Public Service

Program website (<https://www.harpercollege.edu/academics/public-service/fire-science/fire-science-technology-degree.php>)

Program Overview

This 60 credit-hour program in fire science technology is designed to allow students to master fundamental principles in fire and emergency services, fire prevention principles, fire behavior, firefighting strategy and tactics, fire investigation, hazardous materials, as well as the basics of urban, rural, and wild-land firefighting. Many of the courses offered have course approval with the Office of the Illinois State Fire Marshal. The program also provides current firefighters with the education needed to broaden their career paths. This degree program is recognized through Fire and Emergency Services Higher Education (FESHE), a network of the U.S. Fire Administration's National Fire Academy. Many fire departments now require an AAS degree in Fire Science Technology before the student is eligible for entry-level positions while other fire departments offer promotional and salary incentives to graduate.

Program Requirements

First Semester		Hours
ENG 101	Composition I	3
FIS 100	Fundamentals of Fire and Emergency Services	3
FIS 121	Fire Behavior and Combustion	3
FIS 122	Fire Prevention Principles	3
MGT 150	Business Math ¹	3
Hours		15
Second Semester		Hours
BIO 260 or NTR 101	Human Anatomy or Fundamentals of Nutrition	3
FIS 103	Firefighting Strategies and Tactics	3
FIS 104	Building Construction for Fire Protection	3
FIS 132	Hazardous Materials	3
FIS 260	Emergency Services Safety	3
Hours		15
Third Semester		Hours
FIS electives (p. 1)		9
PSY 101	Introduction to Psychology ⁺	3
SPE 101	Fundamentals of Speech Communication	3
Hours		15
Fourth Semester		Hours
FIS 145	Fire and Emergency Services Instructor	3
FIS 212	Fire Protection Systems	3
FIS electives (p. 1)		9
Hours		15
Total Hours		60

¹ The mathematics requirement for this degree can be met with MGT 150 (Business Math) or Math Competency. See Math

Competency options (<https://www.harpercollege.edu/testing/docs/math-competency-options.php>) for information. Students who use Math Competency to meet the mathematics requirement must complete an additional three credit-hour AAS General Education elective. See full list of AAS General Education Electives. (<https://catalog.harpercollege.edu/catalog/programs/aas-general-education-electives/>)

+ This course meets the World Culture and Diversity graduation requirement.

FIS Electives

Code	Title	Hours
Select at least 18 credit hours from the following courses:		18
FIS 102	Fire Service Management and Leadership	
FIS 106	Fire Service Career Exploration Practicum	
FIS 109	Basic Firefighter Certification	
FIS 200	Fire Service Internship	
FIS 210	Fire-Arson Investigation	
FIS 230	Fire and Emergency Services Law	
FIS 240	Fire Apparatus Engineer	
FIS 270	Fire Service Technical Rescue	
EMG 131	Public Safety Dispatcher I	
EMG 231	Public Safety Dispatcher II	
EMS 111	Emergency Medical Technician Preparatory ¹	
EMS 112	Emergency Medical Technician: Medical Emergencies ¹	
EMS 113	Emergency Medical Technician: Trauma Emergencies ¹	

¹ Please note: EMS 111, EMS 112, and EMS 113 are recommended which will provide students with an Emergency Medical Technician Certificate.

Program Learning Outcomes

- Determine the origin and causes of fires.
- Apply skills to identify and solve firefighting problems.
- Apply tactics and strategies to emergency fire incidents.
- Respond to emergencies related to hazardous materials.
- Demonstrate fire safety and emergency scene safety procedures.
- Demonstrate fire prevention procedures and techniques.
- Demonstrate knowledge of arson investigation procedures.
- Demonstrate ability to function as a member of a team.
- Demonstrate physical fitness and health consciousness.
- Utilize technical fire protective and suppression equipment.
- Effectively communicate within and outside the organization, in both written and oral formats.