

FIRE SCIENCE, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Fire Science program includes the necessary general education and specialized fire and emergency services coursework to prepare students for careers in the fire service. Students will learn fundamental firefighting skills such as utilizing protective clothing and equipment, conducting search and rescue operations, advancing hoselines, and operating fire streams. Students will also be challenged with the academic aspect of firefighting in subjects including building construction, fire behavior, strategies and tactics, and fire prevention. With the knowledge, skills, and abilities gained from this program of study, students will be aptly prepared for a career in the fire service.

Students are required to complete internship credits as part of their degree plan. During this internship, students become affiliated with a fire department and gain valuable on-the-job experience while working with professional firefighters. Students have the opportunity to build a professional network, learn through practical experience (i.e. training, emergency response, etc.), and receive valuable leadership and guidance. It is highly recommended that students complete their internship credits locally, while in school to maximize the experience.

For more information, please visit the program website (<http://programs.socc.edu/fire-science>).

Graduation Requirements

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the AAS Fire Science degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

Pre-Program Courses

Students are required to take the following courses *prior to* the program courses, depending on students' college placement information. See advisor for details:

Code	Title	Credits
CIS90	Computer Basics (or demonstrate proficiency)	2
MTH20	Basic Mathematics (or placement in higher math course)	4
WR90R	Academic Literacy (or placement in higher writing course)	4

Program Guide

Course	Title	Credits
First Year		
Fall		
FS100	Principles of Emergency Services	3
FS105	Firefighter Fundamentals I	2
FS180	Internship: Fire Science	1

MTH60	Algebra I ¹	4
WR121 or WR121H	English Composition ² or English Composition w/Honors	3
Credits		13
Winter		
CIS120	Concepts of Computing	4
FS110	Firefighter Fundamentals II	2
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combust	3
FS180	Internship: Fire Science	1
Required Program Course - Speech ³		3
Credits		16
Spring		
FS115	Firefighter Fundamentals III	2
FS125	Principles of Fire and Emergency S Health, Wellness, and Fitness ⁴	4
Required Program Course - Human Relations ⁵		3
Specific Elective ⁶		4
Credits		16
Second Year		
Fall		
FS123	Structural Firefighter I (or specific elective) ⁶	4
FS200	Strategy and Tactics	3
FS205	Fire Prevention	3
FS231	Fire Protection Hydraulics and Wate	3
FS280	CWE: Fire Science	1
Credits		14
Winter		
FS210	Hazardous Materials for First Respo (or specific elective) ⁶	2
FS215	Legal Aspects of Emergency Services	3
FS220	Fire Protection Systems	3
FS280	CWE: Fire Science	1
EMT151	Emergency Medical Technician Part A	5
Specific Elective ⁶		2
Credits		16
Spring		
FS130	Fire Apparatus Driver/Operator (or specific elective) ⁶	1
FS222	Fire Instructor I (or specific elective) ⁶	3
FS225	Prin of Fire & Emerg Service Admin	3
FS232	Occupational Safety and Health ES	3
EMT152	Emergency Medical Technician Part B	5
Credits		15
Total Credits		90

¹ MTH65 Algebra II or higher may be substituted for MTH60 Algebra I, excluding MTH81 Applied Mathematics for Culinary Arts and MTH211 Fundamentals of Elementary Mathematics I.

² Students may substitute three (3) credits of Writing at a higher level than WR121 to fulfill this requirement.

- ³ Required Program Course - Speech options: SP100 Basic Speech Communications, SP111 Fundamentals of Public Speaking, SP218 Interpersonal Communication, SP219 Small Group Discussion, or SP220 Gender and Communication.
- ⁴ PE231 Wellness for Life, HE250 Personal Health or three (3) credits of PE185 sport/activity will fulfill this requirement.
- ⁵ Required Program Course - Human Relations options: BA110 Group Dynamics for Teams, BA120 Leadership Development, BA285 Human Relations in Organizations, PSY100 Introduction to Psychology, PSY201 General Psychology, PSY201H General Psychology w/Honors, PSY202 General Psychology, PSY202H General Psychology w/Honors, PSY203 General Psychology, or PSY203H General Psychology w/Honors.
- ⁶ Student may take any FS, EM, EMT, and/or CJ course to fulfill this requirement. The courses selected to fulfill the Elective requirement must not be a specified requirement of this degree program and at least eight (8) credits of specific electives must be FS courses.

Program Student Learning Outcomes

Upon successful completion of this program, the student will be able to:

- Demonstrate technical proficiency in fundamental firefighting skills.
- Apply critical-thinking and decision-making skills relevant to fire service scenarios.
- Demonstrate behaviors consistent with professional and employer expectations.