

# FIRE SCIENCE, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Fire Science is designed to meet the needs of students who plan on pursuing a bachelor's or higher degree at a university. Fire departments and private agencies are increasingly expecting candidates for administrator and supervisor positions to have higher levels of education. Fire Science coursework is developed using model curriculum from the United States Fire Administration's Fire and Emergency Services Higher Education initiative. Students will study relevant topics including building construction, firefighting strategies and tactics, fire prevention, and fire protection systems.

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 AS in 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
MTH95	Intermediate Algebra (or placement in higher math course)	4
WR90R	Academic Literacy (or placement in higher writing course)	4

## Program Guide

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	3
MTH105	Math in Society <sup>1</sup>	4
WR121 or WR121H	English Composition or English Composition w/Honors	3
	Health, Wellness, and Fitness <sup>2</sup>	3
	Required Program Course - Arts and Letters <sup>3</sup>	3
	Credits	16
<b>Winter</b>		
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combust	3
MTH243	Intro to Probability and Statistics Statistics	4

WR122 or WR122H or WR227	English Composition or English Composition w/Honors or Report Writing	3
	Required Program Course - Social Science <sup>3</sup>	3
	Credits	16
<b>Spring</b>		
FS125	Principles of Fire and Emergency S	4
	Required Program Course - Speech <sup>3</sup>	3
	Required Program Course - Social Science <sup>3</sup>	3
	Required Program Course - Arts and Letters <sup>3</sup>	3
	Credits	13
<b>Second Year</b>		
<b>Fall</b>		
FS200	Strategy and Tactics	3
FS205	Fire Prevention	3
FS231	Fire Protection Hydraulics and Wate	3
	Required Course - Social Science <sup>3</sup>	3
	Elective <sup>4</sup>	3
	Credits	15
<b>Winter</b>		
FS215	Legal Aspects of Emergency Services	3
FS220	Fire Protection Systems	3
	Required Course - Science, Mathematics, or Computer Science <sup>3</sup>	4
	Required Course - Arts and Letters <sup>3</sup>	3
	Elective <sup>4</sup>	3
	Credits	16
<b>Spring</b>		
FS225	Prin of Fire & Emerg Service Admin	3
FS232	Occupational Safety and Health ES	3
	Required Program Course - Science, Mathematics, or Computer Science <sup>3</sup>	4
	Elective <sup>4</sup>	4
	Credits	14
	Total Credits	90

<sup>1</sup> MTH105 Math in Society or higher, excludes MTH211 Fundamentals of Elementary Mathematics I.

<sup>2</sup> Health, Wellness, and Fitness courses include PE231 Wellness for Life, HE250 Personal Health, or any combination of PE185 courses totaling three (3) credits.

<sup>3</sup> Select appropriate course in specific subject area from the course listed in Associate of Science (<http://ecatalog.socc.edu/archive/2018-2019/programsaz/associate-science-degree-as/#programguidetext>) General Education Requirements category.

<sup>4</sup> Any course 100 level or higher maybe used as an elective.

## Program Student Learning Outcomes

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

- Apply critical-thinking and decision-making skills relevant to fire service scenarios.
- Apply core fire science knowledge to prevention, training, operational, and administrative situations relevant to the fire service.
- Demonstrate effective verbal and nonverbal communication in emergency and nonemergency situations including, but not limited to:

communicating on the fireground, drafting administrative documents, handling disciplinary issues, completing incident reports, and conducting public education.

- Complete general education requirements in preparation to transfer to a four-year degree program.