

Fire Science Technology

Overview

Associate of Applied Science

SPECIALIZATION:

Emergency Services Leadership

PURPOSE: The **Fire Science Technology** AAS has been designed for students desiring to advance in the fire protective service occupations and to acquire knowledge in fire protection fundamentals useful in related occupations. With the increasing complexity of modern technology in the fire protection field, it is necessary for fire protection personnel to acquire specialized knowledge and problem-solving skills to meet the challenge of a changing society.

OCCUPATIONAL OBJECTIVES: Firefighter, Fire Officer, Fire Protection Specialist, Fire Emergency Instructor, Fire or Building Inspector, Fire Investigator, Rescue Service, Emergency Medical Service, Hazardous Materials Services, Fire Marshall, Fire Chief, EMS Chief, Emergency Manager, Occupational or Industrial Safety and Risk Management, Fire Sprinkler Designer, Emergency Services Administrators, Sprinkler Installer or Mechanic, and related occupations.

The **Emergency Services Leadership specialization** is designed for first responders with at least five years of occupational experience seeking to advance into leadership positions. This specialization will provide first responders with the knowledge and skills to succeed in leadership, management, and administration within the emergency response services. Students will be prepared to prevent and manage critical fire and emergency safety situations, write technical fire and medical reports, manage personnel, and provide emergency scene leadership.

ADMISSION REQUIREMENTS: General college curricular admission

PROGRAM NOTES: The purpose of the associate of applied science (AAS) degree is to prepare students for immediate employment upon graduation. Four-year college and university transfer opportunities for AAS degrees, if existing, are usually very specific in nature. Reynolds has formal transfer articulation agreements with four-year institutions that enable graduates who qualify to transfer courses completed in the AAS degree. These transfer articulation agreements are subject to change or expiration. In addition, students may substitute some courses in the AAS degree with courses that typically transfer to senior institutions. Students interested in transferring in general or transferring under a formal transfer articulation agreement should consult their faculty advisor upon program entry for further guidance.

There are no physical requirements, such as height, weight, eyesight, and physical dexterity; however, the student should understand that there may be some requirements for employment in fire or rescue service agencies.

COMPUTER COMPETENCY REQUIREMENT: Students in this program will meet the college's computer competency

requirement by successfully completing ITE 115. Students can also meet this requirement by passing the college's computer competency exam, administered in the testing centers on each campus, in which case they will receive college credit for ITE 115. Students not passing the computer competency exam may retake the exam only once.

REYNOLDS COMMUNITY COLLEGE

Roadmap

CURRICULUM

COURSE	TITLE	LEC. HRS.	LAB. HRS.	CRS. CRE.
SDV 100	College Success Skills	1	0	1
ENG 111	College Composition I	3	0	3
FST 100 ¹	Principles of Emergency Services	3	0	3
FST 110	Fire Behavior and Combustion	3	0	3
BIO 107	Biology of the Environment	3	3	4
_____ ²	Social/Behavioral Science Elective	3	0	3
TOTAL		16	3	17
ENG 115	Technical Writing	3	0	3
FST 112 ¹	Hazardous Materials Chemistry	3	0	3
FST 115 ¹	Fire Prevention	3	0	3
MTH 130 ³	Fundamentals of Reasoning	3	0	3
_____ ²	Social/Behavioral Science Elective	3	0	3
ITE 115	Introduction to Computer Applications and Concepts	3	0	3
TOTAL		18	0	18
FST 240	Fire Administration	3	0	3
FST 235	Strategy and Tactics	3	0	3
_____ ^{2,4}	Personal Wellness Elective	0-1	0-2	1
FST 121	Principles of Fire and Emergency Services Safety and Survival	3	0	3
FST 220	Building Construction for Fire Protection	3	0	3
_____ ²	Humanities/Fine Arts Elective	3	0	3
TOTAL		15-16	0-2	16
FST 205	Fire Protection Hydraulics and Water Supply	3	0	3
FST 245	Fire and Risk Analysis	3	0	3
FST 210	Legal Aspects of Fire Service	3	0	3
FST 215	Fire Protection Systems	3	0	3
CST 100	Principles of Public Speaking	3	0	3
or	or			
FST 135	Fire Instructor I			
TOTAL		15	0	15
Total Minimum Credits for AAS Degree in Fire Science Technology				66

03.02.18

¹ Students with certain fire service certifications may be awarded credit for this course. See course descriptions or program head for more details.

² A list of approved general education electives (humanities/ fine arts, social/behavioral sciences, mathematics, science, and personal wellness) is provided in the General Education section of the catalog under Curriculum Planning and Design.

³ Students planning to attend a four-year institution are recommended to take MTH 154 or 161 in place of MTH 130.

⁴ EMS 111 or 112 will also satisfy the general education requirements for personal wellness. Students who have a valid EMT certificate will be given credit for EMS 112 when all other curriculum requirements have been met.

CURRICULUM: Emergency Services Leadership Specialization

COURSE	TITLE	LEC. HRS.	LAB. HRS.	CRS. CRE.
SDV 100	College Success Skills	1	0	1
ENG 111	College Composition I	3	0	3
CST 100 ¹	Principles of Public Speaking			
or	or	3	0	3
FST 135	Fire Instructor			
FST 121	Principles of Fire and Emergency Services Safety and Survival	3	0	3
BIO 107	Biology of the Environment	3	3	4
_____ ²	Social/Behavioral Science Elective	3	0	3
TOTAL		16	3	17
ENG 115	Technical Writing	3	0	3
_____ ³	Technical Elective	3-4	0	3-4
_____ ³	Technical Elective	3	0	3
MTH 130 ⁴	Fundamentals of Reasoning	3	0	3
_____ ²	Social/Behavioral Science Elective	3	0	3
ITE 115	Introduction to Computer Applications and Concepts	3	0	3
TOTAL		18-19	0	18-19
FST 240	Fire Administration	3	0	3
_____ ³	Technical Elective	3	0	3
_____ ^{5,6}	Personal Wellness Elective	0-1	0-2	1
_____ ³	Technical Elective	3	0	3

Associate Degrees & Certificates

FST 220	Building Construction for Fire Protection	3	0	3
PHI 101	Introduction to Philosophy			
or	or	3	0	3
PHI 111	Logic I (meets humanities/fine arts requirement)			
TOTAL		15-16	0-2	16
FST 115	Fire Prevention	3	0	3
FST 245	Fire and Risk Analysis	3	0	3
FST 210	Legal Aspects of Fire Service	3	0	3
FST 215	Fire Protection Systems	3	0	3
³	Technical Elective	3	0	3
TOTAL		15	0	15
Total Minimum Credits for AAS Degree Fire Science, Emergency Services Leadership Specialization				66

The following courses meet the required outcomes of **both** the International Association of Fire Chiefs Supervising Fire Officer **and** the International Association of Fire Chiefs Managing Fire Officer education recommendations:

BUS 117 - Leadership Development

FST 140 - Fire Officer I

FST 237 - Emergency Services Supervision

FST 250 - Fire Officer II

03.02.18

¹ Students with certain fire service certifications may be awarded credit for this course. See course descriptions or program head for more details.

² Select two different courses from the following to fulfill the six total credits of social/behavioral science electives required for this program: PSY 200, SOC 200, PLS 211.

³ Select five different courses from the list below to fulfill 15 total credits of technical electives.

⁴ Students planning to attend a four-year institution are recommended to take MTH 154 or 161 in place of MTH 130.

⁵ A list of approved personal wellness electives is provided in the General Electives section of the catalog under Curriculum Planning and Design.

⁶ EMS 111 or 112 will also satisfy the general education requirement for personal wellness. Students who have a valid EMT certificate will be given credit for EMS 112 when all other curriculum requirements have been met.

Technical Electives

The following course meets the required outcomes of the International Association of Fire Chiefs Supervising Fire Officer education recommendations:

BUS 205 - Human Resource Management

The following courses meet the required outcomes of the International Association of Fire Chiefs Managing Fire Officer education recommendations:

ACC 211 - Principles of Accounting

BUS 265 - Ethical Issues in Management

CST 229 - Intercultural Communication

MTH 155 - Statistical Reasoning