

# FIRE SCIENCE

This program is a Selective Program. Application requirements are included in the description below.

## Basic Firefighter

### Certificate

This program is designed to prepare students for the firefighting occupation. Students of the Basic Structure Fire Training Program, also known as the Fire Academy, will learn the functions of fire equipment, including the fire apparatus, as well as both the theory and practical application of firefighting technology. The program will prepare students for the Texas Basic Structure Fire Suppression certificate in accordance with the standards from the Texas Commission on Fire Protection. After a student has met the state's certification requirements, the student may be hired as a paid firefighter by Texas fire departments; other states may also recognize the certification if the student applies for and meets the qualifications for the optional IFSAC seal.

### Application Requirements

In order to be considered for entry into the South Texas College Fire Academy/Firefighter Certificate, all applicants must complete the requirements below which will be evaluated for accuracy, passing scores, and acceptable outcomes:

- A. Must be at least 18 years of age.
- B. Applicants with military background must have an honorable discharge to apply.
- C. Complete Fire Academy application (published on program webpage).
- D. Pass Physical Fitness Test administered by Fire Academy. Information about test dates are published on program webpage. (Applicant must have valid identification to participate in test.)
- E. Submit fingerprints for criminal history check through a state/national database. Applicants convicted of a Class A Misdemeanor, or above, or convicted of a Class B misdemeanor within the last 10 years will not be considered.
- F. Clearance by medical doctor.
- G. Must provide the following documents:
  - Certified Copy of Court Disposition (for all charges on criminal history)
  - Proof of U.S. Citizenship or Resident Alien
  - Valid Texas Driver's License
  - Official high school transcript (accredited) or proof of GED completion
  - Military Discharge Form (DD 214), if applicable.

## Fire Science Technology

### Associate of Applied Science

The Fire Science Technology Associate Degree program is designed to build on students' knowledge of the firefighting occupation. The program will prepare students for firefighter certifications beyond the basic fire suppression certification according to the standards from the Texas Commission on Fire Protection. Students will also be introduced to the organization and management of a fire department and the relationship of government agencies to the fire service. It also provides a sound foundation for continuous higher learning in fire protection, administration, and management.

## Program Learning Outcomes Certificate

1. The student will be able to identify the skills necessary in the firefighting occupation, such as utilizing communication equipment, extinguishers, ladders, SCBAs, and various other firefighting equipment.
2. The student will be able to describe the functions of firefighting equipment, fire apparatus, and the theory and practical applications of firefighting technology.
3. The student will be able to describe the characteristics of a live fire and other duties set forth by the Texas Commission of Fire Protection for basic fire suppression.

### Associate of Applied Science

1. The student will be able to identify the skills necessary in the firefighting occupation, such as utilizing communication equipment, extinguishers, ladders, SCBAs, and various other firefighting equipment.
2. The student will be able to describe the functions of firefighting equipment, fire apparatus, and the theory and practical applications of firefighting technology.
3. The student will be able to describe the characteristics of a live fire and other duties set forth by the Texas Commission of Fire Protection for basic fire suppression.
4. The student will be able to identify the concepts of Pre-Incident Planning.
5. The student will be able to identify concepts related to vehicle extraction.

## Advisory Committee Members

Dr. Armando Ocaña, Mayor, City of Mission  
Adrian Garcia, Fire Chief, Mission Fire Department  
Juan Gloria, Fire Chief, McAllen Fire Department  
Carlos Arispe, Deputy Chief, Pharr Fire Department

Rogelio Contreras, Fire Chief, Alamo Fire Department  
Baldo Perez, Deputy Fire Chief, Edinburg Fire Department  
Manuel Muniz, Fire Chief, Rio Grande City Fire Department

## Certificate

- Basic Firefighter Certificate (p. 1)

## Associate Degree

- Fire Science Technology, Associate of Applied Science (p. 2)

## Basic Firefighter Certificate

### TSI Exempt

Course	Title	Credit Hours
Fall		
FIRS 1301	Firefighter Certification I	3
FIRS 1407	Firefighter Certification II	4
FIRS 1313	Firefighter Certification III	3
FIRS 1319	Firefighter Certification IV	3
FIRS 1423	Firefighter Certification V	4
FIRS 1203	Firefighter Agility and Fitness Preparation	2
FIRS 1329	Firefighter Certification VI	3
FIRS 1433	Firefighter Certification VII	4
Credit Hours		26
Total Credit Hours		26

# Fire Science Technology

## Associate of Applied Science

### TSI Liable

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
FIRS 1301	Firefighter Certification I	3
FIRS 1407	Firefighter Certification II	4
FIRS 1313	Firefighter Certification III	3
FIRS 1319	Firefighter Certification IV	3
FIRS 1203	Firefighter Agility and Fitness Preparation	2
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
FIRS 1423	Firefighter Certification V	4
FIRS 1329	Firefighter Certification VI	3
FIRS 1433	Firefighter Certification VII	4
<b>Math and Natural Sciences Elective <sup>1</sup></b>		<b>3</b>
<b>Credit Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGL 1301	Composition I <sup>1</sup>	3
FIRT 1427	Building Construction in the Fire Service	4
FIRT 1353	Legal Aspects of Fire Protection	3
FIRT 1309	Fire Administration I	3
GOVT 2306	Texas Government <sup>1</sup>	3
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
SPCH 1315	Public Speaking <sup>1</sup>	3
FIRT 1333	Fire Chemistry I	3
FIRT 1338	Fire Protection Systems	3
FIRT 1301	Fundamentals of Fire Protection	3
<b>Humanities Elective <sup>1</sup></b>		<b>3</b>
<b>Credit Hours</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>60</b>

<sup>1</sup> Identifies courses to fulfill minimum 15 credit hour General Education requirement.

### Escrowed Credit

Upon successful completion of FIRT 1427 Building Construction in the Fire Service and FIRT 1353 Legal Aspects of Fire Protection, students who have successfully completed and maintain Firefighter Certification through a Texas Commission on Fire Protection licensed Fire Academy will be awarded 26 credit hours for the following courses:

FIRS 1301	Firefighter Certification I	3
FIRS 1407	Firefighter Certification II	4
FIRS 1313	Firefighter Certification III	3
FIRS 1319	Firefighter Certification IV	3
FIRS 1203	Firefighter Agility and Fitness Preparation	2
FIRS 1423	Firefighter Certification V	4
FIRS 1329	Firefighter Certification VI	3
FIRS 1433	Firefighter Certification VII	4
<b>Total Credit Hours</b>		<b>26</b>