

The Law and Public Service career cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. This career cluster includes occupations ranging from all aspects of the military, police officer and firefighter to political scientist and lawyer.

## Statewide Program of Study: Fire Science

The Fire Science program of study focuses on occupational and educational opportunities associated with fire prevention, protection, and firefighting. This program of study includes firefighter safety, building codes, and the necessary physical skills to perform rescues. Students will learn about preparedness, basic fire suppression techniques, basic arson investigation, hazardous material management, and educating the public about fire safety.



## **Secondary Courses for High School Credit**

Level 1 • Principles of Law, Public Safety, Corrections, and Security

Level 2 • Disaster Response

Fundamentals of Fire Protection (TBD)

Level 3 • Firefighter I

National Security

- · Emergency Medical Technician—Basic
- · Anatomy and Physiology
- Counseling and Mental Health
- Crisis Care (TBD)

### Level 4 • Firefighter II

- Career and Technical Education Project-Based Capstone
- Practicum in Law, Public Safety, Corrections, and Security
- Practicum in Law, Public Safety, Corrections, and Security + Extended Practicum in Law, Public Safety, Corrections, and Security
- · Career Preparation for Programs of Study
- Career Preparation for Programs of Study + Extended Career Preparation



Work-Based Learning Activities

- Shadow a fire chief to learn about fire department operations and skills needed to be a firefighter
- Intern with a fire inspection company to learn about building safety, fire prevention, and fire protection

Expanded Learning Opportunities

- Tour a local fire department
- Participate in SkillsUSA or TSA, or TPSA

### **Aligned Industry-Based Certifications**

- Basic Structure Fire Protection
- Emergency Care Attendant (ECA)
- Emergency Medical Technician Basic
- IAED Emergency Telecommunicator
- Mental Health Technician Certification (MHTC)
- Telecommunicator License



## **Example Postsecondary Opportunities**

### **Apprenticeships**

Fire Apprentice



#### **Associate Degrees**

- Emergency Medical Technology
- Fire Protection Technology

### **Bachelor's Degrees**

- Fire Science
- · Emergency Health Services

### Additional Stackable IBCs/License

- Hazardous Materials Awareness
- Fire Plan Examiner



## **Example Aligned Occupations**

## Emergency Medical Technicians

Median Wage: \$35,849 Annual Openings: 1,177 10-Year Growth: 19%

### **Firefighters**

Median Wage: \$59,879 Annual Openings: 2,235 10-Year Growth: 14%

# Fire Inspectors and Investigators

Median Wage: \$74,957 Annual Openings: 92 10-Year Growth: 14%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit: https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/lps-fire-science-

TEA.



# Statewide Program of Study: Fire Science

# **Course Information**

Course	Prerequisites   Corequisites	Career Clusters
Principles of Law, Public Safety, Corrections, and Security* 13029200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	<u> </u>

Course	Prerequisites   Corequisites	Career Clusters
<b>Disaster Response</b> N1303011 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Law, Public Safety, Corrections, and Security Recommended Corequisites: None	
Fundamentals of Fire Protection TBD (TBD credit)	Prerequisites: TBD Corequisites: TBD Recommended Prerequisites: TBD Recommended Corequisites: TBD	\(\frac{1}{2}\frac{1}{4}\)

Course	Prerequisites   Corequisites	Career Clusters
Firefighter I 13029900 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Law, Public Safety, Corrections, and Security Recommended Corequisites: None	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
National Security 13018800 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Government and Public Administration and Public Management and Administration or Principles of Law, Public Safety, Corrections, and Security or Junior Reserve Officer Training Corps (JROTC) coursework Recommended Corequisites: None	<u> </u>
Emergency Medical Technician—Basic N1303015 (2 credits)	Prerequisites: Biology Corequisites: None Recommended Prerequisites: Principles of Law, Public Safety, Corrections, and Security, and Anatomy and Physiology Recommended Corequisites: None	
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<sup>\*</sup> Indicates course is included in more than one program of study in this career cluster.





# Statewide Program of Study: Fire Science

## **Course Information**

Course	Prerequisites   Corequisites	Career Clusters
Anatomy and Physiology 13020600 (1 credit)	Prerequisites: One credit in biology and one credit in chemistry, Integrated Physics and Chemistry (IPC), or physics Corequisites: None Recommended Prerequisites: A course from the Health Science career cluster Recommended Corequisites: None	₩ <b>½</b> ;
Counseling and Mental Health* 13024600 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Human Services Recommended Corequisites: None	
Crisis Care* TBD (TBD credit)	Prerequisites: TBD Corequisites: TBD Recommended Prerequisites: TBD Recommended Corequisites: TBD	345

Course	Prerequisites   Corequisites	Career Clusters
Firefighter II 13030000 (3 credits)	Prerequisites: Firefighter I Corequisites: None Recommended Prerequisites: Principles of Law, Public Safety, Corrections, and Security Recommended Corequisites: None	\$ <del>\</del> \$
Career and Technical Education Project-Based Capstone* First Time Taken: 12701101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Practicum in Law, Public Safety, Corrections, and Security* First Time Taken: 13030100 (2 credits) Second Time Taken: 13030110 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	\$ <del>\$</del> \$

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# Statewide Program of Study: Fire Science

# **Course Information**

Course	Prerequisites   Corequisites	Career Clusters
Practicum in Law, Public Safety, Corrections, and Security + Extended Practicum in Law, Public Safety, Corrections, and Security* First Time Taken: 13030105 (3 credits) Second Time Taken: 13030115 (3 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	<b>₹</b>
Career Preparation for Programs of Study* First Time Taken: 12701121 (2 credits)	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Career Preparation for Programs of Study + Extended Career Preparation* First Time Taken: 12701141 (3 credits)	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

<sup>\*</sup> Indicates course is included in more than one program of study in this career cluster.

