

# Fire Science Degree

If you want to become a Firefighter it is a must that you complete the following to be a prime  
**Candidate.**

Keep in mind that this is only a sample from one college in the United States.

## Associate in Science in Fire Technology:

Firefighting is a dynamic public safety profession that requires a wide and ever-changing range of knowledge and skills. Areas of necessary knowledge include safety, fire behavior and suppression, rescue, emergency medical service delivery and operations, hazardous materials, building construction, detection and signaling systems and the incident command system. This program focuses on preparing the student for their first career in the fire service. This program includes educational opportunities for those employed within the fire service, as well as those within volunteer fire agencies. Courses include those required for transfer to four-year colleges, those required to meet eligibility requirements for employment, and those required for incentive salary increases and promotions.

## Program Learning Outcomes:

- Students will be able to engage in patient assessment considering patient pathophysiology and implement appropriate emergency medical care.
- Students will be able to identify and analyze building components, hazardous materials classifications and automated suppression systems.
- Students will be able to evaluate fire behavior and combustion and apply the appropriate fire suppression and rescue techniques.

Career/Transfer Opportunities: Career opportunities include the following: firefighter, firefighter EMT, emergency medical technician, fire investigator, fire prevention specialist, fire marshal, deputy fire marshal, fire officer, chief officer, hazardous materials, and public education.

To earn this degree, students must meet the following requirements:

1. Completion of 60-degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the Associate in Science graduation requirements.

### **Core Curriculum Courses Required:**

CHM 030A Fundamentals of Chemistry 3.0 Units

FPT 051 Fire Protection Organization 3.0 Units

FPT 052 Fire Behavior and Combustion 3.0 Units

FPT 053 Fire Protection Equipment and Systems 3.0 Units

FPT 054 Building Construction for Fire 3.0 Units

FPT 055 Fire Prevention Technology 3.0 Units

FPT 056 Hazardous Materials Technology 3.0 Units

MAT 000C Intermediate Algebra 5.0 Units

Plus 6 units from the following:

KIN 039A Fire Agility - Introduction 2.0 Units

FPT 057 Rescue Practices 3.0 Units

FPT 060 Wildland Fire Technology 3.0 Units

FPT 061 Fundamentals of Fire Suppression 3.0 Units

FPT 065 Emergency Medical Technician I Theory 6.0 Units

FPT 065C Emergency Medical Technician 1 0.5 Units

FPT 065L Emergency Medical Technician Laboratory 1.5 Units

FPT 180 Emergency Medical Technician-I Refresher 2.0 Units

Required Units for the Major: 32.0 Units

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0 Units

## **EMT Program:**

Many students choose to be a part the EMT "program" which are three courses of 8.0 units over the same semester:

- FPT 065 (EMT Theory/Lecture)
- FPT 065L (EMT Lab)
- FPT 065C (EMT Clinical)

The prerequisite for the program is the American Health Association BLS for Healthcare Provider (CPR) class.

This is offered as HOC 002 and is a one-day course.

# Candidate Physical Ability Test

To schedule any CPAT event, please visit [www.FCTOnline.org](http://www.FCTOnline.org).

The FCTC CPAT Testing Center is an indoor facility and is designed with the firefighter candidate in mind.

The Candidate Physical Ability Test, administered by Cal-JAC, measures the capabilities of firefighting recruits along eight job-specific areas.



*Stair Climb*



*Hose Drag*



*Equipment Carry*



*Ladder Raise*



*Forcible Entry*



*Search*



*Rescue Drag*



*Ceiling Breach & Pull*

For a modest registration fee, candidates receive an orientation and a rigorous, professionally run test covering the eight basic skills. For an additional fee, the CPAT equipment will be available to candidates on scheduled practice days.

The International standards of the Candidate Physical Ability Test states that each candidate have the opportunity to attend at least two orientation sessions within 8 weeks prior to taking the test. Additionally, the pre-test program offers each candidate the opportunity to perform at least two-timed practice runs prior to the test itself. If you choose not to participate in this pre-test program, you will be required to sign a waiver acknowledging that you are aware of the pre-test program, and have declined to include it in your preparations to complete the CPAT.

## Qualifications:

- Applicants must be at least 18 years of age
- Must show government issued photo identification

## **Dress Code:**

The dress code is strictly enforced for safety. The CPAT dress code for all events

- Long Pants (No Shorts)
- T-Shirt or sweatshirt
- Footwear with no open heel or toe (No five finger shoes, barefoot running shoes, individual toe shoes)
- No loose or restrictive jewelry

Candidates must be in proper CPAT attire before participating in any CPAT event.

## **Register and Schedule Early:**

Delays in taking the CPAT may result in not meeting fire department application deadlines and may not allow for ample time for the pre-test preparation program. We do not accept walk-in candidates at our testing centers. All candidates must have an appointment in order to test.

- [VIEW SCHEDULES](#)
- [CREATE AN ACCOUNT TO REGISTER ONLINE FOR THE CAL-JAC CPAT](#)

## **Fees:**

- \$150.00 for two Orientations and Test
- \$25.00 for each timed practice run (two recommended as part of the pre-test program)
- \$20.00 for lost or damaged CPAT Cards
- For information on financial assistance visit the California Fire Foundation website at [www.cafirefoundation.org](http://www.cafirefoundation.org) under scholarships and grants

## **Payment:**

- Fees must be paid when scheduling your CPAT event to secure your appointment
- Visa or MasterCard only

## **Refunds:**

- **All fees are non-refundable**
- A \$50.00 fee will be charged for rescheduling requests made less than 2 business days prior to a scheduled event
- We DO NOT accept reschedule requests on date of event. Failure to attend your scheduled event will result in a forfeiture of fees

- Unless arrangements have been made, prepaid events that are not scheduled and completed within 24 months of the original payment date will be cancelled and all fees forfeited

### **Career Options:**

- Firefighter
- Fire Inspector
- Fire Investigator
- Plan Check Engineer
- Fire Officer
- Chief Fire Officer

Note: some career options may require more than two years of college study. Classes beyond the Associate Degree level may be required for preparation for transfer to a university program.

### **Whatever you do – don't fail to:**

- Graduate from high school
- If it is too late go back and obtain your GED
- Obtain these certs along the way:
  - First Aid Cert
  - CPR Cert
    - Infant
    - Child
    - Adult
  - Class "C" drivers license
- Obtain your AS in Fire Science
- Obtain your EMT National Cert
- Obtain Your Paramedic National Cert

Simply put you can never be too prepared to compete with others seeking to become members of the fire service.

Remember don't depend on just one source of information.

You can't depend on any one person, school, firefighter, fire chief, etc. to provide you with all the support tools that can help you along the way to become a part of this great profession.

**Lastly, you can start as early as you like by joining the 100% Free:**

**Firefighter's ABC's Online Internship Program by joining at: [www.FirefightersABCs.com](http://www.FirefightersABCs.com)**

I hope our many 100% free support tools on our site will be shared by you with anyone seeking a career in the fire service and most of all please share with others in your network nationwide and kindly ask them to share.

Firefighter's ABC's also created a few videos related to diversity:

Please feel free to share with the youth in your community.

<https://www.youtube.com/channel/UCVUi7k86BU9Z7r17tKPXgFw/videos>

If you find them useful please subscribe to our YouTube page and share with others in the fire service or other community organizations.

Most of us dream of a career but seldom do we know how to make our dreams become a reality.

Similar is the process for aspiring Firefighters and Emergency Medical Service candidates.

Many wish to be part an honored profession such as the Fire Service or EMS field but don't know where or how to start.

I am sure many of the youth in your community face the same situation.

Thus, FFABC's was founded in 1999 to offer diverse and otherwise untapped job seekers resources and tools to streamline these efforts to enter this desired career field.

Yes, this may seem like a tough career to prepare for.

Please let me stress to you how important it is to prepare to be the best you can be and not let it be said that someone else was selected because they were better prepared.

I wish you the best.

Russell G. Hayden

Founder – Firefighter's ABC's

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