

# FIRE SCIENCE

## Curriculum Guide for Academic Year 2021-2022

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Students planning to **transfer** to a four-year college or university should refer to the ASSIST web site at [www.assist.org](http://www.assist.org) and **consult a counselor** before beginning a program of study. Please call 562-938-4561 for the LAC, or (562) 938-3920 for PCC to schedule a meeting with a counselor. Students may also wish to visit the Transfer Center on either campus.

Program of study leading to: <b>Associate in Science (A.S.) Degree</b>				
<u>REQUIRED CORE COURSES</u>		UNITS	In Progress	Completed Grade
FIRE 1	Fire Protection Organization	3		
FIRE 2	Fire Prevention Technology	3		
FIRE 3	Fire Protection Equipment and Systems	3		
FIRE 4	Building Construction	3		
FIRE 5	Fire Behavior and Combustion	3		
	<b>Subtotal Units</b>	<b>15</b>		
<b><u>IN ADDITION, complete NINE (9) UNITS from the following courses:</u></b>		<b>UNITS</b>		
	FIRE 53 Fire Hydraulics	3		
	FIRE 54 Hazardous Materials 1	3		
	FIRE 57 Introduction to Fire Tactics and Strategy	3		
	FIRE 58 Intro to Fire Company Administration	3		
	FIRE 61 Rescue Practices	3		
	FIRE 62 Fire Apparatus & Equipment	3		
	FIRE 64 Hazardous Materials 2	3		
	FIRE 65 Fundamentals of Fire Safety	3		
	FIRE 240 Firefighter I Physical Agility	0.5		
♦†	EMT 251 Emergency Medical Technician	4		
♠♦†	EMT 251L Emergency Medical Technician Laboratory	2		
	PUBAD 1 Introduction to Public Administration	3		
	<b>Subtotal Units</b>	<b>9</b>		
	<b>TOTAL UNITS</b>	<b>24</b>		

*Associate Degree requirements continue on the following page:*

**Associate Degree requirements continued from the previous page:**

For graduation with an **Associate in Science (A.S.) Degree with a major in Fire Science:**

1. **Minimum Unit Requirements:** §Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (Approved by College Curriculum Committee Spring 2012). For this degree, complete a minimum of 60 units in courses numbered 1-599. Please note that additional elective units may be required to meet this minimum based upon courses selected to fulfill General Education for the Associate Degree.

**Fire Science Major:** 24 units  
**General Education/A.S. §** 19 units

2. **Scholarship:** Maintain an **overall grade point average (GPA) of 2.0** ("C" average) based on all accredited college work applied to the degree, no matter where completed. For this **field of concentration, complete each course above** with a **grade of "C" or better**, or "P" if course is graded on a P/NP basis.
3. **Residence for the Degree:** Complete at least 12 semester units of the required 60 semester units in residence at Long Beach City College in order for the college to grant an Associate of Arts and/or an Associate of Science Degree.
4. **Residence for the Field of Concentration:** Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at **least 12 units** of the required 24 must be **completed at Long Beach City College**. Credit earned by exam, where applicable, may be included.
5. **General Education and Proficiency Requirements:** Complete the required A.A./A.S. General Education and Proficiency requirements\*, otherwise known as "Plan A". For Plan A requirements, refer to the general catalog or view it online at <http://osca.lbcc.edu>.
6. Complete and submit the degree application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu/>. Refer to the Schedule of Classes (<http://schedule.lbcc.edu>) and click the "Important Dates" link to view the actual deadline for each semester.

\*The requirements for general education/proficiency and the field of concentration (major) need to be from the same catalog year. This catalog year may be any year between the year of initial enrollment to the present, provided continuous enrollment is maintained throughout. See the catalog for definition of "continuous enrollment".

**Program of study leading to:  
Certificate of Achievement**

**REQUIRED COURSES**—Complete the 24 units of required courses as listed in the Associate Degree requirements box on the preceding pages.

**REQUIRED COURSES**

		In Progress	Completed
<b>TOTAL UNITS</b>	<b>24</b>		

For graduation with a **Fire Science Certificate of Achievement:**

1. Complete each of the **REQUIRED COURSES** listed above with a **minimum grade of "C"** or better, or "P" if course is graded on a P/NP basis.
2. Complete fifty percent (50%) or more of the unit requirements for this field of concentration in residence; this means at **least 12 units** of the required 24 must be **completed at Long Beach City College**. Credit earned by exam, where applicable, may be included.
3. Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu/>. Refer to the Schedule of Classes (<http://schedule.lbcc.edu>) and click the "Important Dates" link to view the actual deadline for each semester.

## Suggested Sequence of Classes

This is not an educational plan, as course offerings, student schedules, and circumstances vary. Students must meet all the prerequisites in order to be eligible for the sequence of courses.

A suggested, full-time sample sequence of courses to meet the unit requirement for the Associate Degree includes:

<u>First Semester</u>	<u>Units</u>	<u>Second Semester</u>	<u>Units</u>
ENGL course	3	FIRE 2	3
FIRE 1	3	FIRE 4	3
FIRE 3	3	G.E. Course	3-5
G.E. Course	3-5	G.E. Course	3-5
G.E. Course	3-5	<b>Semester Total</b>	<b>12 – 16</b>
<b>Semester Total</b>	<b>15 – 19</b>		
<u>Third Semester</u>		<u>Fourth Semester</u>	<u>Units</u>
FIRE 5	3	EMT 251	4
MATH Course	3	EMT 251L	2
FIRE Elective	3	G.E. Course	3-5
G.E. Course	3-5	G.E. Course	3-5
G.E Course	3-5	<b>Semester Total</b>	<b>12-16</b>
<b>Semester Total</b>	<b>15 – 19</b>		

## Career Opportunities

Students are educated and trained in the technical fields relating to fire and safety practices. This program also provides partial lower-division preparation for the baccalaureate degree in this field.

This **Certificate of Achievement** will prepare students for entry to a fire academy and for an entry-level position in private and public fire-related occupations.

This **Associate Degree** will prepare students for entry to a fire academy and for career advancement for those already employed in a fire-related industry.

## Program Mission and Outcomes

Prepare students for careers in the fire service and enhance skills for those who are currently employed in that area.

Outcomes:

- Demonstrate the ability to attain the Institutional Student Learning Outcomes. (ISLOs).
- Explore the history, development, structure, and functions of the American fire service.
- Apply prevention/protection/fire-fighting theories, principles, and concepts to address real-life situations in the field.
- Recognize the importance of and practice the safety behaviors in a professional fire service setting.
- Analyze, interpret, and evaluate prevention/protection/fire fighting theories, policies, practices, and procedures to develop strategies to prevent, control, and fight fires.

## Legend

† This course has a prerequisite. Prerequisite courses must be complete with at least a “C” or “P” grade. Refer to the General Catalog (<http://www.lbcc.edu/cat/index.html>), the Schedule of Classes (<http://schedule.lbcc.edu/>), or the online Credit Course Outline (<http://wdb-asir.lbcc.edu/coursecurriculum/courseetails/>) for specific prerequisite information.

♦ Students who complete this instruction as a portion of basic academy may use those credits to satisfy this requirement.

Ⓞ This course has a co-requisite.