

FIRE SERVICE TECHNOLOGY

FIRE SERVICE TECHNOLOGY COURSES

Updated: August 20, 2024

FST 1 - Fire Protection Organization

3 units

This course provides an overview to fire protection and emergency services, career opportunities in fire protection and related fields, culture and history of emergency services, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local government, laws and regulations affecting the fire service; fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, introduction to fire strategy and tactics, and life safety initiatives. 54 hours lecture. Transfer: CSU; C-ID# FIRE 100 X.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 2 - Principles of Fire and Emergency Services Safety and Survival

3 units

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services; assessing fire dangers and handling common fire situations; risk abatement and personal preparation for unforeseen fire emergencies; roles and responsibilities in educating the public on fire safety; development of a survival attitude using problem-solving techniques for increased situational awareness and self-reliance in an emergency. 54 hours lecture. Transfer: CSU; C-ID# FIRE 150 X.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 3 - Fire Behavior and Combustion

3 units

Theory and fundamentals of why fires start, spread, and are controlled. An in-depth study of fire chemistry and fire physics, characteristics of materials, extinguishing agents, and fire control techniques. 54 hours lecture. Transfer: CSU; C-ID# FIRE 140 X.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 4 - Fire Prevention

3 units

Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention and organization, organization and operation of a fire prevention bureau, use and applications fire codes and standards, plans review, fire inspections, identification and correction of fire hazards, fire and life safety education, and fire investigation. 54 hours lecture. Transfer: CSU; C-ID# FIRE 110 X.

Recommended Course Preparation: FST 1 with a minimum grade of C.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 5 - Fire Protection Systems

3 units

This course provides information relating to the features of design, and operations of fire alarm systems, water-based suppression systems, special hazard fire suppression systems and water supply for fire protection, smoke and thermal detection systems. Installation, testing and maintenance of automatic or manual protection systems, water supply for sprinkler and standpipe systems, and portable fire extinguishers. 54 hours lecture. Transfer: CSU; C-ID# FIRE 120 X.

- Credit - Degree Applicable

- Grading Option: Letter Grade

FST 6 - Building Construction for Fire Protection

3 units

This course provides the components of building construction related to fire and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fire and collapse emergencies. Development and evolution of building and fire codes will be studied in their relationship to past fires and collapses in residential, commercial, and industrial occupancies. 54 hours lecture. Transfer: CSU; C-ID# FIRE 130 X.

Recommended Course Preparation: FST 1 with a minimum grade of C.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 7 - Fire Service Conditioning & Physical Agility Development

1 unit

This course is an introduction to the components of physical fitness development and conditioning, with an emphasis in preparing students for the physical agility performance and testing standards required of "Emergency First Responder" Candidates entering into Police or Fire Academies. Students will be presented instruction on proper warm-up and stretching techniques, how to maintain and develop the components of fitness through increased muscular strength and muscular endurance, cardiovascular endurance and recovery, and increased flexibility and balance. Students will be introduced to Circuit Training and will also receive skills instruction on various testing parameters of the Nationally approved and recognized Certified Physical Agility Test (CPAT). Students will additionally receive instruction on various "Tools of the Trade" (i.e., Ladders, Fire Hose, SCBA) for developing proper skills in handling, lifting and carrying techniques as well as developing cardio-respiratory control and aerobic conditioning while wearing a "Self Contained Breathing Apparatus" (SCBA) under conditions of physical exertion. 54 hours laboratory. AA/VAS GE: VA. Transfer: CSU, UC; CSUGE: E.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 8 - Fire Strategy and Tactics

3 units

Fire Strategy and Tactics examines how a fire department responds to structure fires and other emergency incidents from the incident commander's viewpoint. The class examines strategies and tactics from the incident commander's viewpoint. Students are challenged with decision-making through a variety of occupancies as they utilize basic firefighting procedures and considerations. Principles of fire control, through utilization of manpower, equipment, extinguishing agents, and fire command and control procedures will be discussed and demonstrated. Using information on building construction types in fire control, pre-fire planning and the organized approach to decision making on the fire ground will be applied. The target audience for this course is second year FST students or working fire professionals who wish to promote to a supervisory role. 54 hours lecture. Transfer: CSU.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 10 - Fire Academy Preparation

1 unit

This course provides an orientation to the Firefighter 1 and Firefighter 2 Academy. This course concentrates on the 10 Mandatory testable evolutions for the IFSAC and PRO Board testing for the Structural Module of a CSFM ARTP/ALA Fire Academy. This course can also be used as a bridge summer course for High School students and others wishing to learn more about the physical and psychological rigors of a Fire Academy. The intended audience is HS students looking for a summer program, or students who have completed FST 7 Fire Service Conditioning and wish to expand their

knowledge of commonly used tools and equipment. 9 hours lecture, 27 hours laboratory.

Recommended Course Preparation: FST 7 with a minimum grade of C.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 11C - Standalone Firefighter I Skills Practice and Testing

1.5 units

This course prepares students to meet the State Fire Training (SFT) requirements for Fire Fighter I (FFI) including the capstone knowledge and skills necessary to pass. Upon successful completion of the IFSAC and Pro-Board Certification Exams at the end of the course, students will receive a pass letter from the SFT. 9 hours lecture, 54 hours laboratory.

Prerequisite: Completion of a Fire Academy using the Firefighter 2013 curriculum as the described by California State Fire Training and a letter from a recognized fire agency attesting to the fact that the applicant has met the aforementioned requirement. FST 11 with a minimum grade of C or completion of a Fire Academy using the Firefighter 2013 curriculum as the described by California State Fire Training and a letter from a recognized fire agency attesting to the fact that the applicant has met the aforementioned requirement.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

FST 12 - LPC Regional FIRE Academy - Firefighter 1 and Firefighter 2

17 units

This course provides the skills and knowledge needed for the entry-level firefighter to perform structural suppression activities, wildland fire suppression activities and hazardous materials mitigation and containment activities. This course covers topics in both Firefighter 1 and Firefighter 2 in accordance with the California State Fire Marshall 2019 Curriculum. 180 hours lecture, 378 hours laboratory. Transfer: CSU.

Prerequisite: EMS 30 with a minimum grade of C or a valid State of California EMT or PARAMEDIC license issued by the CA EMSA also meet this prerequisite. FST 1 with a minimum grade of C. FST 7 with a minimum grade of C or a valid CPAT (Candidate Physical Agility Test) or a BIDDLE (Firefighter Physical Agility) test also meet this prerequisite.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 13 - LPC Regional Fire Academy-Firefighter 2 Module

2.5 units

This course provides the skills and knowledge needed for the fire fighter to take on increased leadership roles and responsibilities pertaining to fire department communications, rescue operations, and fire and life safety initiatives, preparedness and maintenance of power tools. 27 hours lecture, 54 hours laboratory.

Prerequisite: Completion of a state approved ALA or ARTP Firefighter 1 academy which includes IFSAC Proboard certification testing. This may be taken concurrently with the Firefighter 1 academy with instructor approval.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 20 - CO 2A Human Resource Management for Company Officers

2.5 units

This course provides information on the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene. This is a required course for any Firefighter within State Fire Training and certification track who is seeking promotion to the rank of Company Officer. This course follows

all applicable mandates and content as identified by the CSFM State Fire Training description. 45 hours lecture. Transfer: CSU; C-ID# FIRE 200 X.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 21 - CO 2B General Administrative Functions for Company Officers

1.5 units

This course provides information on general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. 27 hours lecture. Transfer: CSU; C-ID# FIRE 210.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 22 - CO 2C Fire Inspections and Investigation for Company Officers

2.5 units

This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. This course is a requirement for aspiring Firefighters seeking promotion as a company officer. 45 hours lecture. Transfer: CSU; C-ID# FIRE 220.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 23 - CO 2D All - Risk Command Operations for Company Officers

2.5 units

This course provides information on conducting incident size-up; developing and implementing an initial plan of action involving single and multi-unit operations for various types of emergency incidents to mitigate the situation following agency safety procedures; conducting pre-incident planning; and develop and conduct a post incident analysis. 45 hours lecture. Transfer: CSU; C-ID# FIRE 230 X.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 24 - CO 2E Wildland Incident Operations for Company Officers

2.5 units

This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. 45 hours lecture. Transfer: CSU; C-ID# FIRE 240 X.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 25 - Instructor 1

2.5 units

Provides skills and knowledge needed for entry-level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction. 45 hours lecture. Transfer: CSU; C-ID# FIRE 250 X.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 26 - Ethical Leadership for Fire and Emergency Services Instructors

0.5 units

This course provides the knowledge and skills needed to identify the value of ethical behavior in instructional settings, describe how ethical norms influence individual ethics, identify a personal ethical perspective and core values and how they impact communication and ethical decision making, and make an ethical decision using an ethical decision-making model, in order to assist in making ethical decisions when faced with an ethical dilemma in an instructional setting and carry out the roles and responsibilities of an SFT instructor in an ethical manner. 9 hours lecture. Transfer: CSU.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 30 - Basic Firefighter Skills and Update

2 units

This course is designed for currently employed and volunteer Firefighters and covers fire service topics in a classroom and manipulative setting that includes required skills maintenance and updated tactical techniques. All subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques. 18 hours lecture, 54 hours laboratory.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 31 - Intermediate Firefighter Skills and Update

2 units

This course is designed for currently employed and volunteer Firefighters and covers Intermediate fire service topics in a classroom and manipulative setting that includes required skills maintenance and updated tactical techniques. All Intermediate subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques. 18 hours lecture, 54 hours laboratory.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 32 - Advanced Hazmat and Wildland Training for Firefighters

2 units

This course is designed for currently employed and volunteer firefighters and covers advanced Hazmat and Wildland topics, updates, and

manipulative skills. All advanced subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques. 18 hours lecture, 54 hours laboratory.

Enrollment Limitation: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.

- Credit - Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 160 - Fire Apparatus Driver/Operator 1A

1 - 1.5 units

This course provides the knowledge and skills needed to perform preventive maintenance on and drive or operate a fire apparatus. Topics include routine tests, inspections, and servicing functions; operating, backing, maneuvering, and turning a fire apparatus under a variety of conditions; and operating all fixed systems and equipment on a fire apparatus. Fulfills the requirements for a Class C driver's license fire fighter endorsement. 18 hours of lecture, 27 hours of lab.

Enrollment Limitation: Students must possess a valid California driver's license.

- Credit - Not Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 161 - Pumping Apparatus Operations 1B

1 - 1.5 units

This course provides the knowledge and skills needed to operate and perform preventative maintenance on a pumping apparatus. Topics include routine test, inspections, and serving functions; producing, hand, master and foam fire streams; relay pump operations; and supplying water to fire sprinkler and standpipe systems. 18 hours of lecture, 27 hours of lab.

Enrollment Limitation: Must possess a valid California driver's license with a Class C firefighter endorsement.

- Credit - Not Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 162 - Wildland Fire Apparatus Operations

0.5 - 1 units

This course provides the knowledge and skills needed to operate and perform preventive maintenance on a wildland fire apparatus. Topics include routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus; operating a wildland fire apparatus; and producing an effective fire stream. 9 hours of lecture, 27 hours of lab.

Enrollment Limitation: Must possess a valid California driver's license with a Class C firefighter endorsement.

- Credit - Not Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 163 - Fire and Emergency Services Instructor 2

1-2 units

This course provides the skills and knowledge needed for the intermediate level professional instructor to safely, effectively, and competently develop lesson plans and evaluation instruments, teach and deliver instruction, evaluate and coach other instructors, and analyze resources and formulate a program budget. 45 hours lecture.

Prerequisite: FST 25 with a minimum grade of C

- Credit - Not Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 164 - Fire Fighter Rescue and Rapid Intervention Crew (RIC) Operations

0.5 - 1 units

This hands-on course provides the knowledge and skills needed to perform fire fighter rescue to reduce fire fighter injuries and deaths. Topics include the fire fighter rescue mindset; size up, tool assembly, and softening the structure; search, assessment, air delivery, and rescue; and Rapid Intervention Crew (RIC) roles, responsibilities, strategies, and operations. 27-54 hours laboratory.

- Credit - Not Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 165 - ICS 300: Intermediate Incident Command System for Expanding Incidents

1.5 units

This course provides training for personnel who require advanced application of the Incident Command System (ICS). This course expands upon information covered in the ICS 100 and ICS 200 courses. 27 hours lecture.

- Credit - Not Degree Applicable
- Grading Option: Letter or Pass/No Pass

FST 166 ICS 400: Advanced ICS for Command and General Staff Complex Incidents

1.5 UNITS

This course provides training for personnel who require advanced application of the Incident Command System (ICS). This course expands upon information covered in ICS 100 through ICS 300 courses, which are prerequisites for the ICS 400 course. 27 hours lecture.

Enrollment Limitation: Completion of the following courses: IS0100, Introduction to the Incident Command System; IS0200, Basic Incident Command System for Initial Response; ICS 300 (E/L/G0300), Intermediate Incident Command System for Expanding Incidents; IS0700, National Incident Management System, An Introduction; and IS0800, National Response Framework, An Introduction. The instructor of record will verify prerequisites prior to the first class meeting.

Not Degree Applicable, Grading Option: GR, P/NP

FST 167 Incident Management of the Fire Fighter Emergency

1 UNIT

This command level awareness course provides the student with the incident management terminology and methodology that is employed during a fire fighter emergency. Classroom simulations based upon case studies allow students to participate in simulated incident command positions during a fire fighter emergency. 9 hours lecture, 27 hours laboratory.

Prerequisite: FST 23 with a minimum grade of C or Company Officer 2D: All-Risk Command Operations.

Not Degree Applicable, Grading Option: GR, P/NP

FST 168 Chief Officer 3A Human Resource Management for Chief Fire Officers

1.5 UNITS

This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits and developing a measurable accident and injury prevention program. 27 hours lecture.

Enrollment Limitation: Meet the educational requirements for Company Officer, or five (5) years as a career officer (Lieutenant or higher), or seven (7) years as a volunteer officer (Lieutenant or higher), or five (5) years CAL FIRE Fire Apparatus Engineer, or seeking Fire Marshal Certification.

Not Degree Applicable, Grading Option: GR, P/NP

FST 169 Chief Officer 3B Budget and Fiscal Responsibilities for Chief Fire Officers

1 UNIT

This course provides students with a basic knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding. 18 hours lecture.

Enrollment Limitation: Meet the educational requirements for Company Officer or five (5) years as a career officer (Lieutenant or higher), or seven (7) years as a volunteer officer (Lieutenant or higher) or five (5) years CAL FIRE Fire Apparatus Engineer.

Not Degree Applicable, Grading Option: GR, P/NP

FST 170 Chief Officer 3C General Administration Functions for Chief Fire Officers

1.5 UNITS

This course provides students with a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ. 27 hours lecture.

Enrollment Limitation: Meet the educational requirements for Company Officer or five (5) years as a career officer (Lieutenant or higher), or seven (7) years as a volunteer officer (Lieutenant or higher) or five (5) years CAL FIRE Fire Apparatus Engineer.

Not Degree Applicable, Grading Option: GR, P/NP

FST 171 Chief Officer 3D Command of Expanding All Hazard Incidents for Chief Fire Officers

1 UNIT

This course provides students with a basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records. 18 hours lecture.

Enrollment Limitation: Meet the educational requirements for Company Officer, or five (5) years as a career officer (Lieutenant or higher), or seven (7) years as a volunteer officer (Lieutenant or higher), or five (5) years CAL FIRE Fire Apparatus Engineer. Not Degree.

Not Degree Applicable, Grading Option: GR, P/NP