

# FIRE SERVICE (FIRE)

## **FIRE 101 Fire Fighter**

(12 Credits, Fall)

This course is based on the current National Fire Protection Association (NFPA) 1001: Standard for Fire Fighter Professional Qualifications and may lead to International Fire Service Accreditation Congress (IFSAC) certification. It is designed to equip students with the knowledge and skills needed to function as an integral member of a firefighting team under direct or general supervision in hazardous conditions. A combination of classroom study, drills, field practice, and training evolutions will prepare students to perform most fire ground functions under the supervision of an officer or experienced firefighter. Topics covered include a Rescue course, Hazardous Materials Awareness and Operations (to include Chapters 6.2 & 6.6 of NFPA 472), Extrication, Wildland Firefighting (Red Card), and Building Construction. This course is delivered on-campus only. Successful completion of all written exams and practical exercises and a passing score on the state certification exam is required for IFSAC certification. PREREQ: Admission to the Fire Service Technology or Fire Service Management program and PERM/INST. COREQ: FIRE 110. *(7 lecture hours, 15 lab hours, 12 credits)*

## **FIRE 110 Physical Fitness for Firefighters**

(1 Credit, Fall)

This course prepares students for the physical fitness requirements that must be met in order to pass the Firefighter Candidate Physical Ability Test (CPAT). It will also teach students about the importance of physical fitness for firefighters. Physical training focuses on the aerobic conditioning, strength training, and biomechanical knowledge needed for a healthy career as a firefighter. Students will learn the skills necessary to successfully complete the CPAT, which is required by fire departments for hiring, and to meet the minimum standards for candidate firefighters put forth by National Fire Protection Association (NFPA) 1582. This course may be repeated twice for a maximum of three credits. (Pass/No Pass) PREREQ: Admission to the Fire Service Technology or Fire Service Management program. COREQ: FIRE 101 or FIRE 151, or PERM/INST. *(0 lecture hours, 3 lab hours, 1 credits)*

## **FIRE 120 Principles of Emergency Services**

(3 Credits, Varies)

Overview of fire protection and emergency services. Topics include 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, and life safety initiatives. Also includes an introduction to fire protection systems and fire strategy and tactics. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. *(3 lecture hours, 0 lab hours, 3 credits)*

## **FIRE 151 Fire Officer I**

(3 Credits, Varies)

This course is based on the current NFPA 1021: Standard for Fire Officer Professional Qualifications for Fire Officer I, and may lead to IFSAC certification. It is designed to equip students with the basic supervisory and managerial knowledge and skills that are needed to deliver safe, efficient, and effective leadership during emergency operations and non-emergency activities, as well as daily administration within the organization. A combination of classroom study and practical exercises will prepare students to be fire company officers. Students must successfully complete all written exams and portfolios in order to obtain IFSAC certification. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. *(3 lecture hours, 0 lab hours, 3 credits)*

## **FIRE 152 Fire Officer II**

(3 Credits, Varies)

This course is based on the current NFPA 1021: Standard for Fire Officer Professional Qualifications for Fire Officer II, and may lead to IFSAC certification. It is designed to equip students with the basic supervisory and managerial knowledge and skills that are needed to deliver safe, efficient, and effective leadership during emergency operations and non-emergency activities, as well as daily administration within the organization. A combination of classroom study and practical exercises will prepare students to be fire company officers. Students must successfully complete all written exams and portfolios in order to obtain IFSAC certification. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. PRE/COREQ: FIRE 151. *(3 lecture hours, 0 lab hours, 3 credits)*

## **FIRE 160 Work Experience I**

(1 Credit, Spring)

Providing an opportunity for the supervised application of skills learned in FIRE 101 and FIRE 110, this is the first in a three-course sequence that will be completed on-site at a local fire station. Students may perform tasks on many different levels and a wide variety of subjects including, but not limited to, the following areas: emergency medical services; firefighting tactics, strategies, and applications; hazardous material responses; technical rescues; and routine operations and training tasks as assigned by the industry supervisor. Work Experience I will focus on developing the skills and knowledge needed to be given clearance for interior fire operations as well as the opportunity to prepare and test for the IFSAC Firefighter II certification. In order to register for this course, students must be graduates of the CWI Fire Academy, have current IFSAC Firefighter I and EMT-B National Registry (or higher) certifications, and be approved for participation by a local fire department. Students are also required to register for a corequisite Workforce Development (WD) course of the same name. The WD portion of the class will allow students to work alongside trained firefighters and requires an additional time commitment of 21 hours per week for 20 weeks. Further information about the WD portion of the class and the additional fees payable to WD will be provided by the instructor when the students seek permission to register for this course. PREREQ: FIRE 101, FIRE 110, and PERM/INST. *(0 lecture hours, 3 lab hours, 1 credits)*

**FIRE 165 Work Experience II**

(1 Credit, Summer)

Providing an opportunity for the supervised application of skills learned in FIRE 101 and FIRE 110, this is the second in a three-course sequence that will be completed on-site at a local fire station. Students may perform tasks on many different levels and a wide variety of subjects including, but not limited to, the following areas: emergency medical services; firefighting tactics, strategies, and applications; hazardous material responses; technical rescues; and routine operations and training tasks as assigned by the industry supervisor. Work Experience II will focus on the skills and knowledge as agreed upon by the instructor and industry supervisor(s) based on the developed taskbook and seasonal training schedule of the industry; includes the continuation of the Firefighter II certification process, if needed. In order to register for this course, students must have current IFSAC Firefighter I and EMT-B National Registry (or higher) certifications and be approved by a local fire department. Students are also required to register for a corequisite Workforce Development (WD) course of the same name. The WD portion of the class will allow students to work alongside trained firefighters and requires an additional time commitment of 21 hours per week for 10 weeks. Further information about the WD portion of the class and the additional fees payable to WD will be provided by the instructor when the students seek permission to register for this course. PREREQ: FIRE 101, FIRE 110, and PERM/INST. (0 lecture hours, 3 lab hours, 1 credits)

**FIRE 170 Work Experience III**

(1 Credit, Fall)

Providing an opportunity for the supervised application of skills learned in FIRE 101 and FIRE 110, this is the third in a three-course sequence that will be completed on-site at a local fire station. Students may perform tasks on many different levels and a wide variety of subjects including, but not limited to, the following areas: emergency medical services; firefighting tactics, strategies, and applications; hazardous material responses; technical rescues; and routine operations and training tasks as assigned by the industry supervisor. Work Experience III will focus on the skills and knowledge as agreed upon by the instructor and industry supervisor(s) based on the developed taskbook and through an end of probationary department-specific tasks, training, and evaluations. In order to register for this course, students must have current IFSAC Firefighter I and EMT-B National Registry (or higher) certifications and be approved by a local fire department. Students are also required to register for a corequisite Workforce Development (WD) course of the same name. The WD portion of the class will allow students to work alongside trained firefighters and requires an additional time commitment of 21 hours per week for 20 weeks. Further information about the WD portion of the class and the additional fees payable to WD will be provided by the instructor when the students seek permission to register for this course. PREREQ: FIRE 101, FIRE 110, and PERM/INST. (0 lecture hours, 3 lab hours, 1 credits)

**FIRE 200 Building Construction for Fire Protection**

(3 Credits, Varies)

Components of building construction related to firefighting and life safety. Elements of structural design and construction are shown to be key factors when inspecting buildings, preplanning fire operations, and operating in emergencies. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. PRE/COREQ: FIRE 120. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 210 Fire Behavior and Combustion**

(3 Credits, Varies)

Exploration of the fundamental theories regarding how and why fires start and spread, as well as how they can be controlled using various suppression strategies and extinguishing agents. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 220 Principles of Safety and Survival for Fire and Emergency Services**

(3 Credits, Varies)

Introduction to the basic principles and history of national firefighter life safety initiatives. Focus is placed on the need for cultural and behavioral changes related to safety, leadership, supervision, accountability, and personal responsibility throughout the emergency services field. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 230 Fire Prevention**

(3 Credits, Varies)

Introductory course for fire fighters and other interested parties who want to learn more about fire prevention and inspections. Topics include history and philosophy of fire prevention, the organization and operation of a fire prevention bureau, use and application of codes and standards, plan review, fire inspection, fire and life safety education, and fire investigation. This course is primarily designed for those entering the field of fire service inspections and would be extremely useful to city inspectors and company level officers. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 240 Fire Protection Systems**

(3 Credits, Varies)

Learn about various fire protection systems, including the design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers. PREREQ: Admission to the Fire Service Technology or Fire Service Management program. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 251 Fire Officer III**

(3 Credits, Varies)

This course is based on the current NFPA 1021: Standard for Fire Officer Professional Qualifications for Fire Officer III and may lead to IFSAC certification. A combination of classroom study and practical exercises are designed to further prepare students to be a fire administrative or executive officer. Students must successfully complete the written exam and portfolio in order to obtain IFSAC certification. PREREQ: FIRE 152. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 252 Fire Officer IV**

(3 Credits, Varies)

This course is based on the current NFPA 1021: Standard for Fire Officer Professional Qualifications for Fire Officer IV, and may lead to IFSAC certification. A combination of classroom study and practical exercises are designed to further prepare students to be a fire administrative or executive officer. Students must successfully complete the written exam and portfolio in order to obtain IFSAC certification. PRE/COREQ: FIRE 251. (3 lecture hours, 0 lab hours, 3 credits)

**FIRE 290 Fire Service Capstone**

(3 Credits, Varies)

This capstone course provides Fire Service Technology and Fire Service Management majors the opportunity to apply the knowledge and skills they have cultivated throughout their program. The course will be tailored to individual educational and career goals and should be completed during the student's final semester at CWI. PREREQ: PERM/INST. (3 lecture hours, 0 lab hours, 3 credits)

*Refer to How to Read Course Descriptions for an explanation of elements found in the course descriptions above.*