

**Course Description****FFP2521 | Construction Documents and Plans Review | 3.00 credits**

This curriculum is geared towards teaching the student how to assimilate information contained in working, drawing, and specifications as they relate to the fire inspector. The curriculum includes how to interpret conventional graphic communications. Accepted standards and conventions are introduced. Symbols, abbreviations, principles of technical projection, as well as a review of geometry are included. Related worksheets are used to allow for applied experience of finding and interpreting information from authentic drawings.

**Course Competencies:**

**Competency 1:** The student will comprehend the concepts of building construction components and techniques related to fire and life safety by:

1. Describing building construction components and techniques as they relate to building codes, fire and life-safety codes, fire prevention and inspection, firefighter safety, and firefighting strategy and tactics.
2. Distinguishing the Classifications of major types of building construction as applicable with “model” building codes.
3. Interpreting the hazards and tactical considerations associated with the various types of building construction.
4. Analyzing the different loads and stresses that are placed on a building and their interrelationships.
5. Describing principle structural components in a typical building design. 6. Explaining the function of each building design.
6. Comparing defined differences in fire resistance construction, the flame spread within building types, and describe the testing procedures used to establish ratings for each.
7. Identifying the indicators of potential structural failure as they relate to firefighter safety.
8. Analyzing the causes involved in the line of duty firefighter deaths related to structural firefighting and building collapse.

**Competency 2:** The student will understand the principles of the use of water in fire protection and how to apply hydraulic principles to analyze and to solve water supply problems by:

1. Describing the basic elements of a public water supply system including sources, distribution networks, piping, hydrants and the community fire flow demand criteria.
2. Describing the principles of forces that affect water at rest and in motion.

**Competency 3:** The student will describe the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, and water supply for fire protection and portable fire extinguishers by:

1. Explaining the benefits of fire protection systems in various types of structures.
2. Analyzing the elements of a public water supply system.

**Competency 4:** Discuss the federal, state, and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of court cases by:

1. Describing federal, state, and local laws, which regulate or influence emergency services.

**Learning Outcomes:**

1. Social Responsibility
2. Critical Thinking
3. Ethical Issues