FIR 159: Building Construction for Fire Prevention

This course provides the components of building construction related to firefighter 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 emergencies. Three class hours a week. (FESHE Approved)

Course Student Learning Outcomes

1. Describe building construction as it relates to firefighter safety, building codes, fire prevention, code inspection, firefighting strategy, and tactics. 2. Classify major types of building construction in accordance with a local/model building code. 3. Analyze the hazards and tactical considerations associated with the various types of building construction. 4. Explain the different loads and stresses that are placed on a building and their interrelationships. 5. Identify the function of each principle structural component in typical building design. 6. Differentiate between fire resistance and flame spread and describe the testing procedures used to establish ratings for each. 7. Classify occupancy designations of the building code. 8. Identify the indicators of potential structural failure as they relate to firefighter safety. 9. Identify the role of Geographic Information Systems (GIS) as it relates to building construction.
Credits: 3
Program: Fire Science