Course Prefix and Number: FST 216          Credits: 3

Course Title: Automatic Sprinkler System Design I

Course Description: Presents a comprehensive study of treatment of automatic sprinkler systems, including a study of sprinkler standards, design features, water supply adequacy, sprinkler limitations, and appropriate building and fire code applications. Prerequisite: FST 205 or program permission. Lecture 3 hours per week.

General Course Purpose:
  a. Sprinkler standards, building, and fire codes
  b. Sprinkler design concepts, occupancy, and commodity classifications
  c. Water supplies for sprinkler systems, including fire pumps and storage tanks
  d. Sprinkler system types and the operations and limitations of each
  e. System components (equipment, pipe, fittings, and valves)

Course Prerequisites and Co-requisites:
Prerequisite: FST 205 or program permission

Student Learning Outcomes:
Upon completing the course, the student will be able to
  a. Identify and cite applicable codes and standards for sprinkler systems, buildings, fire alarm, and system maintenance;
  b. Apply sprinkler design concepts, codes, and standards to sprinkler system layout;
  c. Measure and ensure adequacy of water supply system for sprinkler system;
  d. Identify operational features of sprinklers including limitations; and
  e. Select the appropriate system type.

Major Topics to Be Included:
  a. Sprinkler standards, building, fire, and other applicable codes and standards
  b. Sprinkler design concepts
  c. Sprinkler layout design concepts
  d. Design adequate water supply
  e. Measure adequacy of water supply
  f. Identify operational features of sprinkler systems
  g. Identify limitations of sprinkler systems
  h. Given parameters of structure, select appropriate system

Date Created/Updated (Month, Day, Year): March 12, 2019