

# FIRE PROTECTION ENGINEERING APPLICATIONS GRADUATE CERTIFICATE

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## Program Learning Objectives

1. Identify relevant fire safety codes, standards and regulations, comprehend the fire safety performance objectives and criteria associated with these documents, and apply these fire safety objectives and criteria to a broad range of applications.
2. Understand how people interact with fire conditions in buildings and calculate evacuation times through the application of fundamental principles of people movement and the use of state-of-the-art computer-based evacuation models.
3. Design fire detection and alarm systems, fire suppression systems, structural fire protection systems, and egress systems to achieve specified performance objectives.

## Prerequisites

For admission as a classified graduate student, an applicant should hold a bachelor's degree in engineering, fire science, fire protection and safety, or a closely related field from a regionally accredited institution, college, or university. An undergraduate grade point average of 3.0 is required. On occasion, where other credentials are exceptionally strong, a GPA in the 2.5-3.0 range may be accepted.

## Core Courses

|                    |                                                 |           |
|--------------------|-------------------------------------------------|-----------|
| FPE 521            | Egress Analysis and Design                      | 4         |
| FPE 522            | Fire Detection, Alarm and Communication Systems | 4         |
| FPE 523            | Water-based Fire Suppression                    | 4         |
| FPE 524            | Structural Fire Protection                      | 4         |
| <b>Total units</b> |                                                 | <b>16</b> |