

## SYNOPSIS

**COURSE TITLE:** Security Engineering

**LOCATION:** Variable

**PURPOSE:** To provide a basic understanding of security engineering principles so that security, antiterrorism, and engineering personnel can work together more effectively to address security and antiterrorism/force protection issues at the inception of construction projects for new or existing facilities.

**SCOPE:** This course covers the information contained in the Unified Facilities Criteria (UFC) documents 4-020-01, Security Engineering Planning Manual, and UFC 4-020-02, Security Engineering Design Manual. These UFC's are updated and expanded versions of the 3 volume series of Technical Manuals/Air Force Manuals (TM/AFMAN) 5-853/AFMAN 32-1071 on Security Engineering published in 1994. In addition, the course will cover the contents of UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings, and UFC 4-010-02, DoD Minimum Antiterrorism Standoff Distances for Buildings. These UFC's present a process by which planning teams including security and antiterrorism personnel, engineers, and other appropriate personnel, along with facility users, can formulate security and antiterrorism related design criteria for facilities. The design criteria consist of the assets to be protected, the threat to those assets in terms of specific aggressor tactics, the degree to which the asset will be protected against the threat, and any user-imposed design constraints. The UFC's further provide a process by which protective measures to mitigate the threats to assets can be identified and integrated into total protective systems. They also provide means to estimate preliminary costs for the systems. In addition, the course provides information on how risk analysis and regulatory requirements for physical security and antiterrorism/force protection are incorporated into facility planning. The course consists of formal instructional periods in applying the processes in the UFC's with interspersed sample problem exercises. The course also includes a comprehensive practical problem solved by students divided into interdisciplinary groups and presented to the class.

**PERFORMANCE OBJECTIVE:** Students will learn the concepts and philosophies of security engineering. Engineers and security personnel will gain a better understanding of each others' different needs and approaches. This understanding will enable them to work together more effectively to address security problems. Students should be able to apply the concepts and philosophies of security engineering sufficiently to put together preliminary solutions to real security and antiterrorism problems and work as partners on interdisciplinary planning teams.

**WHO SHOULD ATTEND:** Civilian and military (commissioned officer, warrant officer, and enlisted) personnel involved in security, antiterrorism, or engineering support to security and antiterrorism. Security personnel may include people from provost marshal or other security and law enforcement offices, especially those personnel involved in physical security. Antiterrorism personnel may include antiterrorism officers or personnel on antiterrorism staffs. Engineer personnel may include planners and designers from Corps of Engineers offices and Directorates of Public Works. In addition, emergency management personnel and those responsible for key asset protection will benefit from this course. Personnel from installation level, major command level, and Corps of Engineers district and division levels are encouraged to attend. Representatives from other government agencies may also attend.