**FIRE SAFETY & EXPLOSION PROT (FSEP)**

**FSEP 5000 Master's Thesis**  
**Prerequisites:** Consent of instructor.  
**Description:** Methods used in research and thesis writing. Offered for variable credit, 1-6 credit hours, maximum of 18 credit hours.  
**Credit hours:** 1-6  
**Contact hours:** Other: 1  
**Levels:** Graduate  
**Schedule types:** Independent Study  
**Department/School:** Engineering Technology

**FSEP 5113 Fire and Explosion Hazard Recognition**  
**Prerequisites:** 30 credit hours of STEM coursework or instructor consent.  
**Description:** Physical, chemical and electrical hazards and their relationship to loss of property and/or life. Safe storage, transportation and handling practices to eliminate or control the risk of fire or explosion.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

**FSEP 5123 Fire and Explosion Detection and Mitigation**  
**Prerequisites:** 30 credit hours of STEM coursework or instructor consent.  
**Description:** Chemistry and physics of energetic materials and their relationship to their surroundings. The requirements for detection, suppression, and mitigation of energetic materials.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

**FSEP 5133 Principles of Industrial and Process Safety**  
**Prerequisites:** 30 credit hours of STEM coursework or instructor consent.  
**Description:** Systemic assessment of industrial operations and processes to identify and mitigate related hazards. Improve skills in qualitative and quantitative analysis such as fault trees, HAZOP studies, and MORT charts.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

**FSEP 5143 Structural Design for Fire and Life Safety**  
**Prerequisites:** 30 credit hours of STEM coursework or instructor consent.  
**Description:** Building construction standards and codes to assure maximum life and property safety from fires, explosions and natural disasters. Egress design specifications, human factors and fire and explosion protection requirements for building construction and materials.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

**FSEP 5153 Critical Infrastructure Vulnerability and Risk**  
**Prerequisites:** 30 credit hours of STEM coursework or instructor consent.  
**Description:** Identification of critical infrastructure and the societal risk caused by its vulnerability. Methods of analyzing the hazards and threats facing critical infrastructure components and the methods of minimizing those risks.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

**FSEP 5163 Principles of Industrial, Physical and Building Security**  
**Prerequisites:** 30 credit hours of STEM coursework or instructor consent.  
**Description:** Introduction to homeland security and the concept of integrated physical protection. Principles of industrial and building security, security management systems, security standards, and securing against asymmetrical threats.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Engineering Technology

**FSEP 5990 Special Topics**  
**Prerequisites:** Consent of instructor.  
**Description:** Individual report topics in fire safety and explosion protection involving processes, equipment, experiments, literature search, theory, computer use or combinations of these. Offered for variable credit, 2-4 credit hours, maximum of 4 credit hours.  
**Credit hours:** 2-4  
**Contact hours:** Other: 2  
**Levels:** Graduate  
**Schedule types:** Independent Study  
**Department/School:** Engineering Technology