

SAFETY MANAGEMENT (ETSM)

ETSM 2396. Special Topic. 3 Hours.**ETSM 3363. Safety Program Management. 3 Hours.**

This course presents an in-depth examination of the concepts, methods, and techniques involved in safety program management. Emphasis will be placed on the development of safety management programs for the industrial and construction industries. The strengths and weaknesses of existing safety programs, performance management techniques, behavior-based safety, design safety, legal aspects of safety and health management, and emerging trends in safety and health management will be covered.

Prerequisite: Junior standing.

ETSM 3371. Safety Risk Assessment & Mgmt. 3 Hours.

Students examine concepts, methods, and techniques involved in safety risk management. Emphasis is placed on the development of safety programs for the industrial and construction industries. Topics may include an overview of risk management processes, attributes, and disciplines; identification tools; analysis and evaluation; communication; risk analysis approach; and assessment framework.

Prerequisite: CHEM 1411.

ETSM 3372. Occupational Safety Laws. 3 Hours.

Students examine the Occupational Safety and Health Act (OSHA), its rules, and the legal duty to comply with them. Topics may include record keeping, employers' and employees' rights, hazard communication, inspection and investigation, and criminal enforcement of violations. Contesting citations, judicial review of enforcement actions, and ethics in safety at the workplace may also be reviewed.

Prerequisite: CHEM 1411.

ETSM 3382. Issues In Nanotechnology Safety. 3 Hours.

This course introduces students to the emerging technological frontier of nanotechnology. Areas of study will include: potential health concern, potential safety hazards, exposed control procedures occupational health surveillance, and research in the area of safety management for future nanotechnology workers.

Prerequisite: ETEE 1340, ETDD 1361 and Sophomore standing.

ETSM 4096. Directed Study. 1-6 Hours.

Arranged professional and developmental learning experiences incorporating a practical application of safety management skills and practices. To include internships, individual research and industry studies. Variable Credit (1-6).

Prerequisite: Sophomore standing.

ETSM 4369. Special Topic. 3 Hours.**ETSM 4377. Environmental Safety Mgmt. 3 Hours.**

Students examine the principles of effective environmental safety management systems. Laws and regulations that protect our environment and human health are studied. Topics may include hazard communication (HAZCOM) and hazardous waste operations (HAZWOPER). Students may also examine the roles of the Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation (DOT), and the Environmental Protection Agency (EPA).

Prerequisite: ETSM 3372.

ETSM 4382. Industrial Safety. 3 Hours.

This course is a study of the problems involved in developing an integrated safety program for an industrial or commercial establishment. It involves safety education, safe worker practices, recognition and elimination of health hazards, machinery guards, in-plant traffic, material handling and emergency treatment for industrial accidents. Prerequisite: ETCM 1363 and ETDD 1361. Junior standing.