ASEM - Advanced Safety Engineering and Management

Courses

ASEM 461. Occupational Health & Safety Management Systems. 3 Hours.
Prerequisites: MG 302 [Min Grade: C]

ASEM 462. Hazard Identification and Risk Assessment. 3 Hours.
Criticality of proactive hazard identification and risk assessment for mitigation of serious workplace incidents. Techniques include Preliminary Hazard List (PHL), Preliminary Design Hazard Analysis (PHA), System Hazard Analysis (SHA), Subsystem Hazard Analysis (SSHA). Management’s role in establishing policies and guidelines for acceptance of residual risk.
Prerequisites: MG 302 [Min Grade: C]

ASEM 463. Incident Investigation and Root Cause Analysis. 3 Hours.
Human error and error provocative environments. System design for the “failing human.” Rasmussen’s model of Drift to Danger and Reason’s “Swiss Cheese Model.” Analysis techniques include five why, fishbone, event trees and fault tree analysis (FTA). Case studies heavily emphasized.
Prerequisites: MG 302 [Min Grade: C]

Focus on ANSI/ASSE Z10-2012 and ISO 18001.
Prerequisites: MG 302 [Min Grade: C]