

SACHE Undergraduate Process Safety Curriculum

The Importance of Process Safety	Hazard Recognition	Identifying & Minimizing Process Safety Hazards	An Introduction to Managing Process Safety Hazards
Understanding Hazards and Risk	Intro to Process Safety Technology and Practice	Source Models	Atmospheric Dispersion
Fire Hazards	Explosion Hazards	Chemical Reactivity Hazards	Toxicological Hazards
Hazards and Risk: What Can Go Wrong?	Hazards and Risk: Emergency Relief [ER]	Hazards and Risk: Safeguards other than ER	Hazards and Risk: Introduction to HIRA
Safe Design & Operation / Equipment Hazards	Quantitative Methods and Hazard Assessment	Risk Based Process Safety Management	Material Hazards
Inherently Safer Design Safety Systems and How They Work Equipment Hazards Damage Mechanisms Reactor Pressure Relief Adv. Emergency Relief Facility Siting	Risk Review Using LOPA Advanced Dispersion & Consequence Modeling Advanced Process Hazard Analysis	Commit to Process Safety Manage Risk (3 Courses) Learn from Experience	Safety Aspects of Nitrogen and Other Inert Gases Dust Explosions Biological Hazards Common Chemicals and Their Major Hazards