

UNDERGRADUATE CERTIFICATE IN OCCUPATIONAL HEALTH AND SAFETY TECHNOLOGY (AS OF SPRING 2025)

The Undergraduate Certificate in Occupational Health and Safety Technology is designed to meet the urgent demand for skilled professionals in the dynamic occupational safety and health field. Catering to industries like manufacturing, construction, oil and gas, healthcare, energy, and utilities, which prioritize workforce well-being and adherence to strict safety regulations, this program effectively combines theoretical knowledge with practical application. Graduates gain a deep understanding of current regulations and safety practices, preparing them to lead safety initiatives across various work environments.

Code	Title	Hours
Undergraduate Certificate in Occupational Health and Safety Technology		
Required Courses		
ETEC 1010	Engineering Foundations	1-2
ETSM 2310	Introduction to Occupational Safety	3
ETSM 3363	Safety Program Management	3
ETSM 3386	Industrial Safety	3
ETSM 4313	Industrial Hygiene	3
ETSM 4375	Safety Hazard Mitigation	3
or ETSM 4379	Emergency Management & Planning	
Total Hours		16-17

The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The Undergraduate Certificate in Occupational Health and Safety Technology is designed to provide graduates with the following marketable skills:

- **Hazard Identification and Risk Assessment:** Students will develop the skill to identify potential hazards in the workplace and conduct thorough risk assessments. This involves understanding various types of hazards (physical, chemical, biological, ergonomic) and applying methodologies to evaluate their potential impact on worker safety and health.
- **Regulatory Compliance and Legal Knowledge:** A key marketable skill is the ability to understand and navigate the complex landscape of occupational safety and health regulations. This includes knowledge of OSHA standards, state and federal regulations, and the ability to ensure that workplaces are compliant with these laws, thus reducing the risk of legal issues and penalties.
- **Safety Program Development and Implementation:** Students will learn how to develop and implement comprehensive safety programs. This skill involves creating policies, procedures, and training modules that are tailored to specific workplace environments to promote safety and health.
- **Emergency Response Planning and Execution:** The ability to plan and execute effective emergency response procedures is crucial. Students will gain skills in developing emergency plans, conducting drills, and coordinating response efforts in case of workplace incidents or crises.
- **Communication and Training Skills:** A marketable skill in this field is the ability to effectively communicate safety protocols and train employees. This includes developing training materials, conducting workshops or seminars, and using communication tools to foster a culture of safety within an organization.