ENVIRONMENTAL HEALTH AND SAFETY TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

Program Information

Is safety your number one priority? Are you analytical, cautious, and efficient? If so, a career in environmental health and safety technology may be the right path for you. This is a specialized branch of the health profession that focuses on the environment of workers. Environmental health and safety professionals strive to find and eliminate conditions in the workplace that may result in injury or disease. This is achieved through a process of anticipation, recognition, evaluation, and control of the various stresses that contribute to unsafe working environments.

The San Jacinto College Environmental Health and Safety Technology program:

- Is multi-disciplinary in nature, providing students with relevant exposure to biological, chemical, physical, mathematical, and health sciences disciplines, as well as a thorough introduction to occupational health and safety concepts;
- Trains students to recognize common occupational safety concerns that deal with safety hazards involved with confined space entry, hazardous energy control, hazard communication, compliance with safety standards, environmental protection; and other areas; and
- Prepares students to perform the following functions: identify and analyze accident and loss-producing conditions; develop accident prevention and loss control methods, procedures, and programs; communicate accidents and loss-control data to individuals on a need-to-know basis; and measure and evaluate the effectiveness of accident and loss-control systems.

Additional Information

The San Jacinto College Environmental Health and Safety Technology curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). The ABIH and BCSP began a jointly sponsored certification program through the Council on Certification of Health, Environmental, and Safety Technologists (CCHEST). CCHEST will administer the testing. Students who pass the certification examination and pay the required fees are authorized to use the title Environmental Health and Safety Technologist, and to use the initials OHST after their names. Students may further their studies at a university leading toward positions as a Certified Safety Professional and/or Certified Industrial Hygienist.

Career Opportunities

An environmental health and safety manager heads the modern safety and health team. Depending on the size of the company and the commitment of its management, the teams include positions for:

- Safety/Environmental Specialists,
- Safety/Environmental Engineers,
- Industrial Hygienists,
- Risk Management Specialists,
- Health Physicists,
- Occupational Physicians, and
- Occupational Health Nurses.

The job of the environmental health and safety manager is complex and diverse focusing on analysis, prevention, planning, evaluation, promotion, and compliance. Educational requirements range from technical certificates to graduate degrees. Additional college majors held by practitioners include environmental science, occupational and environmental health and safety, industrial safety and health technology, industrial technology, industrial engineering technology, manufacturing technology, industrial management, and engineering technology.

Earning Potential

Occupational Health and Safety Technician: $75,002 per year.[1]

[1] Source: texaswages.com (http://texaswages.com), median salary Gulf Coast region, 2023

For more information, students may contact: Department Chair – 281-998-6350, x1188. Direct: 281-478-2712 - shawn.dickerson@sjcd.edu

Campus

Central Campus

Information

Environmental Health & Safety Technology (EHST) is a specialized branch of the health professions focusing on the environment of workers. Professionals in this field strive to find and eliminate conditions in the workplace that may result in occupational injury or disease. This is achieved through a process of anticipation, recognition, evaluation, and control of the various stresses that contribute to unsafe working environments.

The EHST program is multi-disciplinary in nature, providing students with relevant exposure to disciplines including biological, chemical, physical, mathematical, and health sciences, as well as a thorough introduction to occupational health and safety concepts. Common occupational safety concerns deal with safety hazards involved with confined space entry, hazardous energy control, hazard communication, and compliance with safety standards, environmental protection, and other areas. Environmental health and safety personnel are expected to perform the following functions: identify and analyze accident and loss-producing conditions; develop accident prevention and loss control methods, procedures, and programs; communicate accidents and loss control data to individuals on a need-to-know basis; and measure and evaluate the effectiveness of accident and loss control systems.

The curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). Students who complete the Associate of Applied Science (AAS) degree in EHST may qualify to begin the examination process to become an Associate Safety Professional (ASP) through the BCSP. Students may also complete course work at a number of upper-level universities leading toward additional certifications such as the Certified Industrial Hygienist (CIH) through the ABIH, the Certified Environmental Professional (CEP) through the National Association of Environmental Professionals (NAEP), the Certified Risk Manager (CRM) through the National Alliance for Insurance Education and Research (NAIER), and many others.

Plan of Study

3ENVR-HLTH

First Term		Credits
EPCT 1307	Introduction to Environmental Safety and Health	3
OSHT 1309	Physical Hazards Control	3
ENGL 1301	Composition I	3
MATH 1314	College Algebra	3
CHEM 1311 & CHEM 1111	General Chemistry I (lecture) and General Chemistry I (lab)	4
	Credits	**16**
Second Term		
OSHT 1313	Accident Prevention, Inspection and Investigation	3
OSHT 2320	Safety Training Presentation Techniques	3
Select one of the following:		3
SPCH 1311	Introduction to Speech Communication	
SPCH 1315	Public Speaking	
SPCH 1318	Interpersonal Communication	
SPCH 1321	Business and Professional Speech	
Select one of the following: [1]		4
CHEM 1312 & CHEM 1112	General Chemistry II (lecture) and General Chemistry II (lab)	
BIOL 1306 & BIOL 1106	Biology for Science Majors I (lecture) and Biology for Science Majors I (lab)	
BIOL 2301 & BIOL 2101	Anatomy and Physiology I (Lecture) and Anatomy and Physiology I (Lab)	
	Credits	**13**
Third Term		
EPCT 1341	Principles of Industrial Hygiene	3
OSHT 2305	Ergonomics and Human Factors in Safety	3
OSHT 1307	Construction Site Safety and Health	3
ENGL 2311 or ENGL 1302	Technical and Business Writing or Composition II	3
Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts)		3
	Credits	**15**
Fourth Term		
EPCT 2333	Environmental Toxicology	3
OSHT 2401	OSHA Regulations-General Industry	4
OSHT 2309	Safety Program Management	3
Approved Elective (p. 2)		3
Social and Behavioral Sciences or Government/Political Science or American History		3
	Credits	**16**
	Total Credits	**60**

[1] Students desiring to obtain a baccalaureate degree should take CHEM 1312 General Chemistry II (lecture)/CHEM 1112 General Chemistry II (lab).

Capstone Experience: OSHT 2309 Safety Program Management

Approved Electives

Code	Title	Credits
EMSP 1160 & EMSP 1501	Clinical-Emergency Medical Technician and Emergency Medical Technician [1]	6
EPCT 1301	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics	3
EPCT 1305	Environmental Regulations Overview	3
EPCT 1311	Introduction to Environmental Science	3
EPCT 1313	Contingency Planning	3
OSHT 2380	Cooperative Education-Occupational Safety and Health Technology	3

[1] Both courses required if used to satisfy the elective requirement for Environmental Health and Safety Technology and must be taken concurrently.