B.S. MAJOR IN ENGINEERING TECHNOLOGY: ENVIRONMENTAL, HEALTH, AND SAFETY MANAGEMENT CONCENTRATION

Code	Title	Hours
Bachelor of Science, Major in Engineering Technology: Environmental, Health, and Safety Management Concentration		
Core Curriculum (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/)		
Component Area I (Communication)		6
Component Area II (Mathematics) [1]		3
Component Area III (Life and Physical Science)		8
Component Area IV (Language, Philosophy, and Culture)		3
Component Area V (Creative Arts)		3
Component Area VI (U.S. History)		6
Component Area VII (Political Science/Government)		6
Component Area VIII (Social and Behavioral Sciences)		3
Component Area IX (Component Area Option) [1]		4
Degree Specific Requirements		
ENGL 3330	Intro to Technical Writing	3
MATH 1314	Pre Calculus Algebra [1]	3
MATH 1316	Plane Trigonometry [1]	3
MATH 3379	Statistical Mthods in Practice	3
PHYS 1301 & PHYS 1101	General Phy-Mechanics & Heat and General Physics Laboratory I	4
PHYS 1302 & PHYS 1102	Gen Phy-Snd,Lght, Elec, & Mag and General Physics Laboratory II	4
Major: Foundation		
ETDD 1361	Engineering Graphics	3
ETEC 1010	Engineering Foundations	1
ETEC 3374	Time And Motion Study	3
ETEC 4099	Engineering Innovation	1
ETEC 4384	Supervisory Personnel Practice	3
ETEC 4391	Work Base Mentorship (internship)	3
ETEC 4399	Senior Design	3
ETEE 1340	Introduction to Circuits	3
ETSM 3363	Safety Program Management	3
ETSM 3371	Systems Safety & Risk Assessment	3
ETSM 3372	Occupational Safety Standards	3
ETSM 3386	Industrial Safety	3
ETSM 4313	Industrial Hygiene	3
ETSM 4335	Human Factors & Ergonomics	3
or ETSM 3380	Accident Investigation & Analysis	
ETSM 4345	Industrial Fire Safety	3
or ETSM 4375	Safety Hazard Mitigation	
ETSM 4377	Environmental Safety Mgmt	3
or ETSM 4379	Emergency Management & Planning	
Minor: Required [2]		
Minor		6
Minor (12 hours advanced)		12
Total Hours		**121**

[1] MATH 1316 or MATH 1314 or MATH 1420 or MATH 1324 satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirement. If taking MATH 1314, MATH 1316, or MATH 1324 to satisfy the Component Area II requirement, then take 4 hours in Component Area IX. If taking MATH 1420, then take 3 hours in Component Area IX. Total hours must sum to 120.

[2] All minors can be paired with this degree program.

Notes

Students must earn a 2.0 minimum overall GPA in all coursework.

Students must meet a 2.0 minimum overall major GPA in all major coursework.

Students must earn a 2.0 minimum SHSU GPA in all coursework.

Students must meet a 2.0 minimum SHSU major GPA in all major coursework.

Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

First Year

Fall	Hours	Spring	Hours
Component Area I (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai)	3	Component Area I (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai)	3
Component Area IX (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	3	Component Area VI (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3
ETDD 1361	3	Component Area IX (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	1
ETEC 1010	1	ETEE 1340	3
MATH 1314[1]	3	MATH 1316[1]	3
		Minor[2]	3
	13		**16**

Second Year

Fall	Hours	Spring	Hours
Component Area IV (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3	Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3
Component Area V (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3	Component Area VIII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3
Component Area VI (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3	Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4
PHYS 1301 & PHYS 1101	4	ENGL 3330	3
Minor[2]	3	PHYS 1302 & PHYS 1102	4
	16		**17**

Third Year

Fall	Hours	Spring	Hours
Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3	Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4
ETSM 3363	3	ETEC 3374	3
ETSM 3386	3	ETSM 3371	3
MATH 3379	3	ETSM 3372	3
Minor Advanced[2]	3	ETSM 4345 or 4375	3
	15		**16**

Fourth Year

Fall	Hours	Spring	Hours
ETEC 4099	1	ETEC 4384	3
ETSM 4313	3	ETEC 4391	3
ETSM 4335 or 3380	3	ETEC 4399	3
ETSM 4377 or 4379	3	Minor Advanced[2]	6
Minor Advanced[2]	3		
	13		**15**

Total Hours: 121

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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 skills 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 BS in Engineering Technology - Concentration in Safety Management is designed to provide graduates with the following marketable skills:

- Apply concepts of safety and risk management to prioritize resources, reduce costs and minimize occupational hazards.
- Anticipate, recognize, evaluate, and control hazardous conditions that affect workers, properties and/or work environments.
- Demonstrate safety leadership skills, teamwork, and effective communication skills.
- Identify and apply applicable safety standards, regulations, and codes in industrial settings.
- Apply engineering technology and strategies to resolve issues of ethics and social responsibility.
- Integrate professional, ethical, and social responsibilities as a professional in the field.
- Obtain continuous learning skills through applied industry experiences, safety case studies, and past incident records