

# BACHELOR OF SCIENCE, MAJOR IN ENGINEERING TECHNOLOGY

Code	Title	Hours
<b>Bachelor of Science, Major in Engineering Technology</b>		
Core Curriculum ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/</a> )		
Component Area I (Communication)		6
Component Area II (Mathematics)		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)		4
<b>Degree Specific Requirements</b>		
ENGL 3330 or MATH 3379	Intro to Technical Writing Statistical Methods in Practice	3
MATH 1314	Pre Calculus Algebra <sup>1</sup>	3
MATH 1316 or PHYS 1401	Plane Trigonometry <sup>1</sup> Physics Boot Camp	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
<b>Major Core</b>		
ETEC 1010	Engineering Foundations	1-2
ETEE 1340	Introduction to Circuits	3
ETDD 1361	Engineering Graphics	3
ETEC 1371 or ETDD 1366	Descriptive Geometry Machining Technology I	3
<b>Major</b>		
ETDD 3310	Product Design & Development	3
ETEC 2382	Manufacturing Processes	3
ETEC 3374 or ETEC 3300	Time And Motion Study Technology Innovations	3
ETEC 3375	Statics	3
ETEC 4099	Engineering Innovation	3
ETEC 4340 or ETEC 3340	Alternative Energy Technology Solar and Wind Energy Systems	3
ETEC 4384	Supervisory Personnel Practice	3
ETEE 2320	Circuits and Systems	3
ETEE 4352	Instrumentation & Interfacing	3
ETSM 3386	Industrial Safety	3
Approved Advanced Electives from: ETEC, ETEE, ETDD, ETCM, ETSM and INED <sup>2</sup>		6
<b>Minor (if required)</b>		
Minor		6
Minor (12 hours advanced)		12
Total Hours		120-121

2 Bachelor of Science, Major in Engineering Technology

<sup>1</sup> 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. MATH 1420 also satisfies one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).

<sup>2</sup> Engineering Technology (ETEC), Design & Development (ETDD), Construction Management (ETCM), Safety Management (ETSM), Electronics (ETEE), Industrial Education (INED)

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

**First Year**

Fall	Hours	Spring	Hours
Component Area I ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai</a> )		3 Component Area I ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai</a> )	3
Component Area IX ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix</a> )		4 Component Area IV ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiiv">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiiv</a> )	3
ETEC 1010		1-2 ETEC 1371 or ETDD 1366	3
ETDD 1361		3 ETEE 1340	3
MATH 1314 <sup>1</sup>		3 MATH 1316 or PHYS 1401 <sup>1</sup>	3
		14-15	15

**Second Year**

Fall	Hours	Spring	Hours
Component Area V ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav</a> )		3 Component Area VI ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi</a> )	3
Component Area VI ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi</a> )		3 Component Area VII ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii</a> )	3
ETEC 2382		3 Component Area VIII ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii</a> )	3
Minor Courses		3 ENGL 3330 or MATH 3379	3
PHYS 1301 & PHYS 1101		4 PHYS 1302 & PHYS 1102	4
		16	16

**Third Year**

Fall	Hours	Spring	Hours
Component Area III ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii</a> )		4 Component Area III ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii</a> )	4
Component Area VII ( <a href="http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii">http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii</a> )		3 ETDD 3310	3
ETEC Program Advanced Elective <sup>2</sup>		3 ETEC 3374 or 3300	3
ETEE 2320		3 ETEC Program Advanced Elective <sup>2</sup>	3
Minor Courses		3 Minor Courses (Advanced)	3
		16	16

**Fourth Year**

Fall	Hours	Spring	Hours
ETEC 4340 or 3340		3 ETEC 3375	3
ETEE 4352		3 ETEC 4099	3

ETSM 3386	3 ETEC 4384	3
Minor Courses (Advanced)	6 Minor Courses (Advanced)	3
		15
		12

Total Hours: 120-121

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- 2 Engineering Technology (ETEE), Design & Development (ETDD), Construction Management (ETCM), Safety Management (ETSM), Industrial Education (INED).

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

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 is designed to provide graduates with the following marketable skills:

- Communicate technology problem solutions.
- Apply technology tools in applied engineering and technology.
- Analyze data and notice trends to successfully provide solutions.
- Team-based skills including leadership and conflict resolution abilities.
- Prepare to engage in lifelong learning.