

BACHELOR OF SCIENCE, MAJOR IN ENGINEERING TECHNOLOGY (MANUFACTURING ENGINEERING TECHNOLOGY)

Code	Title	Hours
Bachelor of Science, Major in Engineering Technology (Manufacturing Engineering Technology)		
Core Curriculum (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/)		
Component Area I (Communications)		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)		4
Degree Specific Requirement		
MATH 1314	Pre Calculus Algebra ¹	3
MATH 1316	Plane Trigonometry ¹	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		
ETEC 1010	Engineering Foundations	1
ETDD 1361	Engineering Graphics	3
ETEE 1340	Introduction to Circuits	3
Major		
ETDD 1366	Machining Technology I	3
ETDD 2366	Machining Technology II	3
ETDD 3310	Product Design & Development	3
ETDD 4380	Material Hand & Plant Layout	3
ETDD 4388	3D Parametric Design	3
ETEC 2382	Manufacturing Processes	3
ETEC 3367	Engineering Materials Techn	3
ETEC 3374	Time And Motion Study	3
ETEC 3375	Statics	3
ETEC 4340	Alternative Energy Technology	3
ETEC 4384	Supervisory Personnel Practice	3
ETEC 4391	Work Base Mentorship	3
Major: Concentration (Manufacturing Engineering Technology)		
ETEC 4369	Spec Topics in Industrial Tech	3
ETEC 4376	Strength of Materials	3
ETEC 4399	Senior Design	3
ETEE 2320	Circuits and Systems	3
ETEE 3313	Industrial Robotics	3
ETEE 4351	Automation & PLCs	3
ETSM 3386	Industrial Safety	3
Total Hours		120

¹ If MATH 1316 or MATH 1314 are used to satisfy the Core Curriculum requirement for Component Area II (Mathematics) then an additional 3 hours in Math will be needed to meet the 120 total semester credit 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)		4 Component Area IV (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiiv)	3
ETDD 1361		3 ETDD 1366	3
ETEC 1010		1 ETEE 1340	3
MATH 1314 ¹		3 MATH 1316 ¹	3
		14	15

Second Year

Fall	Hours	Spring	Hours
Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)		4 Component Area II (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaii) ¹	3
ETDD 2366		3 Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4
ETDD 3310		3 Component Area V (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
ETEC 2382		3 Component Area VI (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3
PHYS 1301 & PHYS 1101		4 PHYS 1302 & PHYS 1102	4
		17	17

Third Year

Fall	Hours	Spring	Hours
Component Area VI (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)		3 Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3
Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)		3 ETDD 4380	3
ETEC 3374		3 ETDD 4388	3
ETEC 3375		3 ETEC 4340	3
ETEC 3367		3 ETEC 4391	3
ETEC 4384		3	
		18	15

Fourth Year

Fall	Hours	Spring	Hours
Component Area VIII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)		3 ETEE 4351	3
ETEE 2320		3 ETEC 4369	3
ETEE 3313		3 ETEC 4399	3
ETSM 3386		3 ETEC 4376	3
	12		12

Total Hours: 120

¹ If MATH 1316 (<http://catalog.shsu.edu/archives/2022-2023/search/?P=MATH%201316>) or MATH 1314 (<http://catalog.shsu.edu/archives/2022-2023/search/?P=MATH%201314>) are used to satisfy the Core Curriculum requirement for Component Area II (Mathematics) then an additional 3 hours in Math will be needed to meet the 120 total semester credit 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 - Manufacturing Engineering Technology Concentration is designed to provide graduates with the following marketable skills:

- Knowledge and hands-on experience in various manufacturing processes such as machining, plastic processing, and 3D printing.
- Skills in product design and development and the product life cycle.
- Skills in the plant layout for high efficiency production.
- Skills in material testing and properties measurement following industrial standards.
- Automation and control of manufacturing equipment.
- Demonstrate leadership, teamwork, and effective communication skills.