BACHELOR OF SCIENCE, MAJOR IN ENGINEERING DESIGN TECHNOLOGY

Additional information: Reference the Program Landing Page (https://www.shsu.edu/programs/bachelor-of-science-in-engineering-design-technology/) for additional information, such as cost, delivery format, contact information, or to schedule a visit.

Code	Title	Hours
Bachelor of Science, Major in Engineering Design and Technology		
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) [2]		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		
MATH 1314	Pre Calculus Algebra [1]	3
MATH 1316	Plane Trigonometry [1]	3
MATH 3379	Statistical Methods in Practice	3
or ENGL 3330	Introduction to Technical Writing	
PHYS 1301 & PHYS 1101	General Physics-Mechanics and Heat and General Physics Laboratory I	4
PHYS 1302 & PHYS 1102	General Physics-Sound, Light, Electricity, and Magnetism and General Physics Laboratory II	4
Major: Foundation		
ETDD 1361	Engineering Graphics	3
ETDD 2363	Architectural Design	3
ETDD 3310	Product Design & Development	3
ETDD 3366	Intro to Virtual and Augmented Reality	3
ETDD 3379	Industrial Design & Drafting	3
ETDD 4339	Advanced Computer-Aided Drafting and Modeling	3
ETDD 4380	Material Hand & Plant Layout	3
ETDD 4388	3-Dimensional Parametric Design	3
ETEC 1010	Engineering Foundations	1
ETEC 1371	Descriptive Geometry	3
or ETEC 1366	Machining Technology I	
ETEC 3367	Engineering Materials Techniques	3
ETEC 3374	Time And Motion Study	3
or ETEC 3300	Technology Innovations	
ETEC 3375	Statics	3
ETEC 4384	Supervisory Personnel Practice	3
or ETEC 4376	Strength of Materials	
ETEC 4391	Work Base Mentorship	3
ETEC 4399	Senior Design II [3]	3
ETEE 1340	Introduction to Circuits	3
ETSM 3386	Industrial Safety	3
Minor: Required [4]		
Minor		6

Minor (9 hours advanced)	9
Total Hours	**123**

1 MATH 1314, MATH 1316, MATH 1324, and MATH 1420 satisfy the Core Curriculum requirement for Component Area II (Mathematics). MATH 1314 and MATH 1316 also satisfy the Degree Specific Requirement. MATH 1420 will satisfy one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).
2 Must be taken from BIOL, CHEM, GEOL, or GEOG 1401 only.
3 ETEC 4199 is a prerequisite for ETEC 4399.
4 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.

Additional information: Reference the Program Landing Page (https://www.shsu.edu/programs/bachelor-of-science-in-engineering-design-technology/) for additional information, such as cost, delivery format, contact information, or to schedule a visit.

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)[1]	4	Component Area IV (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3
ETDD 1361	3	ETEC 1371 or 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 VI (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3	Component Area VI (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3
ETDD 2363	3	Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3
ETDD 3310	3	Component Area VIII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3
PHYS 1301 & PHYS 1101	4	MATH 3379 or ENGL 3330	3
Minor[2]	3	PHYS 1302 & PHYS 1102	4
	16		**16**

Third Year

Fall	Hours	Spring	Hours
Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)[3]	4	Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)[3]	4
ETDD 3366	3	Component Area V (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
ETDD 3379	3	ETEC 3367	3
ETEC 3375	3	ETEC 3374 or 3300	3
Minor[2]	3	ETSM 3386	3
	16		**16**

Fourth Year

Fall	Hours	Spring	Hours
Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3	ETDD 4388	3
ETDD 4339	3	ETEC 4391	3
ETDD 4380	3	ETEC 4399[4]	3
ETEC 4384 or 4376	3	Minor Advanced[2]	6
Minor Advanced[2]	3		
	15		**15**

Total Hours: 123

1. MATH 1314, MATH 1316, MATH 1324, and MATH 1420 satisfy the Core Curriculum requirement for Component Area II (Mathematics). MATH 1314 and MATH 1316 also satisfy the Degree Specific Requirement. MATH 1420 will satisfy one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).
2. All minors can be paired with this degree program.
3. Must be taken from BIOL, CHEM, GEOL, or GEOG 1401 only.
4. ETEC 4199 is a perquisite for ETEC 4399.

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.

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 Design Technology is designed to provide graduates with the following marketable skills:

- Conduct engineering design using Computer Aided Design (CAD) tools.
- Fabricate prototypes via various manufacturing processes and equipment.
- Communicate effectively in both written and verbal forms.
- Work collaboratively in a team environment.