

# BACHELOR OF SCIENCE, MAJOR IN ENGINEERING TECHNOLOGY - CONCENTRATION IN ELECTRONICS

Code	Title	Hours
<b>Bachelor of Science, Major in Engineering Technology - Concentration in Electronics</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) <sup>1</sup>		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>		
Select one of the following:		3
ENGL 3330	Intro to Technical Writing	
MATH 3379	Statistical Mthods in Practice	
MATH 1314	Pre Calculus Algebra <sup>1</sup>	3
MATH 1316	Plane Trigonometry <sup>1</sup>	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
<b>Major</b>		
ETEE 2320	Circuits and Systems	3
ETEC 3340 or ETEC 4340	Solar and Wind Energy Systems Alternative Energy Technology	3
ETEE 3350	Analog Electronics	3
ETEE 3360	Electrical Power & Machinery	3
ETEE 3373	Control Systems Technology	3
ETEC 3376	Microcontroller Applications	3
ETEC 4099	Engineering Innovation	3
ETEE 4351	Automation & Control Systems	3
ETEE 4352	Instrumentation & Interfacing	3
ETEE 4373	Digital Electronics	3
ETEC 4384 or INED 4310	Supervisory Personnel Practice Occup. Human Relations in CTE	3
ETEC 4391	Work Base Mentorship (internship)	3
ETSM 3386	Industrial Safety	3
<b>Minor</b>		
Minor		6
Minor (12 hours advanced)		12
Total Hours		120-121

<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 will also satisfy one semester credit hour of Core Curriculum Component Area IX (Component Area Option).

**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
EETC 1010		1-2 ETDD 1361	3
ETEE 1340		3 ETEE 2320	3
MATH 1314 <sup>1</sup>		3 MATH 1316 <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
EETC 3340 or 4340		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
ETEE 3350		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 EETC 4384 or INED 4310	3
ETEE 3373		3 ETSM 3386	3
Minor Courses		6 Minor Courses (Advanced)	6
		16	16

### Fourth Year

Fall	Hours	Spring	Hours
EETC 3376		3 ETEE 3360	3
ETEE 4351		3 EETC 4099	3
ETEE 4373		3 ETEE 4352	3

Minor Courses (Advanced)	6 ETEC 4391	3
	15	12

Total Hours: 120-121

<sup>1</sup> MATH 1316 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=MATH%201316>) or MATH 1314 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=MATH%201314>) or MATH 1420 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=MATH%201420>) or MATH 1324 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=MATH%201324>) satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirement. MATH 1420 will also satisfy one semester credit hour of Core Curriculum Component Area IX (Component Area Option).

**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 - Concentration in Electronics is designed to provide graduates with the following marketable skills:

- Select and engage in modern electrical/, electronics, and computer devices and systems.
- Design and conduct Engineering Technology experiments.
- Learn and apply conventional and renewable energy technologies.
- Use automation, robotics, instrumentation, and data acquisition in industrial environments.
- Engage in technical report writing and communication.
- Employ teamwork and leadership skills.