

BACHELOR OF SCIENCE, MAJOR IN ELECTRONICS AND COMPUTER ENGINEERING TECHNOLOGY

Code	Title	Hours
Bachelor of Science, Major in Electronics and Computer Engineering 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)		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 Requirements		
ENGL 3330	Intro to Technical Writing	3
MATH 3379	Statistical Methods in Practice	3
MATH 1316	Plane Trigonometry ¹	3
MATH 1420	Calculus I ²	4
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 Core		
COSC 1436	Programming Fundamentals I	4
COSC 1437	Programming Fundamentals II	4
ETDD 1361	Engineering Graphics	3
ETEE 1340	Introduction to Circuits	3
Major		
COSC 2327	Intro to Computer Networks	3
COSC 2329	Comp Organiz & Machine Lang	3
COSC 3327	Computer Architecture	3
ETEC 1010	Engineering Foundations	1-2
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
Internship		6
ETEC 4391	Work Base Mentorship	
Advanced ETEE & ECET Electives		3
Total Hours		122-123

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¹ MATH 1316 satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirements.

² MATH 1420 satisfies one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option) and the Degree Specific requirements.

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 IV (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiiv)	3
EETC 1010		1-2 COSC 1436	4
ETEE 1340		3 ETEE 2320	3
MATH 1316 ¹		3 MATH 1420 ²	4
		13-14	17

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
Component Area V (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)		3 Component Area VII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3
COSC 1437		4 Component Area VIII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3
ETEE 3350		3 ENGL 3330	3
PHYS 1301 & PHYS 1101		4 PHYS 1302 & PHYS 1102	4
		17	16

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
Component Area III (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)		4 COSC 3327	3
COSC 2327		3 ETDD 1361	3
COSC 2329		3 ETEC 3340 or 4340	3
ETEE 3373		3 ETEE 4373	3
		16	16

Fourth Year

Fall	Hours	Spring	Hours
ETEE 3360		3 ETEC 4099	3
ETEC 3376		3 ETEE 4352	3
ETEE 4351		3 ETEC 4391 (Internship)	3
ETEE Advanced Elective		3 ETEC 4391 (Internship)	3

MATH 3379	3	
	15	12

Total Hours: 122-123

- ¹ MATH 1316 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=MATH%201316>) satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirements.
- ² MATH 1420 (<http://catalog.shsu.edu/archives/2020-2021/search/?P=MATH%201420>) satisfies one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option) and the Degree Specific requirements.

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 Electronics and Computer Engineering Technology 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.