

## Bachelor of Science-Electrical Engineering

The Bachelor of Science-Electrical Engineering degree requires a minimum of 120 credit hours.

Required Core Courses	
Refer to catalog for General Education Requirements	42 hours

Major Requirements		82 Hours
Course Number	Course Title	Credit Hours
PHYS 2325	University Physics I (satisfied in core curriculum)	3
PHYS 2125	University Physics I Lab (satisfied in core curriculum)	1
PHYS 2326	University Physics II (satisfied in core curriculum)	3
PHYS 2126	University Physics II Lab (satisfied in core curriculum)	1
CHEM 1307	General Chemistry for Engineering Students	3
CHEM 1117	General Chemistry for Engineering Students Lab	1
COSC 1315	Introduction to Computer Science	3
MATH 2413	Calculus I (satisfied in core curriculum)	4
MATH 2414	Calculus II	4
MATH 2415	Calculus III	4
MATH 2320	Differential Equations	3
MATH 2318	Linear Algebra	3
EE 307	Probability and Random Processes	4
EE 2305	Electric Circuits I	3
EE 319	Electric Circuits II	3
EE 320	Circuit Laboratory (Taken with EE 319)	1
EE 321	Digital Logic	3
EE 322	Digital Logic Lab	1
EE 325	Signals and Systems	3
EE 326	Signals and Systems Lab	1
EE 335	Electronics I	3
EE 336	Electronics Lab	3



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EE 447	Electronics II	3
EE 340	Computer Architecture	3
EE 345	Introduction to Electromagnetic Theory	3
EE 432	Control Systems	3
EE455	Digital Circuit Testing and Testability	3
EE 470	Digital Design Using Very High Speed Integrated Circuit Hardware Description Language (VHDL)	3
EE 429	Basic Communication Theory	3
EE 490	EE Senior Design I	3
EE 491	EE Senior Design II	3
<b>Other Requirements</b>		
<b>Select 12 semester credit elective hours from the following:</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
CS 363	Neural Networks and Machine Learning	3
CS 420	Computer Networks	3
CS 467	Image Processing and Computer Vision	3
CS 310	Analysis of Algorithms	3
EE 317	Information Theory	3
EE 425	Systems and Signals II	3
EE 465	Very-Large-Scale Integrated (VLSI) Design	3
EE 469	Wireless Communications	3
EE 473	Power Systems	3
EE 497	Special Topics	3
ENGR 315	Engineering Computations	3
ENGR 2311	Engineering and Business Technical Writing	3
ENGR 310	Engineering Economics	3
ENGR 312	Engineering and Business Ethics	3

For more information on the Bachelor of Science in Electrical Engineering degree please contact [CBET@tamut.edu](mailto:CBET@tamut.edu)