

# BACHELOR OF SCIENCE, MAJOR IN ENGINEERING TECHNOLOGY WITH TEACHING CERTIFICATION

## Bachelor of Science, Major in Engineering Technology with Teaching Certification

**Core Curriculum** ([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))

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
<b>Degree Specific Requirements</b>		
ACOM 3360	Communication Skills for Agriculturists	3
Select one of the following MATH Courses:		3
MATH 1314	Pre Calculus Algebra	
MATH 1324	Mth For Mnjl Decision Making	
MATH 1420	Calculus I	
Select one of the following: <sup>1</sup>		3
MATH 1316	Plane Trigonometry <sup>1</sup>	
MATH 1430	Calculus II	
MATH 2399	Mth For Mnjl Decision Making	
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>		
ETDD 1361 or ETDD 1390	Engineering Graphics Intro -Computer Aided Drafting	3
ETEC 1010	Engineering Foundations	1-2
EETC 1371	Descriptive Geometry	3
ETEE 1340	Electronics Technology I	3
ETCM 1363	Wood Frame Construction	3
<b>Major</b>		
ETDD 3310	Product Design & Development	3
ETCM 2363	Architectural Design	3
EETC 4340	Alternative Energy Technology	3
ETEE 2320	Electronics Technology II	3
INED 4310	Occup. Human Relations in CTE	3
INED 4364	Teaching in Schools & Industry	3
INED 4391	Lab Mgt,Organization & Control	3
12 hours Advanced Electives selected from: ETEC, ETEE, ETDD, ETCM, ETSM and INED		12
<b>Minor</b>		
CISE 3384	The Teaching Profession	3
CISE 4364	Mth Tch Secondary Schools	3
CISE 4378	Content Literacy	3
CISE 4379	Differentiated Pedagogy	3
CISE 4380	Respon Of Pro Educator	3
CISE 4394	Creatng Env For Lrng-Secondary	3

CISE 4396	Std Tch Secondary Classroom	3
or CISE 4397	Std Tch Secondary Classroom	
Total Hours		123-124

<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.

For certification purposes the minor is considered to be Secondary Education. No other minor is required, but if an additional teaching field is desired, the student must meet the requirements of that teaching field. For the degree of Bachelor of Science and a teaching certificate with an integrated teaching field in technology, the student must complete a minimum of 48 semester hours in Industrial Technology and 21 semester hours in Secondary Education. The courses listed above are required of all students who are majoring in Industrial Technology and seeking a teaching certificate. The student should be advised by the Industrial Sciences and Technology teacher educator. Contact the advisor at (936) 294-1216, or seek advisement for Industrial Sciences at the SAM Center.

### First Year

Fall	Hours Spring	Hours
Component Area I (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai)	3 Component Area I (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai)	3
Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	1 Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4
ETDD 1361 or 1390	3 Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiiv)	3
ETCM 1363	3 ETEC 1010	1-2
ETEE 1340	3 ETEE 2320	3
MATH 1314, 1324, or 1420 <sup>1</sup>	3 PHYS 1301 & PHYS 1101	4
	16	18-19

### Second Year

Fall	Hours Spring	Hours
Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4 Component Area VI (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3
Component Area V (PLSC 2399 is suggested)	3 Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3
Component Area VI (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3 Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3
ETDD 3310	3 ETCM 2363	3
MATH 1316, 2399, or 1430	3 ETEC 1371	3
	16	15

### Third Year

Fall	Hours Spring	Hours
Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3 CISE 4364	3
CISE 3384	3 CISE 4379	3
ETEC Program Advanced Electives	6 CISE 4380	3
PHYS 1302 & PHYS 1102	4 ETEC 4340	3
	INED 4364	3
	16	15

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CISE 4378	3 Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	3
ETEC Program Advanced Electives	6 ACOM 3360	3
INED 4310	3 CISE 4394	3
INED 4391	3 CISE 4397 or 4396	3
	15	12

Total Hours: 123-124

<sup>1</sup> Satisfies Component Area II (Mathematics). MATH 1420 also satisfies one semester credit hour of Component Area IX (Component Option Area).