

# BACHELOR OF SCIENCE, AGRICULTURAL ENGINEERING TECHNOLOGY WITH TEACHING CERTIFICATION

The purpose of the Agricultural Engineering Technology curriculum is to provide an educational experience based on the fundamentals of engineering principles and practices. Theory-based lectures will be accompanied by experiential learning activities for persons who intend to pursue a career related to the technical operation and management of an agriculture enterprise. It is expected that graduates will choose a position of leadership and responsibility in a career area associated with service and sales, production, processing, product testing, alternative energies, or a government agency.

An internship in an agricultural engineering technology related business or industry is strongly encouraged for each student. This will provide students 'real-life' learning experiences outside their regular classroom and laboratory opportunities. Students generally seek an internship experience at the end of their sophomore or junior year. Internships may be arranged through a student's contact with providers or through departmental announcements or postings. All internships must be approved by the student's departmental academic adviser prior to the initiation of the internship.

Maximum credit for the internships is six (6) credit hours.

## Bachelor of Science, Major in Agricultural 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

### Degree Specific Requirements

ACOM 3360 or ENGL 3330	Communication Skills for Agriculturists (ACOM 3360 recommended) Intro To Technical Writing	3
AGRI 1309 or CSTE 1330	Computers in Agriculture (or approved substitute) Introduction To Computers	3
CHEM 1406	Inorganic & Envir Chemistry <sup>1</sup>	4
ETDD 1361	Engineering Graphics	3
MATH 1369 or STAT 1369	Elementary Statistics Elementary Statistics	3
PHYS 1305 & PHYS 1105	Classical Physics & Thermodynmc and Class Phy & Thermodynamics Lab	4

### Major Core

AGRI 1131	Intro To Pro Leadership Skills	1
AGET 2303	Intro to Ag Engineering Tech	3
ANSC 1319 & ANSC 1119	Animal Science and Animal Science Laboratory	4
PLSC 1307 & PLSC 1107	Plant Science and Plant Science Laboratory	4

### Major Core for Teacher Certification

AGBU 2317	Principles Of Agri Economics	3
AGBU 2389	Agribusiness Financl Analysis	3
AGED 3310	Teaching Ag Technology	3
AGED 3320	Interdiscip Agr Sci & Technol	3
ANSC 3373	Animal Nutrition	3
ANSC 4360	Livestock Mgt Techniques	3
Select 3 hours from Animal Science Production Courses		3
ANSC 3376	Meat Science	
ANSC 4376	Sheep & Goat Production & Mgt	
ANSC 4380	Beef Cattle Production & Mgmt	

EQSC 2364	Equine Science	
AGET 3386	Agricultural Structures and Environmental Control Systems	3
AGET 4381	Adv Agricultural Mechanics	3
AGET 4387	Agricultural Engines & Tractor	3
PLSC 3440	Soil Science	4
PLSC 4370	Forage Crops & Pasture Mgmt	3
or PLSC 3395	Plant Propagation Techniques	
<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
Secondary Ed Courses - AGED		
AGED 4364	Methds Tchg Agricultural Sci	3
AGED 4365	Std Tchng Agricultural Science	3
AGED 4366	Std Tchng Agricultural Science	3
AGED 4380	Respsnblty Of Pro Agr Sci Edu	3
AGED 4388	Agr Sci & Tech Program Mgt	3
Total Hours		137

<sup>1</sup> CHEM 1406 satisfies the Core Curriculum requirement for Component Area III (Life and Physical Science) and Degree Specific Requirement for major.

### 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 (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 VII (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareavii)	3 Component Area II (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaii)	3
AGET 2303	3 Component Area VI (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareavi)	3
AGRI 1131	1 CHEM 1406 <sup>1</sup>	4

AGRI 1309 or CSTE 1330	3 PLSC 1307 & PLSC 1107	4
ANSC 1319 & ANSC 1119	4	
	17	17
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
Component Area VI (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareavi)	3 ETDD 1361	3
Component Area VII (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareavii)	3 AGBU 2389	3
Component Area VIII (Recommend ANSC 2360)	3 ANSC 4360	3
AGBU 2317	3 Component Area III (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaiii)	4
MATH 1369 or STAT 1369	3 Component Area IV (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaiiv)	3
	Component Area V (Recommend PLSC 2399)	3
	15	19

**Third Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
Component Area IX (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaix)	4 AGED 3320	3 AGED 3310	3
ANSC 3373	3 AGET 3386	3 AGED 4388	3
ANSC Production Elective	3 AGET 4387	3 AGET 4381	3
PHYS 1305 & PHYS 1105	4 PLSC 3440	4	
PLSC 4370 or 3395	3		
	17	13	9

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ACOM 3360 or ENGL 3330	3 AGED 4364	3
CISE 3384	3 AGED 4365	3
CISE 4364	3 AGED 4366	3
CISE 4378	3 AGED 4380	3
CISE 4379	3	
CISE 4380	3	
	18	12

Total Hours: 137

<sup>1</sup> Satisfies four semester credit hours the Core Curriculum requirement for Component Area III (Life and Physical Science).