BACHELOR OF SCIENCE, MAJOR IN 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 students 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) 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 (I.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 Communication Skills for Agriculturists (ACOM 3360 recommended) 3 or ENGL 3330 Intro to Technical Writing AGRI 1309 Computers in Agriculture (or approved substitute) 3 or CSTE 1330 Introduction to Computers CHEM 1406 Inorganic & Envir Chemistry ¹ 4
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 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 Communication Skills for Agriculturists (ACOM 3360 recommended) 3 or ENGL 3330 Intro to Technical Writing AGRI 1309 Computers in Agriculture (or approved substitute) 3 or CSTE 1330 Introduction to Computers
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CHEM 1406 Inorganic & Envir Chemistry 1 4
MATH 1369 Elementary Statistics 3
or STAT 1369 Elementary Statistics
PHYS 1305 Classical Physics & Thermdynmc 4
& PHYS 1105 and Class Phy & Thermodynamics Lab
Major Core
AGRI 1131 Intro to Pro Leadership Skills 1
AGET 2303 Intro to Ag Engineering Tech 3
ANSC 1319 Animal Science 4
& ANSC 1119 and Animal Science Laboratory
PLSC 1307 Plant Science 4 & PLSC 1107 and Plant Science Laboratory
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
AGED 4388 Agr Sci & Tech Program Mgt 3
ANSC 3373 Animal Nutrition 3
ANSC 4360 Livestock Mgt Techniques 3
Select 3 hours from Animal Production Courses 3
ANSC 3376 Meat Science
ANSC 4376 Sheep & Goat Production & Mqt

ANSC 4380	Beef Cattle Production & Mgmt	
EQSC 2364	Equine Science	
WMGT 3381	Game Animal Production	
AGET 3380	Agricultural Machinery	3
AGET 3386	Agricultural Structures and Environmental Control Systems	3
AGET 4381	Adv Agricultural Mechanics	3
AGET 4387	Agricultural Engines & Tractor	3
ETDD 1361	Engineering Graphics	3
PLSC 3440	Soil Science	4
PLSC 4370	Forage Crops & Pasture Mgmt	3
or PLSC 3395	Plant Propagation Techniques	
Minor		
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 4394	Ag. Ed. Learning Environments	3
Total Hours		140

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
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Fall	Hours Spring	Hours
AGET 2303	3 ENGL 1302 ¹	3
AGRI 1131	1 HIST 1302 ²	3
ANSC 1319 & ANSC 1119	4 KINE 2115, NGLI 1101, or ECON 1100 ⁴	1
ENGL 1301 ¹	3 PLSC 1307 & PLSC 1107	4
HIST 1301 ²	3 POLS 2305 ⁵	3
MATH 1314 or 1332 ³	3	
	17	14

Second Year

Fall	Hours Spring	Hours
AGRI 1309 or CSTE	3 Component Area V	3
1330	(catalog.shsu.edu/	
	undergraduate/	
	academic-policies-	
	procedures/degree-	
	requirements-	
	academic-guidelines/	
	core-curriculum/	
	#componentareav)	

AGBU 2317	3 Component Area VIII (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaviii)	3	
CHEM 1406 ⁶	4 ACOM 3360 or ENGL 3330	3	
MATH 1369 or STAT 1369	3 AGBU 2389	3	
POLS 2306 ⁵	3 Animal Production Courses ⁷	3	
	ETDD 1361	3	
	16	18	
Third Year			
Fall	Hours Spring	Hours Summer	Hours
Component Area III (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaiii)	4 Component Area IX (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaix)	3 AGED 3310	3
ANSC 3373	3 AGET 4387	3 AGED 4388	3
AGED 3320	3 AGET 3386	3 AGET 4381	3
CISE 3384	3 CISE 4378	3 PLSC 3440	4
PHYS 1305 & PHYS 1105	4 CISE 4380	3	
	PLSC 4370 or 3395	3	
	17	18	13
Fourth Year			
Fall	Hours Spring	Hours	
Component Area IV (catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaiv)	3 AGED 4364	3	
AGET 3380	3 AGED 4365	3	
ANSC 4360	3 AGED 4366	3	
CISE 4364	3 AGED 4394	3	
CISE 4379	3		
	15	12	

Total Hours: 140

Satisfies Core Curriculum requirement for Component Area I (Communication).

Satisfies Core Curriculum requirement for Component Area VI (U.S. History).

Satisfies requirement for Core Curriculum Component Area II (Mathematics).

⁴ Satisfies Core Curriculum requirement for Component Area IX (Component Area Option).

- 4 Bachelor of Science, Major in Agricultural Engineering Technology with Teaching Certification
- ⁵ Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).
- Satisfies four semester credit hours the Core Curriculum requirement for Component Area III (Life and Physical Science).
- Animal Production Courses: AGET 3380, ANSC 3376, ANSC 4376, ANSC 4380, EQSC 2364, or WMGT 3381.

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.