

BACHELOR OF SCIENCE, MAJOR IN PLANT AND SOIL SCIENCES WITH TEACHING CERTIFICATION

Agriculture, Food, and Natural Resources (AFNR) Teacher Certification

The primary emphasis of the teaching certification program is the preparation of secondary teachers of Agricultural, Food, and Natural Resources (AFNR). Students gain a broad background in the agricultural sciences along with professional preparation courses in agricultural education and secondary pedagogy. This comprehensive and diverse background prepares students for a wide variety of professional agricultural careers.

The teaching certification option can be chosen with any of the agricultural emphasis majors as shown. Students seeking teaching certification may double major in Interdisciplinary Agriculture and Secondary Education or major in Agricultural Business, Agricultural Engineering Technology, Animal Science or Plant and Soil Sciences with Teacher Certification.

All students seeking teaching certification must be advised each semester to ensure proper sequencing of classes.

Code	Title	Hours
Bachelor of Science, Major in Plant and Soil Sciences with Teaching Certification		
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) ¹		3
Component Area III (Life and Physical Science) ²		8
Component Area IV (Language, Philosophy, and Culture)		3
Component Area V (Creative Arts) ³		3
Component Area VI (U.S. History)		6
Component Area VII (Political Science/Government)		6
Component Area VIII (Social and Behavioral Sciences) ⁴		3
Component Area IX (Component Area Option)		4
Degree Specific Requirements		
AGRI 1309 or CSTE 1330	Computers in Agriculture (or approved substitute) Introduction to Computers	3
MATH 1314 or MATH 1332	Pre Calculus Algebra (Core: Area II) ¹ College Mathematics	3
MATH 1342	Elementary Statistics	3
CHEM 1406	Inorganic & Envir Chemistry ²	4
CHEM 1407	Intro Organic and Biochemistry ²	4
ACOM 3360	Communication Skills for Agriculturists	3
Plant and Soil Major With Teacher Certification		
AGRI 1131	Intro to Pro Leadership Skills	1
PLSC 1307 & PLSC 1107	Plant Science and Plant Science Laboratory	4
ANSC 1319 & ANSC 1119	Animal Science and Animal Science Laboratory	4
AGET 2303	Intro to Ag Engineering Tech	3
AGBU 2317	Principles of Agri Economics	3
PLSC 2399	Floral Design ³	3
AGBU 2389	Agribusiness Financl Analysis	3
PLSC 2395	Ornamental Plant Identification	3
AGED 3310	Teaching Ag Technology	3
AGED 3320	The Secondary Agriculture Education Program	3
ANSC 3373	Animal Nutrition	3
PLSC 3398	Landscape Design I	3
PLSC 3440	Soil Science	4
ANSC 4360	Livestock Mgt Techniques	3

PLSC 4370 or PLSC 3395	Forage Crops & Pasture Mgmt Plant Propagation Techniques	3
AGET 4381	Adv Agricultural Mechanics	3
AGED 4388	Secondary Agriculture Education Program Management	3
Animal Production Elective - Select one from the following:		3
EQSC 2364	Equine Science	
ANSC 3376	Meat Science	
WMGT 3381	Game Animal Production	
ANSC 4376	Sheep & Goat Production & Mgt	
ANSC 4380	Beef Cattle Production & Mgmt	
PLSC Advanced Elective		3
Teaching Certification		
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	Methods of Teaching Agriculture Education	3
AGED 4365	Student Teaching in Agriculture Education	3
AGED 4366	Student Teaching in Agriculture Education	3
AGED 4394	Agriculture Education Learning Environments	3

Total Hours **133**

- 1 MATH 1314 and MATH 1332 satisfy Core Curriculum requirement for Component Area II (Mathematics) as well as the Degree Specific requirement.
- 2 CHEM 1406 and CHEM 1407 satisfies the Core Curriculum requirement for Component Area III (Life and Physical Science) and the Degree Specific requirement.
- 3 PLSC 2399 satisfies Core Curriculum requirement for Component Area V (Creative Arts).
- 4 ANSC 2360 recommended.

Notes

Students must earn a 2.75 minimum GPA in all Education coursework (SHSU and cumulative).

Students must earn a "C" or better in all Education coursework.

Students must earn a "C" or better in all agricultural science major coursework.

First Year

Fall	Hours	Spring	Hours
Component Area IX (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)		1 AGRI 1309 or CSTE 1330	3
AGRI 1131		1 ANSC 1319 & ANSC 1119	4
ENGL 1301 ¹		3 ENGL 1302 ¹	3
HIST 1301 ²		3 HIST 1302 ²	3
MATH 1314 or 1332 ³		3 POLS 2305 ⁴	3

PLSC 1307 & PLSC 1107		4			
		15			16
Second Year					
Fall	Hours	Spring	Hours		
AGET 2303		3 Component Area VIII (http:// catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaviii) ⁷		3	
CHEM 1406 ⁶		4 AGBU 2317		3	
MATH 1342		3 CHEM 1407 ⁶		4	
PLSC 2399 ⁵		3 PLSC 3398		3	
PLSC 2395		3 POLS 2306 ⁴		3	
		16			16
Third Year					
Fall	Hours	Spring	Hours	Summer	Hours
AGBU 2389		3 ANSC 3373		3 Component Area IX (http:// catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaix)	3
AGED 3320		3 Animal Production Elective ⁸		3 AGED 3310	3
AGET 4381		3 CISE 4378		3 AGED 4388	3
PLSC 3440		4 CISE 4380		3 ACOM 3360	3
CISE 3384		3 PLSC 4370 or 3395		3	
		16			15
Fourth Year					
Fall	Hours	Spring	Hours		
Component Area IV (http:// catalog.shsu.edu/ undergraduate/ academic-policies- procedures/degree- requirements- academic-guidelines/ core-curriculum/ #componentareaiiv)		3 AGED 4364		3	
ANSC 4360		3 AGED 4365		3	
CISE 4364		3 AGED 4366		3	
CISE 4379		3 AGED 4394		3	
PLSC Advanced Elective		3			
		15			12
Total Hours: 133					

4 Bachelor of Science, Major in Plant and Soil Sciences with Teaching Certification

- 1 Satisfies Core Curriculum requirement for Component Area I (Communications).
- 2 Satisfies Core Curriculum requirement for Component Area VI (U.S. History).
- 3 Satisfies Core Curriculum requirement for Component Area II (Mathematics).
- 4 Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).
- 5 Satisfies Core Curriculum requirement for Component Area V (Creative Arts).
- 6 Satisfies Core Curriculum requirement for Component Area III (Life and Physical Science).
- 7 ANSC 2360 recommended.
- 8 Select one from the following: ANSC 3376, ANSC 4376, ANSC 4380, EQSC 2364, WMGT 3381

Notes

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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 Plant and Soil Sciences with Teaching Certification is designed to provide graduates with the following marketable skills:

- Recognize soil characteristics for optimum plant growth.
- Evaluate plants of importance in our society and how those plants are utilized.
- Analyze major insect, disease, and weed pests and control strategies.
- Develop entry level technical knowledge and skills required of Agriculture, Food and Natural Resources teachers in Agricultural Communications, Agricultural Business, Agricultural Engineering Technology, Animal Science and Plant and Soil Science.
- Manage, organize, and conduct Supervised Agricultural Experience Programs, Leadership, Career and Speaking Development Events.
- Develop annual and long range plans (program of activity, semester, and lesson plans, etc.)
- Use effective research-based techniques to develop a positive classroom environment.
- Create lessons and units of instruction to meet the Texas Essential Knowledge and Skills requirements for Agriculture, Food, and Natural Resources classes.