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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science, Major in Agricultural Engineering Technology with Teaching Certification</td>
<td>Core Curriculum (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/)</td>
<td>6</td>
</tr>
<tr>
<td>Component Area I (Communication)</td>
<td>6</td>
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</tr>
<tr>
<td>Component Area II (Mathematics)</td>
<td>3</td>
<td></td>
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<tr>
<td>Component Area III (Life and Physical Science)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Component Area IV (Language, Philosophy, and Culture)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Component Area V (Creative Arts)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Component Area VI (U.S. History)</td>
<td>6</td>
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</tr>
<tr>
<td>Component Area VII (Political Science/Government)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Component Area VIII (Social and Behavioral Sciences)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Component Area IX (Component Area Option)</td>
<td>4</td>
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</table>

#### Degree Specific Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACOM 3360</td>
<td>Communication Skills for Agriculturists (ACOM 3360 recommended)</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 3330</td>
<td>Intro to Technical Writing</td>
<td></td>
</tr>
<tr>
<td>AGRI 1309</td>
<td>Computers in Agriculture (or approved substitute)</td>
<td>3</td>
</tr>
<tr>
<td>or CSTE 1330</td>
<td>Introduction to Computers</td>
<td></td>
</tr>
<tr>
<td>CHEM 1406</td>
<td>Inorganic &amp; Envir Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>ETDD 1361</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1305</td>
<td>Classical Physics &amp; Thermdynmc and Class Phy &amp; Thermodynamics Lab</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHYS 1105</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Agricultural Engineering Technology With Teacher Certification

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBU 2317</td>
<td>Principles of Agri Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGBU 2389</td>
<td>Agribusiness Financl Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGED 3310</td>
<td>Teaching Ag Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGED 3320</td>
<td>The Secondary Agriculture Education Program</td>
<td>3</td>
</tr>
<tr>
<td>AGED 4388</td>
<td>Secondary Agriculture Education Program Management</td>
<td>3</td>
</tr>
<tr>
<td>AGET 2303</td>
<td>Intro to Ag Engineering Tech</td>
<td>3</td>
</tr>
<tr>
<td>AGET 3380</td>
<td>Agricultural Machinery</td>
<td>3</td>
</tr>
<tr>
<td>AGET 4381</td>
<td>Adv Agricultural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>AGET 3386</td>
<td>Agricultural Structures and Environmental Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>AGET 4387</td>
<td>Agricultural Engines &amp; Tractor</td>
<td>3</td>
</tr>
<tr>
<td>AGR 1131</td>
<td>Intro to Pro Leadership Skills</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 1319</td>
<td>Animal Science</td>
<td>4</td>
</tr>
<tr>
<td>&amp; ANSC 1119</td>
<td>and Animal Science Laboratory</td>
<td></td>
</tr>
<tr>
<td>ANSC 3373</td>
<td>Animal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 4360</td>
<td>Livestock Mgt Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 1307</td>
<td>Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PLSC 1107</td>
<td>and Plant Science Laboratory</td>
<td></td>
</tr>
<tr>
<td>PLSC 3440</td>
<td>Soil Science</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 4370</td>
<td>Forage Crops &amp; Pasture Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>or PLSC 3395</td>
<td>Plant Propagation Techniques</td>
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</table>

Select 3 hours from Animal Production Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 3376</td>
<td>Meat Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 4376</td>
<td>Sheep &amp; Goat Production &amp; Mgt</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 4380</td>
<td>Beef Cattle Production &amp; Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>EQSC 2364</td>
<td>Equine Science</td>
<td>3</td>
</tr>
<tr>
<td>WMGT 3381</td>
<td>Game Animal Production</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Teaching Certification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISE 3384</td>
<td>The Teaching Profession</td>
<td>3</td>
</tr>
<tr>
<td>CISE 4364</td>
<td>Mth Tch Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>CISE 4378</td>
<td>Content Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CISE 4379</td>
<td>Differentiated Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>CISE 4380</td>
<td>Respon Of Pro Educator</td>
<td>3</td>
</tr>
<tr>
<td><strong>Secondary Ed Courses - AGED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGED 4364</td>
<td>Methods of Teaching Agriculture Education</td>
<td>3</td>
</tr>
<tr>
<td>AGED 4365</td>
<td>Student Teaching in Agriculture Education</td>
<td>3</td>
</tr>
<tr>
<td>AGED 4366</td>
<td>Student Teaching in Agriculture Education</td>
<td>3</td>
</tr>
<tr>
<td>AGED 4394</td>
<td>Agriculture Education Learning Environments</td>
<td>3</td>
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<tr>
<td><strong>Minor: Not Required</strong></td>
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<tr>
<td><strong>Total Hours</strong></td>
<td>140</td>
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</table>

1. MATH 1314 or MATH 1332 is recommended.
2. CHEM 1406 satisfies the Core Curriculum requirement for Component Area III (Life and Physical Science) and Degree Specific Requirement for major.
3. PLSC 2399 is recommended
4. ANSC 2360 is 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.

<table>
<thead>
<tr>
<th>First Year</th>
<th></th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Hours</td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>AGET 2303</td>
<td>3</td>
<td>ENGL 1302$^1$</td>
</tr>
<tr>
<td>AGRI 1131</td>
<td>1</td>
<td>HIST 1302$^2$</td>
</tr>
<tr>
<td>ANSC 1319 &amp; ANSC 1119</td>
<td>4</td>
<td>KINE 2115, NGLI 1101, or ECON 1100$^4$</td>
</tr>
<tr>
<td>ENGL 1301$^1$</td>
<td>3</td>
<td>PLSC 1307 &amp; PLSC 1107</td>
</tr>
<tr>
<td>HIST 1301$^2$</td>
<td>3</td>
<td>POLS 2305$^5$</td>
</tr>
<tr>
<td>MATH 1314 or 1332$^3$</td>
<td>3</td>
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<tr>
<td><strong>17</strong></td>
<td></td>
<td><strong>14</strong></td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Hours</td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>AGRI 1309 or CSTE 1330</td>
<td>3</td>
<td>Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)</td>
</tr>
<tr>
<td>Course</td>
<td>Hours</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
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</tr>
<tr>
<td>AGBU 2317</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 1406</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ACOM 3360 or ENGL 3330</td>
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<tr>
<td>MATH 1342</td>
<td>3</td>
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</tr>
<tr>
<td>AGBU 2389</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>POLS 2306</td>
<td>3</td>
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<tr>
<td>Animal Production Electives</td>
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</tr>
<tr>
<td>ETDD 1361</td>
<td>3</td>
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</tbody>
</table>

### Third Year

| 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     |
| ANSC 3373 | 3     |
| AGET 4387 | 3     |
| AGED 3320 | 3     |
| AGET 3386 | 3     |
| CISE 3384 | 3     |
| CISE 4378 | 3     |
| PHYS 1305 & PHYS 1105 | 4     |
| CISE 4380 | 3     |
| PLSC 4370 or 3395 | 3     |

### Fourth Year

| Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviv) | 3     |
| AGET 3380 | 3     |
| ANSC 4360 | 3     |
| CISE 4364 | 3     |
| CISE 4379 | 3     |

Total Hours: 140

1. Satisfies Core Curriculum requirement for Component Area I (Communication).
2. Satisfies Core Curriculum requirement for Component Area VI (U.S. History).
4. Satisfies Core Curriculum requirement for Component Area IX (Component Area Option).
Bachelor of Science, Major in Agricultural Engineering Technology with Teaching Certification

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).
Select one of the Animal Production Electives from the course list below.

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<tr>
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<td>3</td>
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<td>WMGT 3381</td>
<td>Game Animal Production</td>
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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.
Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

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 Agricultural Engineering Technology with Teaching Certification is designed to provide graduates with the following marketable skills:

• Understand the importance and use of technology found in the agriculture and related industries for real-world problem solving.
• Evaluate how technology has changed in our society and how those technologies are used in modern agriculture and related industries.
• Analyze engineering issues found within the agriculture and/or other related industries and the technological solutions to those problems.
• Apply independent and team-working skills to accomplish objectives and meet organizational goals.
• Demonstrate a work ethic and soft skills that are desirable of an employee.
• Use professional oral and written communication skills for the transfer of technologically-rich knowledge.
• 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.