AGRICULTURAL SCIENCE BS

More Information

Advising Requirement
Advising is mandatory for this program. Consult your department advisor or program coordinator for information.

E-advising Tools
Students are encouraged to use the interactive e-advising tools that have been designed to help them graduate within four years. These tools can be accessed through the Student Center.

The Bachelor of Science in Agricultural Science covers agriscience and technology. Options are offered in agricultural science and education; and agricultural communication and leadership. State-of-the-art procedures reflect the science-based nature of agriculture and natural resource management in the 21st century. Students can choose either to concentrate on a single option or emphasize a broad overview. The program is designed for “hands-on” learning. A rigorous industry-based internship program, undergraduate research experiences, and a variety of learning activities at the University Farm give this program its reputation for student-centered learning.

Grading Requirement
All courses taken to fulfill program course requirements must be taken for a letter grade except those courses specified by the department as credit/no credit grading only.

Course Requirements for the Major: 78-82 units
Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Courses in this program may complete more than one graduation requirement.

Course | Title | Units
--- | --- | ---
Lower Division Core | | |
ABUS 101 | Introduction to Agricultural Business and Economics | 3
AGET 150 | Agricultural Machine Systems | 3
AGRI 180 | The University Experience | 1
ANSC 101 | Introduction to Animal Science | 3
PSSC 101 | Introduction to Plant Science | 3
PSSC 250 | Introduction to Soil Science | 3
Select one of the following: | | 3
ABUS 231 | Computer Applications in Agriculture | 3
ABUS 261 | Farm Accounting | 1
Select one of the following: | | 3
ANSC 120 | Livestock Skills | 1
ANSC 230 | Animal Feeds and Nutrition | 1
Select one of the following: | | 4
CHEM 107 | General Chemistry for Applied Sciences | 1
CHEM 111 | General Chemistry I | 1
Select six units from the following: | | 6
Any combination of lower-division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant and Soil Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor.

Upper Division Core
AGRI 305 | Agricultural Genetics | 3
AGRI 482W | Agricultural Issues (W) | 3
Select one of the following: | | 3
AGRI 331 | Agricultural Ecology | 3
PSSC 363 | Forage Crops | 3
Select six units from the following: | | 6
Any combination of upper-division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant and Soil Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor.

Major Option
Select one of the following options: | | 31-35
Agricultural Science and Education (p. 1)
Any combination of lower-division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant and Soil Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor.

Total Units | | 78-82
Agricultural Communication and Leadership (p. 2)

Major Option Course Requirements
Students must select one of the following options for completion of the major course requirements.

The Option in Agricultural Science and Education: 35 units
This option prepares students for careers in the broad field of agriculture or for careers in teaching at the secondary level. The option prepares students for diverse careers in agricultural production where the integration of animal, plant, and agri-business knowledge and skills is required.

Teaching Credentials for Agriculture
There are two credentials available for students who wish to pursue a career as an agricultural education teacher in California: the Single Subject Teaching Credential and the Agriculture Specialist Instruction Credential. The Single Subject Teaching Credential in Agriculture authorizes the holder to teach in the classroom. Candidates who fulfill the requirements for the Agriculture Specialist Instruction Credential are prepared to teach in out-of-classroom settings such as serving as an FFA advisor and Supervised Agricultural Experience Program supervisor.

The Single Subject Teaching Credential in Agriculture includes two components; a Subject Matter Preparation program and a Professional Education program. Students can complete the Subject Matter Preparation program by completing the option in agricultural science and education. Students completing another option or major in agriculture should consult the agricultural credential advisor to identify additional course requirements. Candidates may also demonstrate subject matter competence by successfully passing the appropriate California Subject Examinations for Teachers (CSET). The subject matter preparation advisor is responsible for verifying that subject matter preparation has been completed.

The Professional Preparation component of the Single Subject Teaching Credential includes professional education courses and a student teaching experience. This portion of the credential program is administered by the School of Education. For prerequisites and other
admission requirements for professional education programs, contact the School of Education (https://www.csuchico.edu/soe/).

All credential candidates recommended by California State University, Chico are authorized to teach all students, including English language learners, in the regular classroom. You may also want to qualify for the Bilingual Authorization emphasis if you meet the prerequisites in Spanish, Hmong, or Punjabi.

The requirements for the Agriculture Specialist Instruction Credential include a series of agricultural education courses (listed below), occupational experience, and a student teaching experience. Student teaching is combined with the student teaching experience required for the Single Subject Teaching Credential in Agriculture.

If you are interested in obtaining your credentials, confer with the appropriate credential advisor(s) early in your university career. Credential advisors can assist you in planning an educational program that will prepare you for both the BS in agricultural science and the teaching credential requirements. Students pursuing this career objective should also complete the single subject program prerequisite courses and pass the California Basic Education Skills Test (CBEST).

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGED 201</td>
<td>Introduction to Agricultural Education</td>
<td>3</td>
</tr>
<tr>
<td>AGED 210</td>
<td>Directed Field Experience Agricultural Education</td>
<td>2</td>
</tr>
<tr>
<td>AGED 321</td>
<td>Program Development in Agriculture Education</td>
<td>2</td>
</tr>
<tr>
<td>AGED 420</td>
<td>Techniques in Vocational Agricultural Instruction</td>
<td>2</td>
</tr>
<tr>
<td>AGED 421</td>
<td>Curriculum and Methods in Teaching Agricultural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 302</td>
<td>Access and Equity in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 451</td>
<td>Health Education for Secondary School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 530</td>
<td>Fundamentals of Teaching Practice for Secondary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDTE 534</td>
<td>Teaching Special Populations</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 471</td>
<td>Intensive Theory and Practice of Second Language Acquisition</td>
<td>3</td>
</tr>
</tbody>
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Select nine units from the following:

Any combination of upper-division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant and Soil Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor to meet the subject matter competency requirements.

Total Units: 35

Students are strongly encouraged to gain practical skills and knowledge through an approved internship or directed work experience in areas where additional experience is needed to become a successful agricultural teacher. With the approval of your advisor, single subject credential program prerequisite courses may be used as electives in this option. Students pursuing this career objective should also see the School of Education Credential Advisor (https://www.csuchico.edu/soe/advising/index.shtml/) to learn about additional credential program prerequisite requirements.

**The Option in Agricultural Communication and Leadership: 31 units**

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<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGRI 380A</td>
<td>Agricultural Leadership</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 380B</td>
<td>Leadership in the Workplace</td>
<td>3</td>
</tr>
</tbody>
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CMST 133 Speech and Debate Practicum 1
CMST 235 Intercultural Communication Theories and Practice 3
JOUR 255 Digital Literacy and Media Technology 3
JOUR 260W Writing for Mass Media (W) 3
JOUR 265 Survey of PR and Media Relations 3
JOUR 341W Writing for Public Relations (W) 3

Select nine units from the following:

Any combination of upper-division courses in Communication Studies (CMST) or Journalism and Public Relations (JOUR). Choose courses in consultation with your advisor.

Total Units: 31

**Honors in the Major**

Honors in the Major is a program of independent work in your major. It requires six units of honors coursework completed over two semesters.

The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

- You must take six units of Honors in the Major coursework. All six units are honors courses (marked by a suffix of H), and at least three of these units are independent study (399H, 499H, 599H) as specified by your department. You must complete each course with a minimum grade of B.
- You must have completed 9 units of upper-division coursework or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
- Your cumulative #GPA should be at least 3.5 or within the top 5% of majors in your department.
- Your GPA in your major #should be at least 3.5 or within the top 5% of majors in your department.
- Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the six units of coursework over the two semesters of their senior year.
- Your honors work culminates with a public presentation of your honors project.

While Honors in the Major is part of the Honors Program, each department administers its own program. Please contact your major department or major advisor to apply.

See Bachelor’s Degree Requirements (https://catalog.csuchico.edu/undergraduate-requirements/bachelors-degree-requirements/) for complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be upper division.
General Education Requirements: 48 units
See General Education (https://catalog.csuchico.edu/colleges-departments/undergraduate-education/general-education/) and the Class Schedule (http://www.csuchico.edu/schedule/) for the most current information on General Education Requirements and course offerings.

This major has approved GE modification(s). See below for information on how to apply these modification(s).

• ANSC 101 is an approved major course substitution for Life Science (B2).
• AGRI 482W is an approved major course substitution for Upper-Division Social Sciences (UD-D).

These modifications apply to The Option in Agricultural Science and Education only.

• EDTE 451 is an approved major course substitution for Lifelong Learning and Self-Development (E).
• ENGL 471 is an approved major course substitution for Upper-Division Arts and Humanities (UD-C).

Diversity Course Requirements: 6 units
You must complete a minimum of two courses that focus primarily on cultural diversity. At least one course must be in US Diversity (USD) and at least one in Global Cultures (GC). See Diversity Requirements (https://catalog.csuchico.edu/undergraduate-requirements/diversity-requirements/) for a full list of courses. Most courses taken to satisfy these requirements may also apply to General Education (https://catalog.csuchico.edu/colleges-departments/undergraduate-education/general-education/).

Upper-Division Writing Requirement
Writing Across the Curriculum (EM 17-009 (http://www.csuchico.edu/prs/EMs/2017/17-009.shtml/)) is a graduation requirement and may be demonstrated through satisfactory completion of four Writing (W) courses, two of which are designated by the major department. See Mathematics/Quantitative Reasoning and Writing Requirements (https://catalog.csuchico.edu/undergraduate-requirements/mathematicsquantitative-reasoning-writing-requirements/) for more details on the four courses. The first of the major designated Writing (W) courses is listed below.

The Option in Agricultural Science and Education
• Any upper-division Writing (W) course.

The Option in Agricultural Communication and Leadership
• JOUR 341W Writing for Public Relations (W)

The second major-designated Writing course is the Graduation Writing Assessment Requirement (GW) (EO 665 (https://calstate.policystat.com/policy/9585618/latest/)). Students must earn a C- or higher to receive GW credit. The GE Written Communication (A2) (https://catalog.csuchico.edu/colleges-departments/undergraduate-education/general-education/#A2) requirement must be completed before a student is permitted to register for a GW course.