AGRICULTURAL AND LIFE SCIENCES EDUCATION

OVERVIEW
Administered by the Department of Agricultural Education and Studies
For undergraduate curricula in agricultural and life sciences education, agricultural communications, and agricultural studies, leading to the degree of Bachelor of Science, see College of Agriculture and Life Sciences, Curricula. (http://catalog.iastate.edu/collegeofagricultureandlifesciences/)

The department offers three curricula for students desiring to enter careers in agriculture and related fields. These curricula are agricultural communication, agricultural and life sciences education and agricultural studies. The agricultural communication curriculum prepares graduates to communicate about agricultural science with diverse audiences within and outside the agricultural sector locally, nationally, and globally, using various communication channels and tools. The agricultural and life sciences education curriculum prepares persons for careers as agricultural education instructors, and educational specialists for industry, nonprofit organizations, and governmental agencies. The agricultural studies curriculum has two options, production and management and multidisciplinary. Graduates are prepared for careers in production agriculture and agricultural industry. Graduates of all three curricula accept positions in agricultural business, industry, agencies, and production agriculture.

Student Learning Outcomes
Graduates will have a broad base of agricultural knowledge, and will be skilled in decision-making, planning, organizing, presenting, and evaluating information. Through the successful completion of the required coursework, active participation in clubs and organizations, and the acquisition of technical skills and experiences associated with work experiences, internships, and international travel, graduates of our baccalaureate programs meet the university, college, and departmental outcomes in the following nine areas:

1. Professional, interpersonal, and cross-cultural communications
2. Problem solving and critical thinking
3. Leadership
4. Entrepreneurship
5. Life-long learning
6. Ethics
7. Environmental awareness
8. U.S. cultures and communities

More information regarding the departmental learning outcomes can be found at www.ageds.iastate.edu. (http://www.ageds.iastate.edu/)

Curriculum in Agricultural and Life Sciences Education
Administered by the Department of Agricultural Education and Studies. Students majoring in Agricultural and Life Sciences Education may lead to teacher licensure.

Total Degree Requirement: 128 cr.
Only 65 cr. from a two-year institution may apply which may include up to 16 technical cr.; 9 P-NP cr. of free electives; 2.00 minimum GPA. Teacher certification requires 2.5 GPA at particular points in the program of study, and a minimum grade of C- in selected courses.

University Requirements:
ENGL 1500 Critical Thinking and Communication 3
ENGL 2500 Written, Oral, Visual, and Electronic Composition 3
International Perspectives 3
LIB 1600 Introduction to College Level Research 1
U.S. Cultures and Communities (formerly U.S. Diversity) 3
Total Credits 13

CALS Requirements:
Communications Proficiency:
6 cr. of English composition with a C or better and 3 cr. of speech fundamentals with a C or better.

AGEDS 3110 Presentation and Sales Strategies for Agricultural Audiences 3
American History Elective 3
BIOL 2110 Principles of Biology I 3
BIOL 2110L Principles of Biology Laboratory I 1
BIOL 2120 Principles of Biology II 3
BIOL 2120L Principles of Biology Laboratory II 1
CHEM 1630 College Chemistry 4
CHEM 1630L Laboratory in College Chemistry 1
ECON 1010 Principles of Microeconomics 3
Ethics Elective from Approved List 3
MATH 1400 College Algebra 3
STAT 1040 Introduction to Statistics 3

Major Specific Requirements - Agricultural Sciences and Economics (C- or higher required)
ACCT 2840 Financial Accounting 3
Ag Elective From Approved List 3
AGEDS 3150 Personal, Professional, and Entrepreneurial Leadership in Agriculture 3
### Major Specific Requirements - Professional Credits (C or higher required):

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGEDS 1100</td>
<td>Professional Development in Agricultural Education and Studies: New Student Seminar</td>
<td>1</td>
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<tr>
<td>AGEDS 2110A</td>
<td>High School Agriculture Programs</td>
<td>1</td>
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<tr>
<td>AGEDS 3100</td>
<td>Foundations of Agricultural Education Programs</td>
<td>3</td>
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<td>AGEDS 4010</td>
<td>Planning Agriculture and Life Sciences Education Programs</td>
<td>3</td>
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<tr>
<td>AGEDS 4020</td>
<td>Methods of Teaching in Agriculture and Life Sciences</td>
<td>3</td>
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<tr>
<td>AGEDS 4160</td>
<td>Pre-Student Teaching Experience in Agricultural Education</td>
<td>1</td>
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<tr>
<td>AGEDS 4170</td>
<td>Supervised Teaching in Agriculture and Life Sciences</td>
<td>1-16</td>
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<tr>
<td>PSYCH 3330</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>PSYCH 2300</td>
<td>Developmental Psychology</td>
<td>3</td>
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<tr>
<td>SPED 4010</td>
<td>Teaching Secondary Students with Exceptionalities in General Education</td>
<td>3</td>
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<td>Total Credits</td>
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<td>22-37</td>
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### Electives: Select courses to get to 128 credits.

### Minor - Agricultural and Life Sciences Education

The department offers a minor in agricultural and life sciences education which may be earned by completion of a minimum of 15 credits in agricultural education and studies courses, with a minimum of two courses at the 4000 level. The minor must include at least 9 credits that are not used to meet any other department, college, or university requirement. A minor will not meet state licensure requirements for teaching high school agriculture. Courses that can be taken for a minor are:

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<tr>
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<tbody>
<tr>
<td>AGEDS 2110</td>
<td>Foundations of Agricultural Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>AGEDS 3100</td>
<td>Presentation and Sales Strategies for Agricultural Audiences</td>
<td>3</td>
</tr>
<tr>
<td>AGEDS 3120</td>
<td>Science With Practice</td>
<td>3</td>
</tr>
</tbody>
</table>
AGEDS 3150  Personal, Professional, and Entrepreneurial Leadership in Agriculture  3
AGEDS 3270  Survey of Agriculture and Life Sciences Communication  3
AGEDS 3880  Agricultural Mechanics Applications  3
AGEDS 4020  Methods of Teaching in Agriculture and Life Sciences  3
AGEDS 4120  Internship in Agricultural Education and Studies  2-6
AGEDS 4140  Developing Agricultural Education Programs in Non-Formal Settings  2
AGEDS 4500  Farm Management and Operation  3
AGEDS 4510  Agricultural Law  3
AGEDS 4610  Innovation Diffusion and the Role of Agricultural and Extension Education  3
AGEDS 4880  Methods of Teaching Agricultural Mechanics  3
AGEDS 4900  1-3
AGEDS 4960A  International  1-3
or AGEDS 4960B  Domestic
AGEDS 4990  Undergraduate Research  1-30

Visit the departmental website at www.AgEds.iastate.edu/. (http://www.AgEds.iastate.edu/.html)

Graduate Study

The department offers the degrees of Master of Science and Doctor of Philosophy, with a major in agricultural education; a specialization in agricultural extension education; opportunities for emphasis in international agricultural education; and a minor for students majoring in other curricula. Graduate students who have earned a bachelor’s degree in an agricultural discipline may plan a course of study that leads to teacher certification. Candidates pursuing the Master of Science degree may do so by completing either a thesis or nonthesis program of study.

Students have an opportunity to develop competence in disciplinary foundations and ethics, program planning, learning theory, instructional methods, program leadership and administration, program evaluation, research methodologies, data analysis and interpretation, writing for publication, and grant proposal writing.

The department also cooperates in the international development studies option of the General Graduate Studies Program. Courses and workshops are offered, both on and off campus, for extension educators, teachers, and industry and government personnel.