AGRICULTURAL & ENVIRONMENTAL SCIENCES COMMUNICATION

Description
This degree program prepares students for careers in communications, advocacy, and public service roles in the agricultural, natural resources, and environmental disciplines. Degree requirements provide students a broad education combining skills and knowledge in agricultural, environmental, and natural resources sciences; the social sciences; and mass communications. Graduates of this program are also qualified to pursue careers in public relations and public service in government agencies, nonprofit, and private organizations.

To complete the program, students take core courses in the Agricultural Leadership, Education, and Communication (ALEC) Department and then select courses in the College of Agricultural Sciences and Natural Resources (CASNR) to provide a science-based foundation for their content knowledge. Students then select one of three areas of emphasis for further coursework.

The program’s general education requirements provide students a well-rounded introduction to science, communications, humanities, and the social sciences. The agricultural and environmental sciences communication core provides an introduction to the areas of competence required of a professional communicator.

College Requirements

College Admission
Requirements for admission into the College of Agricultural Sciences and Natural Resources (CASNR) are consistent with general University admission requirements (one unit equals one high school year): 4 units of English, 4 units of mathematics, 3 units of natural sciences, 3 units of social studies, and 2 units of foreign language. Students must also meet performance requirements: ACT composite of 20 or higher OR combined SAT score of 950 or higher OR rank in the top one-half of graduating class; transfer students must have a 2.0 (on a 4.0 scale) cumulative grade point average and 2.0 on the most recent term of attendance. For students entering the PGA Golf Management degree program, a certified golf handicap of 12 or better (e.g., USGA handicap card) or written ability (MS Word file) equivalent to a 12 or better handicap by a PGA professional or high school golf coach is required. For more information, please visit: http://pgm.unl.edu/requirements.

Admission Deficiencies/Removal of Deficiencies
Students who are admitted to CASNR with core course deficiencies must remove these deficiencies within the first 30 credit hours at UNL, or within the first calendar year at Nebraska, whichever takes longer, excluding foreign languages. Students have up to 60 credit hours to remove foreign language deficiencies. College-level coursework taken to remove deficiencies may be used to meet degree requirements in CASNR.

Deficiencies in the required entrance subjects can be removed by completion of specified courses in the University or by correspondence.

The Office of Admissions, Alexander Building (south entrance), City Campus, provides information to new students on how deficiencies can be removed.

College Degree Requirements

Curriculum Requirements
The curriculum requirements of the College consist of three areas: ACE (Achievement-Centered Education), College of Agricultural Sciences and Natural Resources Core, and Degree Program requirements and electives. All three areas of the College Curriculum Requirements are incorporated within the description of the Major/Degree Program sections of the catalog. The individual major/degree program listings of classes ensures that a student will meet the minimum curriculum requirements of the College.

Foreign Languages/Language Requirement
Two units of a foreign language are required. This requirement is usually met with two years of high school language.

Minimum Hours Required for Graduation
The College grants the bachelors degree in programs associated with agricultural sciences, natural resources, and related programs. Students working toward a degree must earn at least 120 semester hours of credit. A minimum cumulative grade point average of C (2.0 on a 4.0 scale) must be maintained throughout the course of studies and is required for graduation. Some degree programs have a higher cumulative grade point average required for graduation. Please check the degree program on its graduation cumulative grade point average.

Grade Rules
Removal of C-, D, and F Grades
Only the most recent letter grade received in a given course will be used in computing a student’s cumulative grade point average if the student has completed the course more than once and previously received a grade or grades below C in that course.

The previous grade (or grades) will not be used in the computation of the cumulative grade point average, but it will remain a part of the academic record and will appear on any transcript.

A student can remove from his/her cumulative average a course grade of C-, D+, D, D-, or F if the student repeats the same course at the University of Nebraska and receives a grade other than P (pass), I (incomplete), N (no pass), W (withdrawn), or NR (no report). If a course is no longer being offered, it is not eligible for the revised grade point average computation process.

For complete procedures and regulations, see the Office of the University Registrar website at http://www.unl.edu/regrec/course-repeats.

Pass/No Pass
Students in CASNR may take any course offered on a Pass/No Pass basis within the 24-hour limitation established by the Faculty Senate. However, a department may specify that the Pass/No Pass status of its courses be limited to non-majors or may choose to offer some courses for letter grades only.

GPA Requirements
A minimum cumulative grade point average of C (2.0 on a 4.0 scale) must be maintained throughout the course of studies and is required for graduation. Some degree programs have a higher cumulative grade point average required for graduation. Please check the degree program on its graduation cumulative grade point average.
Transfer Credit Rules
To be considered for admission, a transfer student, Nebraska resident or nonresident, must have an accumulated average of C (2.0 on a 4.0 scale) and a minimum C average in the last semester of attendance at another college. Transfer students who have completed less than 12 credit hours of college study must submit either ACT or SAT scores.

Ordinarily, credits earned at an accredited college are accepted by the University. The College, however, will evaluate all hours submitted on an application for transfer and reserves the right to accept or reject any of them. Sixty (60) is the maximum number of hours the University will accept on transfer from a two-year college. Ninety (90) is the maximum number of hours the University will accept from a four-year college. Transfer credit in the degree program must be approved by the degree program advisor on a Request for Substitution Form to meet specific course requirements, group requirements, or course level requirements in the major. At least 9 hours in the major field, including the capstone course, must be completed at the University of Nebraska–Lincoln regardless of the number of hours transferred.

The College will accept no more than 10 semester hours of C, D+, D, and D- grades from other schools. The C-, D+, D, and D- grades can only be applied to free electives. This policy does not apply to the transfer of grades from UNO or UNK to the University of Nebraska–Lincoln.

Joint Academic Transfer Programs
The College of Agricultural Sciences and Natural Resources has agreements with many institutions to support joint academic programs. The transfer programs include dual degree programs and cooperative degree programs. Dual degree programs offer students the opportunity to receive a degree from a participating institution and also to complete requirements for a bachelor of science degree in CASNR. Cooperative programs result in a single degree from either the University of Nebraska–Lincoln or the cooperating institution.

Dual Degree Programs
A to B Programs
The A to B Program, a joint academic program offered by the CASNR and participating community colleges, allows students to complete the first two years of a degree program at the participating community college and continue their education and study in a degree program leading toward a bachelor of science degree.

The A to B Program provides a basic knowledge plus specialized coursework. Students transfer into CASNR with junior standing.

Depending on the community college, students enrolled in the A to B Program may complete the requirements for an associate of science at the community college, transfer to the University of Nebraska–Lincoln, and work toward a bachelor of science degree.

Participating community colleges include:
- Central Community College
- Metropolitan Community College
- Mid-Plains Community College
- Nebraska College of Technical Agriculture
- Northeast Community College
- Southeast Community College
- Western Nebraska Community College

3+2 Programs
Two specialized degree programs in animal science and veterinary science are offered jointly with an accredited college or school of veterinary medicine. These two programs permit CASNR animal science or veterinary science students to receive a bachelor of science degree from the University of Nebraska–Lincoln with a degree in animal science or veterinary science after successfully completing two years of the professional curriculum in veterinary medicine at an accredited veterinary school. Students who successfully complete the 3+2 Program, must provide transcripts and complete the Application for Degree form via MyRED. Students without MyRED access may apply for graduation in person at Husker Hub in the Canfield Administration Building, or by mail. Students should discuss these degree programs with their academic advisor.

Cooperative Degree Programs
Academic credit from the University and a cooperating institution is applied towards a four-year degree from either the University of Nebraska–Lincoln (University degree-granting program) or the cooperating institution (non University degree-granting program). All have approved programs of study.

UNL Degree-Granting Programs
A University of Nebraska–Lincoln degree-granting program is designed to provide students the opportunity to complete a two-year program of study at one of the four-year institutions listed below, transfer to CASNR, and complete the requirements for a bachelor of science degree.

Chadron State College. Chadron State College offers a 2+2 program leading to a grassland ecology and management degree program and a transfer program leading to a bachelor of science in agricultural education in the teaching option.

Wayne State College. Wayne State College offers a 3+1 program leading to a bachelor of science in plant biology in the ecology and management option and a 3+1 program leading to a bachelor of science in Applied Science.

University of Nebraska at Kearney. Transfer programs are available for students pursuing degree programs leading to a bachelor of science degree.

University of Nebraska at Omaha. The University of Nebraska at Omaha (UNO) cooperates with CASNR in providing four-semester pre-agricultural sciences, pre-natural resources, pre-food science and technology, pre-horticulture, and pre-turfgrass and landscape management transfer programs.

A student enrolled in these programs may transfer all satisfactorily completed academic credits identified in the suggested program of study and enter CASNR to study toward a degree program leading to a bachelor of science degree. The total program would require a minimum of four years or eight semesters (16 credit hours/semester or 120 credit hours).

Nebraska CASNR faculty teach horticulture and food science and technology courses at UNO to assist an urban population in better understanding the food processing, horticulture, and landscape horticulture industries.

For more information, contact the CASNR Dean’s Office, 800-472-8800, ext. 2541.
Non University of Nebraska–Lincoln Degree-Granting Programs
CASNR cooperates with other institutions to provide coursework that is applied towards a degree at the cooperating institution. Pre-professional programs offered by CASNR allow students to complete the first two or three years of a degree program at the University prior to transferring and completing a degree at the cooperating institution.

Chadron State College–Range Science. The 3+1 Program in range science allows Chadron State College students to pursue a range science degree through Chadron State College. Students complete three years of coursework at Chadron State College and one year of specialized range science coursework (32 credit hours) at CASNR.

Dordt College (Iowa)–Agricultural Education: Teaching Option. This program allows students to pursue an Agricultural Education Teaching Option degree leading toward a bachelor of science in agricultural education. Students at Dordt College will complete 90 credit hours in the Agricultural Education: Teaching Option Transfer Program.

Residency
Students must complete at least 30 of the total hours for their degree using University of Nebraska–Lincoln credits. At least 18 of the 30 credit hours must be in courses offered through CASNR 1 (>299) including the appropriate ACE 10 degree requirement or an approved ACE 10 substitution offered through another Nebraska college and excluding independent study regardless of the number of hours transferred. Credit earned during education abroad may be used toward the residency requirement if students register through UNL and participate in pre-approved education abroad programs. University of Nebraska–Lincoln open enrollment and summer independent study courses count toward residence.

1 Includes courses taught by CASNR faculty through interdisciplinary prefixes (e.g., LIFE, MBIO, ENVIR, SCIL, EAEPR, HRTM, ENSC) and CASNR crosslisted courses taught by non-CASNR faculty.

Online and Distance Education
There are many opportunities to earn college credit online through the University of Nebraska–Lincoln. Some of these credits may be applicable not only as elective credits, but also toward the fulfillment of the College’s education requirements. Credits earned online may count toward residency. However, certain offerings may not be counted toward scholarship requirements or academic recognition criteria.

For further information, contact:
Office of Online and Distance Education
University of Nebraska–Lincoln
305 Brace Labs
Lincoln, NE 68588-0109
402-472-4681
http://online.unl.edu/

Independent Study Rules
Students wishing to take part in independent studies must obtain permission; complete and sign a contract form; and furnish copies of the contract to the instructor, advisor, departmental office, and the Dean’s Office. The contract should be completed before registration. Forms are available in 103 Agricultural Hall or online at the CASNR website.

Independent study projects include research, literature review or extension of coursework under supervision and evaluation of a departmental faculty member.

Students may only count 12 hours of independent study toward their degrees and no more than 6 hours can be counted during their last 36 hours earned, excluding senior thesis, internships, and courses taught under an independent study number.

Other College Degree Requirements
Capstone Course Requirement
A capstone course is required for each CASNR degree program. A capstone course is defined as a course in which students are required to integrate diverse bodies of knowledge to solve a problem or formulate a policy of societal importance.

ACE Requirements
All students must fulfill the Achievement Centered Education (ACE) requirements. Information about the ACE program may be viewed at ace.unl.edu (https://ace.unl.edu).

The minimum requirements of CASNR reflect the common core of courses that apply to students pursuing degrees in the college. Students should work with an advisor to satisfy ACE outcomes 1, 2, 3, 4, 6, and 10 with the college requirements.

Catalog Rule
Students must fulfill the requirements stated in the catalog for the academic year in which they are first admitted to the University of Nebraska–Lincoln or when they were first admitted to a Joint Academic Transfer Program. In consultation with advisors, a student may choose to follow a subsequent catalog for any academic year in which they are admitted to and enrolled as a degree-seeking student at Nebraska in the College of Agricultural Sciences and Natural Resources. Students must complete all degree requirements from a single catalog year. The catalog in which a student follows for degree requirements may not be more than 10 years old at the time of graduation.

Learning Outcomes
Graduates of agricultural and environmental sciences communication will be able to:
1. Demonstrate competence in visual and written communication techniques.
2. Apply communication concepts, theories, and principles of critical thinking to real world issues facing agriculture and the environment.
3. Understand diverse perspectives related to food, fuel, water, landscapes, and people in Nebraska, nationally and globally.
4. Communicate agricultural and environmental science information in lay language to targeted audiences.

Major Requirements
Core Requirements

<table>
<thead>
<tr>
<th>College Integrative Courses</th>
<th>Credit Hours Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIL 101 Science and Decision-Making for a Complex World</td>
<td>3</td>
</tr>
<tr>
<td>ALEC 480 Capstone Experience in Agricultural and Environmental Sciences Communication (ACE 10)</td>
<td>3</td>
</tr>
</tbody>
</table>

Written Communication (ACE 1)

4. 3
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 150</td>
<td>Writing and Inquiry</td>
</tr>
<tr>
<td>ENGL 151</td>
<td>Writing and Argument</td>
</tr>
<tr>
<td>ENGL 254</td>
<td>Writing and Communities</td>
</tr>
<tr>
<td>JOUR 202</td>
<td></td>
</tr>
</tbody>
</table>

Communications & Interpersonal Skills Electives (ACE 2)

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEC 102</td>
<td>Interpersonal Skills for Leadership</td>
</tr>
<tr>
<td></td>
<td>(Recommended)</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Communication in the 21st Century</td>
</tr>
<tr>
<td>COMM 209</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>COMM 286</td>
<td>Business and Professional Communication</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 6

Mathematics and Statistics (beyond college algebra) (ACE 3)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 218</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>MATH 102</td>
<td>Trigonometry</td>
</tr>
<tr>
<td>MATH 103</td>
<td>College Algebra and Trigonometry</td>
</tr>
<tr>
<td>MATH 104</td>
<td>Applied Calculus</td>
</tr>
<tr>
<td>MATH 106</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Contemporary Mathematics</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 5-8

Natural Sciences (ACE 4)

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRO 131 / HORT 131 &amp; AGRO 132</td>
<td>Plant Science and Agronomic Plant Science Laboratory</td>
</tr>
<tr>
<td>HORT 131 / AGRO 131 &amp; HORT 133</td>
<td>Plant Science and Horticultural Plant Science Laboratory</td>
</tr>
<tr>
<td>BIOS 101 &amp; BIOS 101L</td>
<td>General Biology and General Biology Laboratory</td>
</tr>
<tr>
<td>LIFE 120 &amp; LIFE 120L</td>
<td>Fundamentals of Biology I and Fundamentals of Biology I Laboratory</td>
</tr>
<tr>
<td>ENTO 115 / BIOS 115 &amp; ENTO 116 / BIOS 116</td>
<td>Insect Biology and Insect Identification</td>
</tr>
</tbody>
</table>

Select one of the following: 4-5

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105</td>
<td>Chemistry in Context I</td>
</tr>
<tr>
<td>CHEM 109</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>MSYM 109</td>
<td>Physical Principles in Agriculture and Life Sciences</td>
</tr>
<tr>
<td>PHYS 141</td>
<td>Elementary General Physics I</td>
</tr>
<tr>
<td>PHYS 151</td>
<td>Elements of Physics</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 8-9

Economics, Humanities and Social Sciences

Select one of the following (ACE 6):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 110</td>
<td>Introduction to Anthropology</td>
</tr>
<tr>
<td>PSYC 181</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>SOCI 101</td>
<td>Introduction to Sociology</td>
</tr>
</tbody>
</table>

Select one of the following (ACE 6):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AECN 141</td>
<td>Introduction to the Economics of Agriculture</td>
</tr>
<tr>
<td>ECON 200</td>
<td>Economic Essentials and Issues</td>
</tr>
<tr>
<td>ECON 211</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 212</td>
<td>Principles of Microeconomics</td>
</tr>
</tbody>
</table>

Select 3 hours of Humanities (ACE 5) 3

Select 3 hours of Arts (ACE 7) 3

Select 3 hours of Ethics (ACE 8) 3

Select 3 hours of Global Awareness & Diversity (ACE 9) 3

Credit Hours Subtotal: 18-19

Total Credit Hours: 43-48

1 Proficiency at the college algebra level must be demonstrated either by a placement exam or through coursework. If MATH 103 is taken, only 2 credit hours can be counted toward this requirement. If MATH 106 is completed, the ACE 3 requirement is fulfilled. STAT 218 is still required.

Specific Major Requirements

Required ALEC Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEC 136</td>
<td>Fundamentals of Agricultural and Environmental Sciences Communication 3</td>
</tr>
<tr>
<td>ALEC 200</td>
<td>Writing for Agriculture and Natural Resources 3</td>
</tr>
<tr>
<td>ALEC 207 / ADPR 207</td>
<td>Communicating to Public Audiences 3</td>
</tr>
<tr>
<td>ALEC 240</td>
<td>Digital Photography and Visual Communication for Agriculture and the Environment 3</td>
</tr>
<tr>
<td>ALEC 241</td>
<td>Mobile Video Production of Agricultural and Environmental Issues 3</td>
</tr>
<tr>
<td>ALEC 305</td>
<td>Presentation Strategies for Agricultural Audiences 3</td>
</tr>
<tr>
<td>ALEC 350</td>
<td>Agriculture, the Environment &amp; Science in the Media 3</td>
</tr>
<tr>
<td>ALEC 388 / AECN 388</td>
<td>Ethics in Agriculture and Natural Resources 3</td>
</tr>
<tr>
<td>ALEC 495B</td>
<td>Internship in Agricultural and Environmental Sciences Communication 3</td>
</tr>
</tbody>
</table>

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEC 108</td>
<td></td>
</tr>
<tr>
<td>ALEC 341</td>
<td>Podcasting to Increase Science Literacy</td>
</tr>
<tr>
<td>ALEC 393 / NRES 393</td>
<td>Digital Imaging and Storytelling in Agriculture and Natural Resources</td>
</tr>
<tr>
<td>ALEC 397</td>
<td>Special Topics</td>
</tr>
<tr>
<td>ALEC 399</td>
<td>Independent Study in Communications</td>
</tr>
<tr>
<td>ALEC 417 / ADPR 417</td>
<td>Issues Management and Crisis</td>
</tr>
<tr>
<td>ALEC 421</td>
<td>Agricultural &amp; Environmental Sciences Communication Practicum</td>
</tr>
<tr>
<td>ALEC 428 / NRES 428</td>
<td>Leadership in Public Organizations</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 33

Required Communication Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 201</td>
<td></td>
</tr>
<tr>
<td>ADPR 151</td>
<td>Introduction to Advertising and Public Relations 3</td>
</tr>
</tbody>
</table>

Select one of the following: 3
COMM 101  Communication in the 21st Century
COMM 215  Visual Communication
COMM 283  Interpersonal Communication
COMM 300  Nonverbal Communication
COMM 312  Argumentation
COMM 325  Interviewing
COMM 375  Theories of Persuasion
COMM 386  Organizational Communication
COMM 452  Media and Culture
COMM 470  Interpersonal Communication Theory

Credit Hours Subtotal: 9

Total Credit Hours 42

CASNR Agricultural Science Content Courses
Required CASNR Content Area Courses
Complete 15 hours of coursework in any CASNR department. 15
Select in consultation with academic advisor.
Credit Hours Subtotal: 15

Total Credit Hours 15

Program Emphasis Areas
Select one of the following three options for a total of 18 hours.

Agricultural Sciences and Natural Resources
Select any CASNR minor in consultation with an academic advisor. 1

Total Credit Hours 18

1 Select any CASNR minor program and complete as required. Choose from
CASNR Undergraduate Catalog.

Agricultural and Environmental Sciences Strategic Communications
Required Course

ADPR 283  Strategy Development for Advertising and Public Relations 3

Credit Hours Subtotal: 3

Group 1 – Issues Courses
Select two of the following: 6

AECN 276 / SOCI 241  Rural Sociology
AECN 345  Policy Issues in Agriculture and Natural Resources
AECN 357 / NREE 357  Natural Resource and Environmental Law
AECN 367  Agricultural Development in Developing Countries
AECN 420  International Food and Agricultural Trade
AECN 445 / NREE 445  Agricultural and Natural Resource Policy Analysis
AECN 456 / NREE 456  Environmental Law
AECN 457 / NREE 457 / WATS 457  Water Law
ENSC 230  Energy and the Environment: Economics and Policy
ENVR 249  Individual and Cultural Perspectives on the Environment
ENVR 319  Environmental Engagement and the Community
FDST 280  Contemporary Issues in Food Science
NRES 104  Climate in Crisis
NRES 323  Natural Resources Policy

Credit Hours Subtotal: 6

Group 2 – Communication Courses
Select three of the following: 9

ADPR 221  Strategic Writing for Advertising and Public Relations
ADPR 323  Copy and Concept
ADPR 333  Design and Layout
ADPR 360  Media Planning and Strategy
ADPR 434  Digital Insight & Analytics
ADPR 447  Strategic and Creative Concepting
ADPR 450  Public Relations Management and Case Studies
ADPR 451  Public Relations Techniques
ADPR 458  Interactive Media Design
ADPR 481  Advertising and Public Relations Research
ADPR 484  Brands & Branding
ADPR 489  Advertising and Public Relations Campaigns
COMM 101  Communication in the 21st Century
COMM 215  Visual Communication
COMM 283  Interpersonal Communication
COMM 300  Nonverbal Communication
COMM 312  Argumentation
COMM 325  Interviewing
COMM 375  Theories of Persuasion
COMM 386  Organizational Communication
COMM 452  Media and Culture
COMM 470  Interpersonal Communication Theory

Credit Hours Subtotal: 9

Total Credit Hours 18

Agricultural and Environmental Sciences Public Issues Communication

Group 1 – Option Content Courses
Select two of the following: 6

AGRO 107 / NRES 107  Invasive Plant Species: Impacts on Ecosystems
AGRO 153 / HORT 153 / SOIL 153  Soil Resources
AGRO 204  Resource-Efficient Crop Management
AGRO 240 / RNGE 240  Forage Crop and Pasture Management
ASCI 100  Fundamentals of Animal Biology and Industry
ASCI 150  Animal Production Skills
ASCI 210  Animal Products
ASCI 250  Animal Management  
ASCI 252  Introduction to the Horse Industry and Management  
ASCI 370  Animal Welfare  
ENSC 110  Energy in Perspective  
ENSC 220  Introduction to Energy Systems  
ENTO 300 / BIOS 300 / NRES 300  Toxins in the Environment  
ENVR 201  Science, Systems, Environment and Sustainability  
ENVR 249  Individual and Cultural Perspectives on the Environment  
ENVR 319  Environmental Engagement and the Community  
GEOL 101  Dynamic Earth  
GEOL 106  Environmental Geology  
GEOL 115  The Earth’s Energy Resources  
HORT 270 / AGRO 270 / NRES 270 / PLPT 270  Biological Invaders  
NRES 108  Earth’s Natural Resource Systems Laboratory  
NRES 408 / AGRO 408 / GEOG 408 / HORT 408 / METR 408 / WATS 408  Microclimate: The Biological Environment  
METR 100  Weather and Climate  
NRES 208  Applied Climate Sciences  
NRES 211  Introduction to Conservation Biology  
NRES 220  Principles of Ecology  
NRES 222  Ecology Laboratory  
WATS 281 / GEOG 281 / NRES 281  Introduction to Water Science  
WATS 354 / MSYM 354 / SOIL 354  Soil Conservation and Watershed Management  
WATS 361 / AGRO 361 / GEOL 361 / SOIL 361  Soils, Environment and Water Quality  

Credit Hours Subtotal: 6

Group 2 – Issues Courses

Select two of the following: 6

AECN 256  Legal Aspects in Agriculture  
AECN 276 / SOCI 241  Rural Sociology  
AECN 345  Policy Issues in Agriculture and Natural Resources  
AECN 357 / NREE 357  Natural Resource and Environmental Law  
AECN 367  Agricultural Development in Developing Countries  
AECN 420  International Food and Agricultural Trade  
AECN 445 / NREE 445  Agricultural and Natural Resource Policy Analysis  
AECN 456 / NREE 456  Environmental Law  
AECN 457 / NREE 457 / WATS 457  Water Law  
ENSC 230  Energy and the Environment: Economics and Policy  
ENVR 249  Individual and Cultural Perspectives on the Environment  
ENVR 319  Environmental Engagement and the Community  
FDST 280  Contemporary Issues in Food Science  
NRES 104  Climate in Crisis  
NRES 323  Natural Resources Policy  

Credit Hours Subtotal: 6

Group 3 – Communication Courses

Select two of the following: 6

COMM 215  Visual Communication  
COMM 220  Public Advocacy and Civic Engagement  
COMM 283  Interpersonal Communication  
COMM 300  Nonverbal Communication  
COMM 312  Argumentation  
COMM 325  Interviewing  
COMM 375  Theories of Persuasion  
COMM 386  Organizational Communication  
COMM 452  Media and Culture  
COMM 470  Interpersonal Communication Theory  

Credit Hours Subtotal: 6

Total Credit Hours: 18

Free Electives

Complete 0-2 hours of free electives 0-2

Credit Hours Subtotal: 0-2

Requirements For Minor Offered by Department

The agricultural and environmental sciences communication minor provides students an opportunity to focus on building communication skills and knowledge in the context of global challenges and issues related to food, fiber, fuel, and water. Students complete a series of communication courses using problem-based and experiential-learning strategies and combine subject area knowledge gained in courses from their majors with strategies and skills to effectively communicate in a 21st Century global society. Students enrolled in the minor will build knowledge and skills in visual literacy, media literacy, science literacy, as well as competencies and increased understanding of challenging, global, 21st Century issues related to communication, agriculture, and natural resources.
Agricultural and Environmental Sciences Communication Minor

The minor is 18 credit hours (minimum), with three required core courses, two electives, and one required project course.

Core Courses – Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEC 200</td>
<td>Writing for Agriculture and Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>ALEC 207 / ADPR 207</td>
<td>Communicating to Public Audiences</td>
<td>3</td>
</tr>
<tr>
<td>ALEC 350</td>
<td>Agriculture, the Environment &amp; Science in the Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 9

Electives

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEC 136</td>
<td>Fundamentals of Agricultural and Environmental Sciences Communication</td>
</tr>
<tr>
<td>ALEC 240</td>
<td>Digital Photography and Visual Communication for Agriculture and the Environment</td>
</tr>
<tr>
<td>ALEC 241</td>
<td>Mobile Video Production of Agricultural and Environmental Issues</td>
</tr>
<tr>
<td>ALEC 305</td>
<td>Presentation Strategies for Agricultural Audiences</td>
</tr>
<tr>
<td>ALEC 341</td>
<td>Podcasting to Increase Science Literacy</td>
</tr>
<tr>
<td>ALEC 393</td>
<td>Digital Imaging and Storytelling in Agriculture and Natural Resources</td>
</tr>
<tr>
<td>ALEC 417 / ADPR 417</td>
<td>Issues Management and Crisis Communications in Agriculture</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 6

Project Course – Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEC 421</td>
<td>Agricultural &amp; Environmental Sciences Communication Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit Hours Subtotal: 3

Total Credit Hours: 18

1 Prerequisite is junior/senior status.

AESC Minor Learning Outcomes

- Develop an understanding of the importance of communication in addressing 21st Century global issues related to food, fiber, fuel, and water.
- Identify and analyze effective communication strategies for discussing challenging issues influencing food production.
- Develop and demonstrate excellence in written and oral communication through various course assignments and projects.
- Create messages and campaigns about controversial scientific issues utilizing critical communication theories and frameworks, as well as multimedia tools and applications for increasing the science literacy of diverse audiences.
- Design, implement, and evaluate a communications project integrated into real-world science engagement contexts connected to CASNR disciplines that demonstrates an understanding of media literacy, science literacy, visual literacy, and digital citizen concepts.

This document represents a sample 4-year plan for degree completion with this major. Actual course selection and sequence may vary and should be discussed individually with your college or department academic advisor. Advisors also can help you plan other experiences to enrich your undergraduate education such as internships, education abroad, undergraduate research, learning communities, and service learning and community-based learning.

Agricultural Sciences and Natural Resources

Agricultural and Environmental Sciences Strategic Communications

Agricultural and Environmental Sciences Public Issues Communication

Career Information

The following represents a sample of the internships, jobs and graduate school programs that current students and recent graduates have reported.

Jobs of Recent Graduates

- Public Information Officer & Exec. Officer, The Nebraska Wheat Board & Wheat Growers Assoc. - Lincoln NE
- Deputy Press Secretary, U.S. House of Representatives - Washington DC
- Marketing Specialist, LI-COR Biosciences - Lincoln NE
- Farm Broadcaster, Rural Radio Network - Scottsbluff NE
- Communications Specialist, Farmway Coop - Beloit KS
- Editor & Agricultural Reporter, Northeast Nebraska News Company - Hartington NE
- Social Media Coordinator, RFD TV - Omaha NE
- Creative Services Manager, David & Associates - Hastings NE
- Account Coordinator, Broadhead - Minneapolis MN
- Sales Representative, Dow AgroSciences - Indianapolis IN

Internships

- Communications Intern, Nebraska Wheat Board - Lincoln NE
- Corporate Communications Intern, Aurora Cooperative - Aurora NE
- Marketing and Public Relations Intern, AKSARBEN Foundation - Omaha NE
- Sales Intern, Dow AgroSciences - Lincoln NE
- Promotions Department Intern, NBC Universal Sports Network - Lincoln NE
- Broadcast Intern, UNL Ed Media - Lincoln NE
- Program & Production Intern, Rural Media Group, Inc. and RFD TV - Omaha NE
- Public Relations/Marketing, Ak-Sar-Ben/River City Roundup - Omaha NE
- Media Intern, American Royal - Kansas City MO
- Marketing and Communications Intern, Agriculture Future of America - Kansas City MO

PLEASE NOTE