

# COLLEGE OF AGRICULTURAL SCIENCES & NATURAL RESOURCES

## 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 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 UNL, whichever takes longer, excluding foreign languages. Students have up to 60 credit hours to remove foreign language deficiencies. College-level course work 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.

## Advising

### Academic Advising

**Undergraduate Advising:** Tiffany Heng-Moss

Advising activities are coordinated by the Associate Dean for Student Affairs in the CASNR Dean's Office. Each student in the College is assigned a faculty or professional advisor to assist in career planning, implementing, and completing academic programs. Assignments are made so that students will be working with an advisor who shares their academic interest. Students are encouraged to visit with their faculty or professional advisor about their career interests and development opportunities. Students may change their college, degree, and/or advisor. Such changes must be initiated in 103 Agricultural Hall.

### Student Responsibility

Students are ultimately responsible for fulfilling all the requirements of the curriculum in which they are enrolled. Students are also responsible for initiating advising contacts and preparing for advising sessions. The mentoring relationship between academic advisors and students is confidential and is strengthened by advisors' listening with empathy.

Students are expected to take responsibility for successful university experiences and effective advising sessions by:

1. Participating in New Student Enrollment and priority registration programs;
2. Scheduling appointments with advisors well in advance of priority registration and at other times as needed;
3. Identifying class choices from requirements of the selected program;
4. Identifying questions to address in advising sessions;
5. Informing advisors of any special needs, deficiencies or barriers that might affect academic success;
6. Following academic policies and procedures and meeting academic calendar deadlines (e.g. registration, fee payment, degree audit, filing for degree, etc.);
7. Knowing and completing degree or program requirements;
8. Monitoring their progress toward meeting degree requirements by maintaining a copy of their academic records and seeking assistance to resolve any errors or questions;
9. Acting on recommendations to seek assistance from the various student support services provided by the University; and
10. Achieving requirements for BS candidacy prior to senior year.

## Academic Programs & Policies

### Academic Load

CASNR students may register for up to 18 credit hours per semester. Written permission must be obtained from the CASNR Dean to exceed the credit hour maximum and must be filed with an Override Authorization form at the time of registration. Students must be enrolled for 12 UNL credit hours to be considered full-time students. For recognition on the Dean's List, these 12 UNL credit hours must be for a letter grade.

### Course Exclusions & Restrictions

- Not more than 12 hours of independent study.
- Not more than 24 hours of Pass/No Pass grade option.
- Not more than 60 hours from two-year colleges.
- Not more than 90 hours from other four-year institutions.
- Not more than 6 hours of non-UNL courses can be counted among the last 36 hours earned.
- No credit toward the BS degree is allowed for MATH 100A Intermediate Algebra.
- No more than 10 semester hours of below C grades are transferable from colleges outside the NU system. Grades below C can only be applied to free electives.

### Credit by Examination

Through study or experience that parallels a University of Nebraska–Lincoln course, a regularly enrolled University student may feel prepared to pass an examination on the course content of a specific course for credit in that course. To apply for credit, a student should:

1. Consult with the department head or designee.
2. Obtain a Credit by Examination Form at the Records Office, 107 Canfield Administration Building, 402-472-3649. Current enrollment in the University must also be verified.
3. Secure the approval signature from the department head, instructor, and the dean of the college. The Dean's signature can be obtained in the 103 Agricultural Hall.

4. Secure the bursar's receipt for payment of the appropriate fee per course for credit by examination. Currently, the fee is one-half the resident tuition rate.
5. Present the completed form to the instructor designated by the department head. The instructor will give the examination and report the results on the Credit by Examination Form to the Admissions Office, Alexander Building, 402-472-0130.

Examination for credit through UNL departments may be taken only by currently enrolled students. A student is not permitted to receive credit by examination in a course which is a prerequisite for a course already taken unless the course and its prerequisites cover essentially different subject matter.

The College also gives credit for the subject and general examinations of the College Level Examination Program (CLEP) and the Advanced Placement (AP) Program administered by the College Entrance Examination Board. See the CASNR Associate Dean, 103 Agricultural Hall, for current policy regarding CLEP and AP examinations.

## Dual Degrees

### Dual Degrees from the College of Agricultural Sciences and Natural Resources

Students in CASNR may earn a bachelor of science degree in more than one program. They must complete all requirements for both programs.

### Dual Degrees from CASNR and Other UNL Colleges

Students in other colleges may earn a bachelor of science from CASNR and a degree from another UNL college. Students will need to consult with both colleges to ensure all requirements are satisfied.

## Grading Appeals

A student who feels that he/she has been unfairly graded must ordinarily take the following sequential steps in a timely manner, usually by initiating the appeal in the semester following the awarding of the grade:

1. Meet with the course instructor. Most concerns are resolved at this point.
2. Meet with the instructor's unit administrator.
3. Submit a grade appeal to the Grading Appeal Committee of the unit involved. The request should be submitted to the unit administrator and they will forward to the Committee.
4. If the concern is not resolved at the unit level, the final step is to submit a grade appeal to the CASNR Curriculum Committee by contacting the Dean's Office, 103 Agricultural Hall. Notification to the Curriculum Committee must be in writing and will include in the notice a statement of the grounds of appeal. Both the student and the instructor will be given an opportunity to present materials to the Committee in the presence of each other.

## Graduation Application

Students are expected to develop a clear understanding of degree requirements and to plan their course of study with a College advisor. Students requiring clarification of outstanding degree requirements should visit with a College advisor promptly.

Students should access their Degree Audit via MyRed at least once each term to review degree requirements and progress toward graduation. It is the student's responsibility to make sure their Degree Audit accurately reflects their current College and program of study.

Students who believe their Degree Audit has errors or omissions should visit with a College advisor promptly. It is important that you resolve these matters as soon as practicable to avoid a delay in graduation.

Each student with MyRED access must submit an online Application for Graduation via MyRED for each degree to be received by:

- The last Friday in January for May graduation
- The last Friday in June for August graduation
- The last Friday in September for December graduation

Students submitting an electronic Application for Graduation via MyRed will be billed a \$25.00 per degree fee on their student account. Those students without MyRED access may apply for graduation in person at the Office of the University Registrar, 107 Canfield Administration Building or by mail. Applications for Graduation submitted in person or by mail must be accompanied by a check or money order in the amount of \$25.00 payable to the University of Nebraska–Lincoln. Failure to submit a timely Application for Graduation may preclude the awarding of a degree in the intended term.

Your Application for Graduation and required \$25.00 fee are good only for the term marked on your application. Neither your application nor your fee, are transferrable to another term. If you submit an Application for Graduation and pay the \$25.00 fee for a specified term but do not complete your degree requirements in that term, you will need to reapply to graduate in a future term and incur another \$25.00 fee.

Commencement ceremony information will be emailed to all degree applicants approximately one month before graduation. Each student who has applied for graduation must submit an online Commencement Attendance Form via MyRED, which will be available when the informational email is distributed.

Only those students who have applied for graduation, had the application accepted, and fulfilled all degree requirements as of the last day of the academic term may participate in the commencement ceremony for that term. Because the University of Nebraska–Lincoln has a commencement for each term, ceremony participation is allowed only in the term during which the student has properly and timely applied for graduation and fulfilled degree requirements.

## Honors Program

The College of Agricultural Sciences and Natural Resources encourages qualified students to participate in the University Honors Program which is a UNL-wide program. The College's honors students pursue degree programs offered by the College while completing the required honors courses.

All University Honors Program students are expected to complete a mentored thesis project with a faculty member of their choosing. Students should enroll in AGRI 299H Honors Thesis Seminar in the spring semester of their sophomore year. As a part of AGRI 299H Honors Thesis Seminar, students will identify a faculty thesis mentor and write a thesis proposal with their faculty thesis mentor. Because of the breadth of degrees, the program relies on faculty mentors within individual degree programs to determine the criteria for an undergraduate thesis in their area of endeavor. General guidance for mentors is provided as requested by Dr. Madhavan Soundararajan.

The Agricultural Research Division supports a competitive grants program to assist the College's Honors Program students in the pursuit of their mentored theses. Students may also seek support from UNL's

Undergraduate Creative Activities and Research Experience (UCARE) program.

For more information about the University Honors Program, contact:

Dr. Madhavan Soundararajan  
University of Nebraska–Lincoln  
N251 Beadle  
PO Box 88664  
Lincoln, NE 68588-0664

## Student Recognition

### Dean's List

Each semester, students having 12 UNL semester-graded hours with a minimum grade point average of 3.75 or above are eligible for the Dean's List.

### Degrees with Distinction

In recognition of outstanding academic excellence, CASNR recommends the bachelors degree With Distinction, With High Distinction, and With Highest Distinction. Recommendations are made by the CASNR Committee on Scholarship. To be eligible for consideration by the Committee, undergraduate students must complete 45 credit hours for a letter grade (excluding Pass/No Pass marks) at UNL prior to the semester in which they graduate and must have completed 60 such credit hours at UNL at the time they graduate. To determine which of the eligible candidates will be recommended for the honor, the Committee currently uses the cumulative grade point average as follows:

With Distinction<sup>1</sup> 3.800-3.849  
With High Distinction 3.850-3.919  
With Highest Distinction<sup>2</sup> 3.920-4.000

<sup>1</sup> *Students who successfully complete an undergraduate thesis (or comparable creative effort) will be eligible for distinction consideration if their cumulative grade point is 3.750 or higher.*

<sup>2</sup> *For a student to achieve the highest Distinction, the student must successfully complete an undergraduate thesis or a comparable creative effort.*

The information for Distinction considerations and the deadlines are posted at <http://casnr.unl.edu/undergraduate-student-resources> under the "Graduation" heading.

**Deadlines:** Students are responsible for meeting the deadlines. Materials are to be submitted to the CASNR Dean's office on or before the deadlines. Submission materials should include,

- a copy of the student's thesis/creative effort,
- the thesis/creative effort prospectus form, and
- thesis evaluation form.

These fillable PDF forms are available at <http://casnr.unl.edu/undergraduate-student-resources> under the "Undergraduate Forms" heading.

## International Study/Education Abroad

The College offers a variety of opportunities for students to enhance their international awareness. All students are required to demonstrate that they have a minimal international awareness, either through course work or experience. A minor in international agriculture and natural resources can be designed for students who seek a broad understanding of the nature and role of agriculture and natural resources in the integrated

world economy and the implications of world events for agriculture and natural resources. International study tours of one to three weeks in duration are also sponsored by CASNR to assist students in discovering different ways of thinking and acting as well as making them more informed global citizens. CASNR also promotes the Education Abroad program offered through the UNL Education Abroad Office which has opportunities of various lengths in numerous countries on all continents.

For financial assistance, the College offers the Robert and Beatrice Kleis Fund. One or more grants are awarded annually to undergraduate students in agriculture-related degree programs at the University of Nebraska–Lincoln. These grants shall be used to subsidize expenses associated with an international study program for credit. For more information on international opportunities, contact Jon Kerrigan at 316 Nebraska East Union or 116 Henzlik Hall or 402-472-8379.

## Student Standing/Classification

**Sophomore Standing.** For admission to sophomore standing, a student must have completed all of the College entrance requirements except foreign language, earned a minimum of 27 semester hours of credit, and attained a total grade point average of at least 2.0.

**Junior Standing.** A student has junior standing after meeting the requirements for sophomore standing and completing 53 semester hours of credit.

**Senior Standing.** A student has senior standing after meeting the requirements for junior standing and completing 89 semester hours of credit.

## Substitutions and Waivers

Requests for substitutions and waivers involving courses that fall within the basic four-year curriculum must be filed before the start of the fall semester for December graduates, before the start of the spring semester for May graduates and prior to the last day of classes of the spring semester for August graduates. Forms are available in 103 Agricultural Hall, from the student advisor, or on the website. **NOTE:** If a course and/or a requirement within the degree program is waived, the credit hours in the degree program are still required.

## ACE Requirements

All students must fulfill the Achievement Centered Education (ACE) requirements. Information about the ACE program may be viewed at [www.ace.unl](http://www.ace.unl).

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 to Use

Students must fulfill the requirements stated in the catalog for the academic year in which they are first admitted to UNL 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 UNL in the College of Agricultural Sciences and Natural Resources. Students must complete all degree requirements from a single catalog year. The catalog which a student follows for degree requirements may not be more than 10 years old at the time of graduation.

## 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 insures 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.

### 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 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 (withdrew), 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.

### 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 is the maximum number of hours UNL will accept on transfer from a two-year college. Ninety is the maximum number of hours UNL 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 UNL 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 UNL.

### 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 UNL 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 course work. 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 UNL, 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 UNL 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 complete the "Application for Degree" form and provide transcripts to the Credentials Clerk, Office of the University Registrar, 107 Canfield Administration Building, UNL. Students should discuss these degree programs with their academic advisor.

### Cooperative Degree Programs

Academic credit from UNL and a cooperating institution is applied towards a four-year degree from either UNL (UNL degree-granting program) or the cooperating institution (non UNL degree-granting program). All have approved programs of study.

### UNL Degree-Granting Programs

A UNL 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

**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).

UNL 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 UNL Degree-Granting Programs

The CASNR cooperates with other institutions to provide course work 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 UNL 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 course work at Chadron State College and one year of specialized range science course work (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 UNL credits. At least 18 of the 30 credit hours must be in courses offered through CASNR<sup>1</sup> (>299) including the appropriate ACE 10 degree requirement or an approved ACE 10 substitution offered through another UNL 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 prior-approved education abroad programs. UNL open enrollment and summer independent study courses count toward residence.

<sup>1</sup> *Includes courses taught by CASNR faculty through interdisciplinary prefixes (e.g., LIFE, MBIO, ENVR, SCIL, EAEP, HRTM, ENSC) and CASNR crosslisted courses taught by non-CASNR faculty.*

### Online and Distance Education

There are many opportunities to earn college credit through the University of Nebraska—Lincoln Office of Online and Distance Education. 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 through the UNL Online and Distance Education program 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  
2100 Vine Street  
Lincoln, NE 68588-8307  
402-472-2175  
<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 course work 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.

## Degrees & Majors

### Degree Programs

Agribusiness (*Offered jointly with College of Business*)

Agricultural Economics

Agricultural Education

Agricultural and Environmental Sciences Communication

Agronomy

Animal Science

Applied Climate Science

Applied Science

Biochemistry (*Offered jointly with the College of Arts and Sciences*)

Environmental Restoration Science

Environmental Studies (*Offered jointly with the College of Arts and Sciences*)

Fisheries and Wildlife

Food Science and Technology

Food Technology for Companion Animals

Forensic Science

Grassland Ecology and Management

Grazing Livestock Systems

Horticulture

Hospitality, Restaurant & Tourism Management (*Offered jointly with the College of Education and Human Sciences*)

Insect Science

Integrated Science

Mechanized Systems Management

Microbiology (*Offered jointly with the College of Arts and Sciences*)

Natural Resource and Environmental Economics

Plant Biology (*Offered jointly with the College of Arts and Sciences*)

PGA Golf Management

Turfgrass and Landscape Management

Veterinary Science

Veterinary Technology (*Offered jointly with the Nebraska College of Technical Agriculture*)

Water Science

### Multiple Degrees

Students may complete requirements for more than one degree by declaring, prior to the last 30 hours of study, a dual degree. This is made

possible through a common core required for all CASNR students. Students may consider these options with their faculty advisors.

An advisor is assigned for each additional degree declared. Appropriate forms must be processed in 103 Agricultural Hall.

### Pre-Professional Programs

General-CASNR

Pre-Forestry

Pre-Veterinary Medicine

### Related Degree Programs

Agricultural Engineering (*Offered jointly with the College of Engineering*)

Biological Systems Engineering (*Offered jointly with the College of Engineering*)

Landscape Architecture (*Offered jointly with the College of Architecture*)

Statistics (*Offered jointly with the College of Arts and Sciences*)

### Professional Programs

Doctor of Plant Health

Veterinary Medicine

### Certificate Programs

Contact John Markwell in the CASNR Deans' Office

## Minors & Areas of Specializations Offered

Minors in the College will consist of 18 hours in the minor area of study, including at least six hours at the 300 and/or 400 level. Alternatively, 12 hours of 300- and/or 400-level courses will meet the requirement. At the discretion of the department(s) responsible for the minor, up to three hours of independent study may be counted toward the minor. Departments may specify additional requirements for their minor(s).

### Minors offered through CASNR:

Agribusiness

Agricultural Economics

Agricultural and Environmental Sciences Communication

Agronomy

Animal Science

Biochemistry

Community Economics and Social Dynamics (*Agricultural Economics*)

Computational Biology and Bioinformatics (*Offered jointly with the College of Engineering and the College of Arts and Sciences*)

Energy Science

Engler Agribusiness Entrepreneurship

Environmental Education

Environmental Restoration Science

Environmental Studies

Fisheries and Wildlife

Food, Energy and Water in Society

Food Science and Technology

Grassland Ecology and Management

Grazing Livestock Systems

Horticulture

Insect Science

International Agriculture and Natural Resources

Leadership and Communication (*Agricultural Leadership, Education, and Communication*)

Leadership and Entrepreneurship (*Agricultural Leadership, Education, and Communication*)

Mechanized Systems Management

Natural Resource and Environmental Economics

Plant Biology

Society and the Environment (*Environmental Studies*)

Statistics

Turfgrass and Landscape Management

Veterinary Science

Water Science

### Filing for a Minor

Students wishing to declare a minor, must submit a new C-D-M-A (College-Degree-Major-Advisor) form electronically in consultation with the Dean's Office or their academic advisor prior to filing for graduation if the minor is exactly the same as that published in the student's Undergraduate Catalog. If there are any variations from the published minor, then the student must file the "Revision of Minor" form with the Dean's Office.

### Minors in Other Colleges

A student with a degree leading to a bachelor of science degree who wants to obtain a minor in a department in the College of Arts and Sciences should use the following procedure in making his/her request:

1. In consultation with the advisor, prepare the list of courses required for either Plan A or Plan B in the chosen minor as indicated in the College of Arts and Sciences section of this catalog. Plan A indicates a single minor; Plan B indicates two minors with fewer hours in each subject than the number required for a single minor.
2. Submit the C-D-M-A form electronically with the Arts and Sciences advisor for the minor prior to the deadline for submitting the application for graduation.

Students who have questions related to the minor after it is declared should consult an advisor in the college through which it is offered. The minor will be recorded on the student's transcript.

## Graduate Student Information

Graduate work leading to the masters degree is offered in the departments of Agricultural Economics; Agricultural Leadership, Education and Communication; Agronomy and Horticulture; Animal Science; Biochemistry; Biological Systems Engineering; Entomology; Food Science and Technology; Plant Pathology; Statistics; School of Veterinary Medicine and Biomedical Sciences; School of Natural Resources; the Center for Biological Chemistry; and in the interdepartmental area of nutrition. A master of applied science degree is also available.

Graduate work leading to the doctor of philosophy degree is offered by the departments of Agricultural Economics; Agricultural Leadership, Education and Communication (offered jointly with the College of Education and Human Sciences); School of Natural Resources (agricultural meteorology and forestry, fisheries and wildlife); Agronomy and Horticulture; Animal Science; Biological Systems Engineering/ Agricultural Engineering; Entomology; Food Science and Technology; Plant Pathology (offered jointly with the School of Biological Sciences); Statistics; Veterinary Medicine and Biomedical Sciences; the Center for Biological Chemistry (offered jointly with the College of Arts and Sciences); and in the interdepartmental area of Nutrition.

Further information appears in the Graduate Studies Catalog.