



# AGRONOMY AND HORTICULTURE (PHD)

The Department of Agronomy and Horticulture offers graduate degree programs leading to a Ph.D. in plant and soil sciences.

## Description

Agronomy is the application of plant and soil science to crop production. Agronomy emphasizes staple food crops, such as corn, rice, beans, and wheat, which are produced on a large scale and represent the foundation of our human food supply.

The Department's pride is its excellent teaching, research, and extension programs carried out by more than 70 faculty members in six core areas: landscape ecology and design; ornamental horticulture; plant breeding and genetics; soil and water sciences; turf/range/forage science; and weed science. The Department also conducts research nationally and internationally in plant physiology, viticulture, molecular biology, plant biotechnology, plant breeding, nutrient cycling and management, rangeland ecology and management, renewable bioenergy, soil and water management, and on the environmental impact and sustainability of agriculture.

The Department has well-equipped laboratories, modern greenhouses, growth chambers, and field facilities, including four district research centers spanning several ecoregions, available to graduate students. For instance, the Plant Sciences Program combines integrative curriculum with collaborative research in highly specialized facilities. And our outstanding field research facilities located in several agro-climatic zones across the state provide a unique ability to conduct research at a production-scale. This increases the relevance of the findings to real-world agro-ecosystems and gives students an opportunity to work in a more realistic production environment.

Many online courses are available.

## Specializations

- Applied Ecology
- Agricultural Meteorology
- Crop Physiology and Production
- Environmental Studies
- Great Plains Studies
- Plant Breeding and Genetics
- Plant Pathology
- Range and Forage Science
- Soil and Water Sciences
- Weed Science

## Program-Related Information

### Graduate Chair

David Hyten Jr  
402-472-3255  
david.hyten@unl.edu

### Support Staff

Lisa Hilfiker

402-472-8393  
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## Program Website

<https://agronomy.unl.edu/>

## Applying for Admission

### Standard requirements for all graduate programs

- Application for Admission with \$50 non-refundable application fee (<https://graduate.unl.edu/admissions/requirements/#appfee>).
- Transcripts (<https://graduate.unl.edu/admissions/requirements/#transcripts>) (unofficial): Uploaded as part of application form.  
If International: Uploads must include all college- or university-level transcripts or mark sheets (records of courses and marks earned), with certificates, diplomas, and degrees plus certified English translations.

After admission: Official documents are required from all students who are admitted and enroll. Photocopies of certified records are not acceptable. International students enrolled in other U.S. institutions may have certified copies of all foreign records sent directly to the Office of Graduate Studies by their current school's registrar office.

- If applicant's native language is not English, verification of English proficiency (<https://graduate.unl.edu/admissions/english-proficiency/>) is required.  
When sending TOEFL scores, our institution code is 6877 and a department code is not needed.
- If applicant is not a US citizen and expects an F or J visa: financial information (<https://graduate.unl.edu/prospective/international/financial/>).
- Applicants must also fulfill any additional requirements the department specifies at the time of application.

### Additional requirements specific to this program

- Master of Science degree in Agriculture or a related field: If you do not already hold such a degree, be sure your application materials demonstrate your excellence in academics, written and oral communication skills, and scholarly creativity and independent thought. For example:
  - On the application's Additional Information page, list your publications, abstracts, invited presentations, teaching experience or other communication-related activities.
  - On the application's Program Requirements page, attach a GRE score report on the Program Requirements page, and/or attach an Other Upload not covered in other areas of this application.
- Minimum English proficiency: Internet TOEFL (<http://www.toefl.org/>) 79, IELTS (<https://www.ielts.org/>) 6.5.
- Curriculum vitae
- Personal Statement: In 1-2 pages, address the following:
  - a. Your professional goals and career aspirations and specifically what you plan to do with your degree.
  - b. Background experiences, events, and/or education that have influenced your professional goals.
  - c. How enrolling in this program in this department at Nebraska will assist you in meeting your professional goals.
- Three recommendation letters

## Requirements

Hours required: 90