

# Plant Sciences/Horticulture

---

## Department Information

- **Department Head:**  
Richard Horsley, Ph.D.
- **Graduate Coordinator:**  
Edward Deckard, Ph.D.
- **Department Location:**  
166 Loftsgard Hall
- **Department Phone:**  
(701) 231-7971
- **Department Web Site:**  
[www.ag.ndsu.edu/plantsciences/](http://www.ag.ndsu.edu/plantsciences/) (<http://www.ag.ndsu.edu/plantsciences/>)
- **Application Deadline:**  
International applications are due May 1 for Fall and October 15 for Spring. Domestic applicants should apply at least one month prior to the start of classes.
- **Credential Offered:**  
Ph.D. (Plant Sciences only), M.S.
- **Test Requirement:**  
The GRE requirement is waived for the current admissions cycle.
- **English Proficiency Requirements:**  
TOEFL iBT 71, IELTS 6; Duolingo 100

---

## Program Description

The Department of Plant Sciences offers graduate studies leading to the M.S. degrees in Cereal Science, Plant Sciences, and Horticulture, and to a Ph.D. degree in Cereal Science or Plant Sciences, with an optional Program of Emphasis in Plant Breeding and Genetics. Specialized academic and research training in Plant Sciences is available in plant breeding and genetics, weed science, biotechnology, and field and forage crop production and management. Areas of specialization in Horticulture and Forestry include breeding and genetics, biotechnology, physiology, propagation, sports and urban turfgrass management, and production and management of horticultural crops such as woody plants, potatoes, vegetables, and herbaceous ornamentals. Areas of specialization in Cereal Science may involve research in the areas of carbohydrates, enzymes, legumes, and other northern-grown crops; barley malting and brewing; wheat milling, baking, and pasta processing. Each study area is designed to provide students with comprehension of the discipline and of relevant regional and global-community social issues.

The Department of Plant Sciences is located in Loftsgard Hall, which provides a state-of-the-art facility for interdisciplinary research in plant sciences, ranging from basic studies and biotechnology to the more traditional applied areas. Facilities for cereal science research are located in Harris Hall. These facilities include analytical laboratories for grain quality research, baking, milling, malting and brewing, and pasta and noodle processing. State-of-the-art greenhouses and extensive growth chamber facilities are also available, as are 100 acres of field research land adjacent to the Plant Science Complex. An additional 500 acres of research land are located near the North Dakota State University campus. A horticultural farm only 25 miles west of campus has an extensive arboretum. Excellent supporting disciplines located nearby, or in the Plant Science Complex, include Soil Science, Botany, Food Safety, Biochemistry and Molecular Biology, Entomology, and Plant Pathology. The Department of Plant Sciences encourages interdisciplinary research, and students frequently tailor their research program to meet their interests by working with faculty in one or more of the supporting disciplines.

Graduate student numbers per faculty member are limited, so the student gets adequate personal attention and works closely with their adviser in research. Final selection of the adviser will be made on the basis of the student's interest, availability of space in the researcher's laboratory, and a common desire of the student and professor to work together.