The Department of Plant Sciences offers graduate studies leading to the Master of Science (M.S.) degree in Horticulture and Urban Agriculture. Areas of specialization in Horticulture include breeding and genetics, biotechnology, physiology, propagation, public horticulture, sports and urban turf grass management, and production and management of horticultural crops such as woody plants, potatoes, vegetables, and herbaceous ornamentals.

The Horticulture and Urban Agriculture is located in Loftsgard Hall, which provides a state-of-the-art facility for collaborative research in plant sciences, ranging from basic studies and biotechnology to the more traditional applied areas. Campus also offers state-of-the-art greenhouses and extensive growth chamber facilities, as well as field plots including an orchard and vineyard.

The NDSU Horticulture Research Farm is located 25 miles west of campus with research plots involving high value crops, woody ornamental plants, and certified organic. Located within the NDSU Horticulture Research Farm is the NDSU Dale E. Herman Research Arboretum. This arboretum is the largest collection of woody ornamental plants in all the Northern Great Plains.

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.