The department provides graduate training leading to the master of science in horticulture. Each M.S. student will have a major advisor who will supervise their program of study and their thesis research. Specializations are available in several aspects of crop science: organic and sustainable horticulture, diversified crop production for urban and regional food systems, environmental impact of horticultural practices, environmental regulation of plant growth and development, plant breeding, biochemistry and molecular biology of horticultural plants, microculture and biotechnology, weed control and herbicide physiology, and biostatistics. Students have the opportunity to develop their research projects using vegetables, fruits, trees, ornamentals, specialty crops, or model species such as Arabidopsis thaliana.

The M.S. student’s thesis project will involve an in-depth mentored exploration of a research question and the development of a written thesis in conjunction with a graduate committee of three faculty members.

The department houses research labs, controlled environment chambers, and greenhouse facilities. Field-plot areas with associated storage and laboratory facilities are available at the UW–Madison Arboretum (https://arboretum.wisc.edu/), Horticulture Research Farm at Arlington (https://arlington.ars.wisc.edu/), and the Agriculture Research Stations (https://ars.wisc.edu/) managed by the College of Agricultural and Life Sciences at selected locations throughout the state. In conjunction with the farm at Sturgeon Bay, the world’s largest collection of tuber-bearing Solanums is maintained by the Inter-Regional Potato Introduction Project and is available for research use.