HORTICULTURE, M.S.

The department provides graduate training leading to the master of science and the doctor of philosophy in horticulture. 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, cytogenetics, 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, turf, specialty crops, or model species such as *Arabidopsis thaliana*.

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, Horticulture Research Farm at Arlington, and the Agriculture Research Stations 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.

## REQUIREMENTS

### MINIMUM DEGREE REQUIREMENTS AND SATISFACTORY PROGRESS

To make progress toward a graduate degree, students must meet the Graduate School Minimum Degree Requirements and Satisfactory Progress (http://guide.wisc.edu/graduate/#policiesandrequirementstext) in addition to the requirements of the program.

### MASTER’S DEGREES

**M.S.**

**MINIMUM GRADUATE DEGREE CREDIT REQUIREMENT**

30 credits

**MINIMUM GRADUATE RESIDENCE CREDIT REQUIREMENT**

18 credits

**MINIMUM GRADUATE COURSEWORK (50%) REQUIREMENT**

Half of degree coursework (15 credits out of 30 total credits) must be completed in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university’s Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle).

**PRIOR COURSEWORK REQUIREMENTS: GRADUATE WORK FROM OTHER INSTITUTIONS**

Allowed; coursework earned five or more years prior to admission to a master’s degree is not allowed to satisfy requirements.

**PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNDERGRADUATE**

Students are allowed to count no more than 7 credits numbered 300 or above toward the minimum graduate degree credit requirement; if those courses are numbered 700 or above they may count toward the minimum graduate coursework requirement. Coursework earned five or more years prior to admission to a master’s degree is not allowed to satisfy requirements.

**PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNIVERSITY SPECIAL**

With program approval, students are allowed to count no more than 15 credits of coursework numbered 300 or above taken as a UW–Madison Special student. Coursework earned five or more years prior to admission to a master’s degree is not allowed to satisfy requirements.

**CREDITS PER TERM ALLOWED**

15 credits

**PROGRAM-SPECIFIC COURSES REQUIRED**

Contact the program for information on any additional required courses.

**OVERALL GRADUATE GPA REQUIREMENT**

3.00

**OTHER GRADE REQUIREMENTS**

The Graduate School requires an average grade of B or better in all coursework (300 or above, not including research credits) taken as a graduate student unless conditions for probationary status require higher grades. Grades of Incomplete are considered to be unsatisfactory if they are not removed during the next enrolled semester.

**PROBATION POLICY**

The Graduate School regularly reviews the record of any student who earned grades of BC, C, D, F, or Incomplete in a graduate course (300 or above), or grade of U in research credits. This review could result in academic probation with a hold on future enrollment or in being suspended from the Graduate School.

**ADVISOR / COMMITTEE**

Every graduate student is required to have an advisor. To ensure that students are making satisfactory progress toward a degree, the Graduate School expects them to meet with their advisor on a regular basis.

An advisor generally serves as the thesis advisor. In many cases, an advisor is assigned to incoming students. Students can be suspended from the Graduate School if they do not have an advisor. An advisor is a faculty member, or sometimes a committee, from the major department responsible for providing advice regarding graduate studies.

A committee often accomplishes advising for the students in the early stages of their studies.

**ASSESSMENT AND EXAMINATIONS**

Contact the program for information on required assessments and examinations.

**TIME CONSTRAINTS**

Master’s degree students who have been absent for five or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students
completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

**LANGUAGE REQUIREMENTS**
Contact the program for information on any language requirements.

**ADMISSIONS**
The department accepts applications for fall, spring, and summer entry. The applicant's academic preparation should include fundamental courses in the plant sciences such as botany, bacteriology, genetics, and physiology, as well as courses in chemistry (general, organic, quantitative), physics, mathematics, and biochemistry. The academic average should be at least 3.0 (on a 4.0 scale) with evidence of proficiency in subjects related to agriculture and plant sciences.

**LEARNING OUTCOMES**

**KNOWLEDGE AND SKILLS**
- Articulates the theories, research methods, and approaches to inquiry used in the field of horticulture.
- Identifies sources and assembles evidence pertaining to questions in the field of horticulture.
- Understands the primary field of horticulture in a global context.
- Selects and utilizes the most appropriate methodologies and practices.
- Synthesizes information pertaining to questions or challenges in the field of horticulture.
- Communicates clearly in ways appropriate to the field of horticulture.

**PROFESSIONAL CONDUCT**
- Recognizes and applies principles of ethical conduct.

**PEOPLE**

**Faculty:** Professors Goldman (chair), Bamberg, Colquhoun, Havey, Jiang, Krysan, Nienhuis, Palta, Patterson, Simon, Spooner, Yandell; Associate Professors Bethke, Jansky, Jull, Weng; Assistant Professors Atucha, Dawson, Endelman, Zalapa