

# HORTICULTURE, B.S.

Horticulturists work to enrich our lives by integrating and applying plant science, environmental science, molecular biology, biotechnology, genetics, physiology, and management. Specifically, horticultural science deals with the development, production, growth, distribution, and use of fruits, vegetables, greenhouse crops, ornamentals, and specialty plant crops (used for flavoring and medicine). Horticultural science is one of the most diverse biological sciences one can study at a university. Not only are the biology and genetics of crop plants interesting, but the application of this knowledge is equally important in a myriad of situations. Undergraduate horticulture majors will obtain specialized training in greenhouse/field management and the production and use of fruits, vegetables, nuts, and herbaceous/woody ornamentals through the bachelor of science degree program.

In addition to obtaining a job with an undergraduate degree in horticulture, the major provides an excellent background for graduate study in the field of plant sciences. Areas of graduate study include plant breeding and plant genetics, horticulture, agronomy, plant pathology, or other related fields such as biology, environmental science, natural resource management, agroecology, and genetics.

Students with either undergraduate or graduate degrees in horticulture have a variety of career opportunities. Recent studies show that there are more jobs in agriculture in the US than there are students graduating with agricultural bachelor of science degrees to fill them. As our world grapples with the need to contribute science-based solutions to feeding 9 billion people by 2050, students trained in the agricultural and horticultural sciences will be called on to contribute.

Horticulture graduates may find opportunities to develop higher yielding crops or crops that can withstand more stressful growing conditions. Others may find opportunities working on improving qualities such as flavor, appearance, texture, and postharvest shelf life for a wide range of horticultural commodities from fruits to vegetables to flowers. Sustainable production is an area of growth where horticultural expertise can make a contribution.

The horticulture degree serves as excellent preparation for careers in food production, plant nurseries, community-supported agriculture (CSA), public gardens, greenhouse production, teaching, public parks, vegetable production, urban agriculture, extension- and community-based educational work, work in research labs, and the health sciences. In addition, many horticultural science majors go on to work in public sector jobs including city and state positions with the Department of Natural Resources, the Wisconsin Department of Agriculture, and the University of Wisconsin Division of Extension. Students with degrees in horticulture also work in hospitals (horticultural therapy), aerospace (food and recycling in space labs), and zoos (managing environments for animals and visitors). Although the career opportunities are numerous, horticulture students have a common desire to work intensively with plants to improve our environment and our health.

## HOW TO GET IN

To declare this major, students must be admitted to UW–Madison and the College of Agricultural and Life Sciences (CALs). For information about becoming a CALs first-year or transfer student, see Entering the

College (<http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#enteringthecollegertext>).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

## REQUIREMENTS

### UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>) section of the *Guide*.

- |                   |  |
|-------------------|--|
| General Education | <ul style="list-style-type: none"> <li>• Breadth—Humanities/Literature/Arts: 6 credits</li> <li>• Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits</li> <li>• Breadth—Social Studies: 3 credits</li> <li>• Communication Part A &amp; Part B *</li> <li>• Ethnic Studies *</li> <li>• Quantitative Reasoning Part A &amp; Part B *</li> </ul> |
|-------------------|--|

\* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

### COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALs must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

### COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code	Title	Credits
	Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.	

Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.

First Year Seminar ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements-text">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements-text</a> )	1
International Studies ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements-text">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements-text</a> )	3
Physical Science Fundamentals	4-5
CHEM 103 General Chemistry I or CHEM 108 Chemistry in Our World or CHEM 109 Advanced General Chemistry	
Biological Science	5
Additional Science (Biological, Physical, or Natural)	3
Science Breadth (Biological, Physical, Natural, or Social)	3
CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements-text">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements-text</a> )	

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used elsewhere.

Code	Title	Credits
<b>Mathematics and Statistics</b>		
Select one of the following (or may be satisfied by placement exam):		5-6
MATH 112 & MATH 113	Algebra and Trigonometry	
MATH 114	Algebra and Trigonometry	
MATH 171	Calculus with Algebra and Trigonometry I <sup>1</sup>	
Select one of the following:		3-5
MATH 211	Calculus	
MATH 217	Calculus with Algebra and Trigonometry II <sup>1</sup>	
MATH 221	Calculus and Analytic Geometry 1	
MATH 222	Calculus and Analytic Geometry 2	
STAT 301	Introduction to Statistical Methods	
STAT 371	Introductory Applied Statistics for the Life Sciences	
COMP SCI 300	Programming II	
<b>Chemistry</b>		
Select one of the following:		5-9
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II	
CHEM 109	Advanced General Chemistry	
<b>Biology</b>		
Select one of the following options:		10-12
Option 1:		

BOTANY/ BIOLOGY 130	General Botany	
ZOOLOGY/ BIOLOGY 101	Animal Biology	
ZOOLOGY/ BIOLOGY 102	Animal Biology Laboratory	
Option 2:		
BIOLOGY/ BOTANY/ ZOOLOGY 151	Introductory Biology	
BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology	
Option 3:		
BIOCORE 381	Evolution, Ecology, and Genetics	
BIOCORE 383	Cellular Biology	
And select two of the following:		
BIOCORE 382	Evolution, Ecology, and Genetics Laboratory	
BIOCORE 384	Cellular Biology Laboratory	
BIOCORE 486	Principles of Physiology Laboratory	
<b>Agricultural Breadth</b>		
ENTOM/ ZOOLOGY 302	Introduction to Entomology	3-4
or ENTOM 351	Principles of Economic Entomology	
GENETICS 466	Principles of Genetics	3
Select one of the following:		3-4
BOTANY 300	Plant Anatomy	
BOTANY 305	Plant Morphology and Evolution	
BOTANY 500	Plant Physiology	
PL PATH 300	Introduction to Plant Pathology	3-4
or PL PATH/ F&W ECOL/HORT/ LAND ARC 309	Diseases of Trees and Shrubs	
SOIL SCI 301	General Soil Science	4
<b>Horticultural Core</b>		
HORT 120	Survey of Horticulture	3
HORT 121	Horticulture Colloquium	1
HORT 227	Propagation of Horticultural Plants	3
HORT 320	Environment of Horticultural Plants	3
HORT/AGRONOMY/ SOIL SCI 326	Plant Nutrition Management	3
Select one of the following:		3
HORT 334 & HORT 335	Greenhouse Cultivation and Greenhouse Cultivation Lab	
HORT 375	Special Topics (Organic Vegetable Production) <sup>2</sup>	
Select three of the following:		9
HORT 234	Ornamental Plants	
HORT/ PL PATH 261 & HORT/ PL PATH 262	Sustainable Turfgrass Use and Management and Turfgrass Management Laboratory	
HORT 375	Special Topics (Arboriculture and Landscape Maintenance)	

or HORT/ LAND ARC 263	Landscape Plants I	
HORT 345	Fruit Crop Production (alternate years) <sup>2</sup>	
HORT 370	World Vegetable Crops	

**Electives**

Select 5 elective credits (see list below) 5

**Capstone**

Students can complete a pre-approved course or an independent study or internship. Independent study and internship require individual pre-approval from the program, and students should talk to the Horticulture advisor to learn more about the process and forms.

*Pre-approved course options:*

HORT/ AGRONOMY 376 & HORT 378	Tropical Horticultural Systems and Tropical Horticultural Systems International Field Study	
PL PATH 315	Plant Microbiomes	

*Independent Study or Internship options (require individual pre-approval):*

HORT 399	Coordinative Internship/Cooperative Education	
HORT 699	Special Problems	
PL PATH 499	Independent Study in Organic Agriculture	

**Total Credits** 69-81

1

If MATH 171 is taken, MATH 217 must also be taken.

2

Alternate years.

**ELECTIVE COURSES**

Students may not double count courses within the major requirements (Agricultural Breadth, Horticultural Core, Electives, Capstone)

Code	Title	Credits
<b>Business and Economics</b>		
A A E 215	Introduction to Agricultural and Applied Economics	4
A A E/ENVIR ST 244	The Environment and the Global Economy	4
A A E 246	Climate Change Economics and Policy	3
A A E 319	The International Agricultural Economy	3
A A E 320	Agricultural Systems Management	3
A A E 323	Cooperatives and Alternative Forms of Enterprise Ownership	3
A A E/ECON/ ENVIR ST 343	Environmental Economics	3-4
GEN BUS 310	Fundamentals of Accounting and Finance for Non-Business Majors	3
GEN BUS 311	Fundamentals of Management and Marketing for Non-Business Majors	3

**Ecology, Conservation, and the Environment**

BOTANY/F&W ECOL/ ZOOLOGY 460	General Ecology	4
F&W ECOL/C&E SOC/ SOC 248	Environment, Natural Resources, and Society	3
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3
F&W ECOL/ BOTANY 455	The Vegetation of Wisconsin	4
F&W ECOL 550	Forest Ecology	3
F&W ECOL/ LAND ARC/ ZOOLOGY 565	Principles of Landscape Ecology	2
F&W ECOL/ BOTANY/ENVIR ST/ ZOOLOGY 651	Conservation Biology	3
GEOG/ENVIR ST 120	Introduction to the Earth System	3
GEOG/ENVIR ST 127	Physical Systems of the Environment	5
GEOG/ENVIR ST 139	Global Environmental Issues	3
GEOG/BOTANY 338	Environmental Biogeography	3
GEOG/ENVIR ST 339	Environmental Conservation	4
GEOSCI/ ENVIR ST 106	Environmental Geology	3
HISTORY/ENVIR ST/ GEOG 460	American Environmental History	4
LAND ARC/ ENVIR ST 361	Wetlands Ecology	3
ZOOLOGY/ ENVIR ST 315	Limnology-Conservation of Aquatic Resources	2
ZOOLOGY 316	Laboratory for Limnology-Conservation of Aquatic Resources	2-3

**Food, Health and Human Well-being:**

A A E/C&E SOC/ SOC 340	Issues in Food Systems	3-4
AGRONOMY/ ENTOM/ NUTR SCI 203	Introduction to Global Health	3
AGRONOMY 300	Cropping Systems	3
AGRONOMY/A A E/ NUTR SCI 350	World Hunger and Malnutrition	3
AGRONOMY 377	Global Food Production and Health	3
C&E SOC/SOC 222	Food, Culture, and Society	3
C&E SOC/SOC 650	Sociology of Agriculture	3
FOOD SCI/ AN SCI 321	Food Laws and Regulations	1
GEOG/ENVIR ST 309	People, Land and Food: Comparative Study of Agriculture Systems	3
HORT 345	Fruit Crop Production	3
HORT 350	Plants and Human Wellbeing	2
HORT/A A E/ AGRONOMY/ PL PATH 367	Introduction to Organic Agriculture: Production, Markets, and Policy	3
HORT 370	World Vegetable Crops	3

HORT 375	Special Topics (Organic Vegetable Production)	3	AGRONOMY/ C&E SOC/MED HIST/ PHILOS 565	The Ethics of Modern Biotechnology	3
HORT 380	Indigenous Foodways: Food and Seed Sovereignty	2	BIOCHEM 501	Introduction to Biochemistry	3
NUTR SCI 132	Nutrition Today	3	CHEM 341	Elementary Organic Chemistry	3
PL PATH 311	Global Food Security (Food Systems, Sustainability, and Climate Change)	3	CHEM 342	Elementary Organic Chemistry Laboratory	1
PL PATH 375	Special Topics	1-4	CHEM 343	Organic Chemistry I	3
<b>Landscape Horticulture</b>			HORT/ AGRONOMY 338	Plant Breeding and Biotechnology	3
BSE 243	Operating and Management Principles of Off-Road Vehicles	3	HORT/AGRONOMY/ BOTANY 339	Plant Biotechnology: Principles and Techniques I	4
BSE 301	Land Information Management	3	HORT/AGRONOMY/ BOTANY 340	Plant Cell Culture and Genetic Engineering	3
F&W ECOL 375	Special Topics (Tree Risk Assessment and Decay Detection)	1-4	HORT/ AGRONOMY 360	Genetically Modified Crops: Science, Regulation & Controversy	2
HORT 234	Ornamental Plants	3	HORT 375	Special Topics (Epigenetics)	1-4
HORT/PL PATH 261	Sustainable Turfgrass Use and Management	2	HORT/ AGRONOMY 501	Principles of Plant Breeding	3
HORT/PL PATH 262	Turfgrass Management Laboratory	1	HORT/ AGRONOMY 502	Techniques of Plant Breeding	1
HORT/ LAND ARC 263	Landscape Plants I	3	HORT/ GENETICS 550	Molecular Approaches for Potential Crop Improvement	3
HORT/SOIL SCI 332	Turfgrass Nutrient and Water Management	3	HIST SCI 202	The Making of Modern Science	3
HORT 334	Greenhouse Cultivation	2	<b>Public Policy and Environmental Ethics</b>		
HORT 335	Greenhouse Cultivation Lab	1	C&E SOC/SOC 541	Environmental Stewardship and Social Justice	3
HORT 375	Special Topics (Arboriculture and Landscape Maintenance)	1-4	ENVIR ST/GEOG 439	US Environmental Policy and Regulation	3-4
LAND ARC 250	Survey of Landscape Architecture Design	3	ENVIR ST/ SOIL SCI 575	Assessment of Environmental Impact	3
LAND ARC 260	History of Landscape Architecture	3	POLI SCI 272	Introduction to Public Policy	3-4
LAND ARC 211	Shaping the Built Environment	3	POLI SCI/ECON/ ENVIR ST/ URB R PL 449	Government and Natural Resources	3-4
<b>Pest Management</b>			<b>Soil Science</b>		
ENTOM/BOTANY/ ZOOLOGY 473	Plant-Insect Interactions	3	SOIL SCI 305	Field Study of Soil	1
ENTOM/ F&W ECOL 500	Insects in Forest Ecosystem Function and Management	2	SOIL SCI 321	Soils and Environmental Chemistry	3
PL PATH/ BOTANY 332	Fungi	4	SOIL SCI 322	Physical Principles of Soil and Water Management	3
<b>Plant Biology</b>			SOIL SCI/ PL PATH 323	Soil Biology	3
BOTANY 300	Plant Anatomy	4	SOIL SCI/ ENVIR ST 324	Soils and Environmental Quality	3
BOTANY 305	Plant Morphology and Evolution	4	SOIL SCI/ ENVIR ST 575	Assessment of Environmental Impact	3
BOTANY 400	Plant Systematics	4	<b>Weather and Climate Change</b>		
BOTANY 401	Vascular Flora of Wisconsin	4	ATM OCN 101	Weather and Climate	4
BOTANY/ANTHRO/ ZOOLOGY 410	Evolutionary Biology	3	ATM OCN/ENVIR ST/ GEOSCI 102	Climate and Climate Change	3
BOTANY 422	Plant Geography	3	ATM OCN/ ENVIR ST 171	Global Change: Atmospheric Issues and Problems	2-3
BOTANY/AMER IND/ ANTHRO 474	Ethnobotany	3-4	ATM OCN/ENVIR ST/ GEOG 332	Global Warming: Science and Impacts	3
BOTANY 500	Plant Physiology	3-4			
F&W ECOL 415	Tree Physiology	3			
HORT 375	Special Topics (The Science of Hemp)	1			
<b>Plant Breeding, Genetics, and Biotechnology</b>					

ATM OCN/ Bioclimatology  
ENVIR ST 520

3

## HONORS IN THE MAJOR

Students admitted to the university and to the College of Agricultural and Life Sciences are invited to apply to be considered for admission to the CALS Honors Program.

### Admission Criteria for New First-Year Students:

- Complete program application including essay questions

### Admission Criteria for Transfer and Continuing UW-Madison Students:

- UW-Madison cumulative GPA of at least 3.25
- Complete program application including essay questions

## HOW TO APPLY

The application is available on the CALS Honors Program website (<https://cals.wisc.edu/academics/undergraduate-students/outside-the-classroom/honors-program/>). Applications are accepted at any time.

New first-year students with accepted applications will automatically be enrolled in Honors in Research. It is possible to switch to Honors in the Major in the student's first semester on campus after receiving approval from the advisor for that major. Transfer and continuing students may apply directly to Honors in Research or Honors in the Major (after approval from the major advisor).

## REQUIREMENTS

All CALS Honors programs have the following requirements:

- Earn at least a cumulative 3.25 GPA at UW-Madison (some programs have higher requirements)
- Complete the program-specific requirements listed below
- Submit completed thesis documentation to CALS Academic Affairs

## REQUIREMENTS

To earn Honors in the Major, students are required to take at least 20 honors credits. In addition, students must take HORT 289 Honors Independent Study, HORT 681 Senior Honors Thesis and HORT 682 Senior Honors Thesis when completing their thesis project; please see the Honors in Major Checklist for Horticulture (<http://www.cals.wisc.edu/academics/undergraduate-programs/get-involved/honors-program/honors-in-the-major/>) for more information. The Department of Horticulture also works collaboratively to strongly support students through the Honors in Research program.

## UNIVERSITY DEGREE REQUIREMENTS

**Total Degree** To receive a bachelor's degree from UW-Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

**Residency** Degree candidates are required to earn a minimum of 30 credits in residence at UW-Madison. "In residence" means on the UW-Madison campus with an undergraduate degree classification. "In residence" credit also includes UW-Madison courses offered in distance or online formats and credits earned in UW-Madison Study Abroad/Study Away programs.

**Quality of Work** Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

## LEARNING OUTCOMES

1. Acquire, integrate and apply knowledge of plant science to horticultural systems.
2. Demonstrate interdisciplinary knowledge and competency in managing horticultural systems.
3. Synthesize knowledge and use insight and creativity to better understand and improve horticultural systems.
4. Appreciate and communicate the diverse impacts of horticulture on people.
5. Demonstrate professionalism and proficiency in skills that relate to horticulture.

## FOUR-YEAR PLAN

### FOUR-YEAR PLAN

#### SAMPLE HORTICULTURE FOUR-YEAR PLAN (WITH BOTANY/BIOLOGY 130 IN THE FIRST SEMESTER)

##### First Year

Fall	Credits	Spring	Credits
HORT 120		3 MATH 113	3
HORT 121		1 BIOLOGY/ZOOLOGY 101 & BIOLOGY/ZOOLOGY 102	5
BIOLOGY/BOTANY 130 <sup>1</sup>	5	Ethnic Studies	3
MATH 112	3	Electives	5
COMM A Course	3		
CALS First Year Seminar	1		
	16		16

##### Second Year

Fall	Credits	Spring	Credits
HORT 320		3 CHEM 104	5
CHEM 103		4 HORT 227	3
COMM B Course		3 HORT 334 & HORT 335	3
Horticulture Breadth		6 Humanities	3-4
	16		14-15

##### Third Year

Fall	Credits	Spring	Credits
Agricultural Breadth <sup>2</sup>		6 Agricultural Breadth <sup>2</sup>	6

Horticulture Breadth	3 Math / Statistics / Computer Science	3
CALS International Studies <sup>3</sup>	3 Humanities	3-4
Electives	4-5 Elective	3

**16-17** **15-16**

**Fourth Year**

Fall	Credits	Spring	Credits
Agricultural Breadth <sup>2</sup>		3 Agricultural Breadth <sup>2</sup>	3-4
Horticulture Breadth		6 Electives	9
Horticulture Capstone		3	
Social Sciences		3-4	
		<b>15-16</b>	<b>12-13</b>

**Total Credits 120-125**

Students must complete at least 120 total credits to be eligible for graduation.

1

BIOLOGY/BOTANY 130, BIOLOGY/ZOOLOGY 101, and BIOLOGY/ZOOLOGY 102 is the preferred biology track.

2

Please consult with a Horticulture advisor to discuss when specific courses are typically offered.

3

Students can choose to complete the CALS International Studies requirement using HORT 370 or HORT/AGRONOMY 376 & HORT 378, which also fulfill Horticulture major requirements.

**Sample Horticulture Four-Year Plan (with CHEM 103 in the first semester)****First Year**

Fall	Credits	Spring	Credits
HORT 120		3 CHEM 104	5
HORT 121		1 BIOLOGY/BOTANY 130 <sup>1</sup>	5
CHEM 103		4 MATH 113	3
MATH 112		3 Ethnic Studies	3
COMM A Course		3	
CALS First Year Seminar		1	
		<b>15</b>	<b>16</b>

**Second Year**

Fall	Credits	Spring	Credits
HORT 320		3 HORT 227	3
BIOLOGY/ZOOLOGY 101 & BIOLOGY/ ZOOLOGY 102		5 HORT 334 & HORT 335	3
Horticulture Breadth		3 Horticulture Breadth	6
COMM B Course		3 Humanities	3-4
		<b>14</b>	<b>15-16</b>

**Third Year**

Fall	Credits	Spring	Credits
Agricultural Breadth <sup>2</sup>		6 Agricultural Breadth <sup>2</sup>	6
Horticulture Breadth		3 Math / Statistics / Computer Science	3

CALS International Studies <sup>3</sup>	3 Humanities	3-4
Electives	3-4 Elective	3

**15-16** **15-16**

**Fourth Year**

Fall	Credits	Spring	Credits
Agricultural Breadth <sup>2</sup>		3 Agricultural Breadth <sup>2</sup>	3-4
Social Sciences		3 Electives	9
Horticulture Capstone		3	
Electives		6-7	
		<b>15-16</b>	<b>12-13</b>

**Total Credits 117-122**

Students must complete at least 120 total credits to be eligible for graduation.

1

BIOLOGY/BOTANY 130, BIOLOGY/ZOOLOGY 101, and BIOLOGY/ZOOLOGY 102 is the preferred biology track.

2

Please consult with a Horticulture advisor to discuss when specific courses are typically offered.

3

Students can choose to complete the CALS International Studies requirement using HORT 370 or HORT/AGRONOMY 376 & HORT 378, which also fulfill Horticulture major requirements.

## ADVISING AND CAREERS

### ADVISING

Students interested in learning more about the Horticulture major should meet with Kathryn Jones, [kjones26@wisc.edu](mailto:kjones26@wisc.edu), or schedule an advising appointment via Starfish (<https://advising.wisc.edu/facstaff/starfish/starfish-student-resources/>).

### FACULTY MENTORS

The Horticulture Department maintains a list of faculty mentors (<https://horticulture.wisc.edu/faculty-and-staff-2/faculty-and-staff/>) that are available to help current students with internships and careers, graduate school preparation, research opportunities, etc.

### CAREERS

A degree in horticulture prepares students for numerous career paths, including plant breeding and genetics, applied plant science, food crop production, greenhouse production, urban agriculture, community-supported agriculture (CSA), gardening and landscaping, horticulture education, extension- and community-based education, horticultural therapy, and the health sciences. For sample career profiles in horticulture, see Career Opportunities (<https://horticulture.wisc.edu/academics/undergraduate-program/research-career-opportunities-3/>) on the department website.

## PEOPLE

### PROFESSORS

Bamberg, Colquhoun, Goldman, Krysan (chair), Simon, Weng, Zalapa

### ASSOCIATE PROFESSORS

Atucha, Bethke, Dawson, Endelman, Jull

### ASSISTANT PROFESSORS

Ellison, Kovaleski, Wang

### USDA SCIENTIST

Mura

### INSTRUCTIONAL STAFF

Calderon, Luiken, Oosterwyk

## WISCONSIN EXPERIENCE

### INTERNSHIPS

Internships are a great way for Horticulture students to get hands-on horticultural experience. Many of our students intern at locations that vary from seed companies to wineries to public gardens. Horticulture students also have many opportunities to intern during the year on or near campus at facilities such as the Allen Centennial Garden (<https://allencentennialgarden.org/>), the UW Arboretum (<https://arboretum.wisc.edu/>), and the Agricultural Research Stations (<https://ars.wisc.edu/>).

### RESEARCH

Horticulture students have many opportunities to get involved with research in the department. Students primarily find research opportunities by directly contacting faculty. Faculty can be found on the department's website by the directory list (<https://horticulture.wisc.edu/faculty-and-staff-2/faculty-and-staff/>), by crops studied (<https://horticulture.wisc.edu/research-and-outreach-2/crops-studied/>), or by program area (<https://horticulture.wisc.edu/research-and-outreach-2/faculty-by-program-area/>). Occasionally, research positions are posted on the Student Job Center.

### STUDY ABROAD

Horticulture students have unique opportunities to contextualize the learning acquired in traditional face-to-face courses on campus by participating in short-term field experiences abroad led by program leaders from the Department of Horticulture.

Some of these programs are:

**UW Tropical Horticulture in Costa Rica** – students enroll in AGRONOMY/HORT 376 Tropical Horticultural Systems in the fall then participate in a two-week intensive field experience in Costa Rica during winter break. Students have the opportunity to visit tropical crop plantations (for example—banana, pineapple, cacao, coffee, palm oil) and contrast different agricultural practices (small and large scale, organic, conventional).

**UW Food Systems and the Environment in Northern Japan** – this two-week field study takes place in mid-August. In this program, students

from UW–Madison are partnered with students from Obihiro University of Agriculture and Veterinary Medicine, and through a combination of lectures and site visits, they will compare and contrast the landscape and ecology of Japan and Wisconsin.

### HORTICULTURE SOCIETY

Connect with other Hort majors and those interested in horticulture by joining the Horticulture Society. The Horticulture Society is a professional, social, and educational group which provides a common ground for all students interested in horticulture to meet other students with the same interests.