

CROP SCIENCES: HORTICULTURAL FOOD SYSTEMS, BS

for the degree of Bachelor of Science Major in Crop Science, Horticultural Food Systems Concentration

This concentration provides students with a strong foundation in plant sciences along with specialized knowledge in horticultural fruit and vegetable crop systems at urban, local, and commercial scales. Graduates from this program are prepared for careers as crop consultants, crop protection and production specialists; entrepreneurs in urban and local food systems; greenhouse or farm managers; and as community gardening and horticultural educators. This concentration will also prepare students for graduate studies leading to careers in research, extension, and education. A minimum of 126 total hours is required.

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Graduation Requirements

Minimum hours required for graduation: 126 hours.

ACES prescribed and elective courses: 35 hours, of which 20 hours must be completed in residence.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300 and 400 level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (<https://studentcode.illinois.edu/article3/part8/3-801/>) (§ 3-801) and in the Academic Catalog (<http://catalog.illinois.edu/general-information/degree-general-education-requirements/>).

General Education Requirements

Follows the campus General Education (Gen Ed) requirements (<https://courses.illinois.edu/gened/DEFAULT/DEFAULT/>). Some Gen Ed requirements may be met by courses required and/or electives in the program.

Code	Title	Hours
	Composition I	4-6
	Advanced Composition	3
	Humanities & the Arts (6 hours)	6
	Natural Sciences & Technology (6 hours)	6
	fulfilled by CHEM 102, CHEM 104, and CPSC 112	
	Social & Behavioral Sciences (6 hours)	6
	fulfilled by ECON 102 or ACE 100 and any other course approved as Social & Behavioral Sciences	
	Cultural Studies: Non-Western Cultures (1 course)	3
	Cultural Studies: US Minority Cultures (1 course)	3
	Cultural Studies: Western/Comparative Cultures (1 course)	3

Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning I) 6-8

fulfilled by MATH 220, MATH 221 or MATH 234, and CPSC 241

Language Requirement (Completion of the third semester or equivalent of a language other than English is required) 0-15

Code	Title	Hours
Department Foundation		
Communication Option:		3 or 6
CMN 101	Public Speaking	
ALEC 115	Let's Talk about Food, Agriculture, and the Environment	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
ACES 101		2
ECON 102 or ACE 100	Microeconomic Principles Introduction to Applied Microeconomics	3 or 4
Calculus Option - Select one of the following:		4-5
MATH 220	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
CPSC 241	Intro to Applied Statistics	3
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	4
Major Core		
CPSC 102	Foundational Skills in Crop Sciences	2
CPSC 112	Introduction to Crop Sciences	4
CPSC 212	Introduction to Plant Protection	4
Internship or Research Option - Select one of the following:		3
CPSC 393	Crop Sciences Internship	
CPSC 395	Undergrad Research or Thesis	
HORT 393	Horticulture Internship	
HORT 395	Undergrad Research or Thesis	
CPSC 498	Crop Sci Professional Developmt	1

Code	Title	Hours
Horticultural Food Systems Core		
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	4
CPSC 382	Organic Chem of Biol Processes	4
HORT 100	Introduction to Horticulture	3
HORT 205	Local Food Systems	3
HORT 341	Greenhouse Mgmt and Production	4
NRES 201	Introductory Soils	4

Concentration Electives

Choose from any 300- or 400-level CPSC, HORT, or PLPA courses, excluding CPSC 393, CPSC 395, HORT 393 and HORT 395. 15

Code	Title	Hours
Total Hours		126

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Sample Sequence

This sample sequence is intended to be used only as a guide for degree completion. All students should work individually with their academic advisors to decide the actual course selection and sequence that works best for them based on their academic preparation and goals. Enrichment programming such as study abroad, minors, internships, and so on may impact the structure of this four-year plan. Course availability is not guaranteed during the semester indicated in the sample sequence.

Students must fulfill their Language Other Than English requirement by successfully completing a third level of a language other than English. See the corresponding section on the Degree and General Education Requirements page (<http://catalog.illinois.edu/general-information/degree-general-education-requirements/>).

First Year

First Semester	Hours	Second Semester	Hours
CPSC 102		2 HORT 100	3
CPSC 112		4 Calculus Option	4
CHEM 102		3 CHEM 104	3
CHEM 103		1 CHEM 105	1
Composition I or Communication Option		3 Communication Option or Composition I	4
ACES 101			
	13		15

Second Year

First Semester	Hours	Second Semester	Hours
ECON 102 or ACE 100		3 CPSC 241	3
HORT 205		3 NRES 201	4
Language Other than English (3rd level)		4 CPSC 212	4
Advanced CPSC, PLPA, or HORT Elective Course		3 Advanced CPSC, PLPA, or HORT Elective Course	3
Free Elective course		3 General Education course	3
	16		17

Third Year

First Semester	Hours	Second Semester	Hours
Internship or Research Option		3 HORT 341	4
Advanced CPSC, PLPA, or HORT Elective course		3 Advanced CPSC, PLPA, or HORT Elective course	3
CPSC 382		4 Advanced Elective Course (CPSC, PLPA, or HORT)	3
CPSC 498		1 General Education course	3
General Education course		3 General Education course	3

Free Elective course		3	
	17		16
Fourth Year			
First Semester		Hours	Second Semester
General Education course		3 Free Elective course	3
General Education course		3 Free Elective course	3
Free Elective course		3 Free Elective course	3
Free Elective course		3 Free Elective course	3
Free Elective course		3 Free Elective course	3
	15		15

Total Hours 124

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Students graduating with the B.S. in Crop Sciences should be able to:

1. Demonstrate knowledge in the key subject matter areas of applied plant biology; crop growth and development; crop management and protection; and soil science.
2. Demonstrate an ability to identify a problem and develop solutions using quantitative reasoning skills for analysis of biological data.
3. Demonstrate oral and written communication skills necessary to listen and make effective arguments, to share applied scientific concepts with the public, and to make use of a broad variety of media.
4. Demonstrate an ability to lead and function in multidisciplinary teams.
5. Demonstrate the ability to perform self-guided discovery in agricultural sciences, practicing skills of engagement to enhance intellectual curiosity.

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Crop Sciences

Crop Sciences website (<https://cropsciences.illinois.edu/>)
 AW-101 Turner Hall
 MC-046
 1102 S. Goodwin Ave.
 Urbana, IL 61801
 (217) 333-3420
cropsciences@illinois.edu

College of Agricultural, Consumer & Environmental Sciences

College of Agricultural, Consumer & Environmental Sciences website (<https://aces.illinois.edu/>)

ACES Office of Academic Programs

128 Mumford Hall
1301 West Gregory Drive
Urbana, IL 61801
217-333-3380
aces-academics@illinois.edu

Advising

Advising Website (<https://cropsciences.illinois.edu/about/contact-us/#paragraph-604>)
(217) 333-3570
Undergraduate Advising Email: ugrad@cropsciences.illinois.edu
Graduate Advising Email: grad@cropsciences.illinois.edu

Admissions

ACES Undergraduate Admissions (<https://aces.illinois.edu/admissions/>)
University of Illinois Urbana-Champaign Undergrad Admissions (<https://www.admissions.illinois.edu/>)
University of Illinois Urbana-Champaign Graduate Admissions (<https://grad.illinois.edu/>)
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