CROP SCIENCES:  
HORTICULTURAL FOOD SYSTEMS, BS  

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

department website: https://cropsciences.illinois.edu/  
department faculty: https://cropsciences.illinois.edu/people/faculty  
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)  
college website: https://aces.illinois.edu/

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.

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

Prescribed Courses including Campus General Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHET 105</td>
<td>Writing and Research</td>
<td>4</td>
</tr>
<tr>
<td>or equivalent - see College Composition I requirement (3 or 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMN 101</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Composition

Select from campus approved list. 3-4

Cultural Studies

Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. 9

Foreign Language

Coursework at or above the third level is required for graduation.

Quantitative Reasoning I

Select one of the following: 4-5

MATH 220  Calculus
MATH 221  Calculus I
MATH 234  Calculus for Business I

Quantitative Reasoning II

CPSC 241  Intro to Applied Statistics 3

Natural Sciences and Technology

See Specific Concentration Requirements

Humanities and the Arts

Select from campus approved list 6

Social and Behavioral Sciences

ACE 100  Introduction to Applied Microeconomics 1  or ECON 102  Microeconomic Principles 3-4

Select from campus approved list. 3-4

ACES required

ACES 101  Contemporary Issues in ACES 2

Required Concentration 58-79

Concentration prescribed courses. See specific concentration requirements.

Total Hours 126

1  ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 102 &amp; CHEM 103</td>
<td>General Chemistry I &amp; General Chemistry Lab I</td>
<td>15-16</td>
</tr>
<tr>
<td>CHEM 104 &amp; CHEM 105</td>
<td>General Chemistry II &amp; General Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>CHEM 232 or CPSC 382</td>
<td>Organic Chem of Biol Processes</td>
<td></td>
</tr>
<tr>
<td>IB 103</td>
<td>Introduction to Plant Biology</td>
<td></td>
</tr>
</tbody>
</table>

Concentration Required Core Courses: 29

CPSC 102  Foundational Skills in Crop Sciences
CPSC 226
CPSC 270  Applied Entomology
CPSC 498  Crop Sci Professional Development
HORT 100  Introduction to Horticulture
HORT 240  Plant Propagation
HORT 360  Vegetable Crop Production
HORT 361  Small Fruit Production
HORT 362  Tree Fruit Production
NRES 201  Introductory Soils
PLPA 204

Select 7 or 8 hours from the following specialized courses: 7-8

CPSC 352  Plant Genetics
HORT 341  Greenhouse Mgmt and Production
HORT 442  Plant Nutrition
CPSC 484  Plant Physiology
or IB 420  Plant Physiology
NRES 438  Soi Nutrient Cycling
or NRES 488  Soil Fertility and Fertilizers

Select 15 hours from the following focus area electives: 15

ACE 231  Food and Agribusiness Mgt
CPSC 261  Biotechnology in Agriculture
CPSC 431  Plants and Global Change
CPSC 437  Principles of Agroecology
HORT 180
HORT 205  Local Food Systems

Information listed in this catalog is current as of 01/2022
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 301</td>
<td></td>
</tr>
<tr>
<td>HORT 341</td>
<td>Greenhouse Mgmt and Production</td>
</tr>
<tr>
<td>HORT 344</td>
<td>Planting for Biodiversity and Aesthetics</td>
</tr>
<tr>
<td>HORT 363</td>
<td>Postharvest Handling Hort Crop</td>
</tr>
<tr>
<td>HORT 421</td>
<td>Horticultural Physiology 1</td>
</tr>
<tr>
<td>HORT 434</td>
<td></td>
</tr>
<tr>
<td>HORT 435</td>
<td>Urban Food Production</td>
</tr>
<tr>
<td>HORT 442</td>
<td>Plant Nutrition 1</td>
</tr>
<tr>
<td>HORT 447</td>
<td>Horticulural Plant Breeding</td>
</tr>
<tr>
<td>HORT 475</td>
<td></td>
</tr>
<tr>
<td>TSM 311</td>
<td>Humanity in the Food Web</td>
</tr>
</tbody>
</table>

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

**Total Required Concentration Hours:** 51-52

1 May only be applied here if not used as a Specialized Course.