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>
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</thead>
<tbody>
<tr>
<td>RHET</td>
<td>Writing and Research</td>
<td>4</td>
</tr>
<tr>
<td>CMN</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 3-4
or ECON 102 Microeconomic Principles

Select from campus approved list. 3-4

ACES required
ACES 101 Contemporary Issues in ACES 2

Required Concentration
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</td>
<td>General Chemistry I &amp; CHEM 103 and General Chemistry Lab I</td>
<td>15-16</td>
</tr>
<tr>
<td>CHEM</td>
<td>General Chemistry II &amp; CHEM 105 and General Chemistry Lab II</td>
<td></td>
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<tr>
<td>CHEM</td>
<td>Elementary Organic Chemistry I or CPSC 382 Organic Chem of Biol Processes</td>
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<tr>
<td>IB</td>
<td>Introduction to Plant Biology</td>
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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 Soil Nutrient Cycling or NRES 488 Soil Fertility and Fertilizers

Select 15 hours from the following focus area electives: 15
ACE 231 Plant Genomics
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 12/2021
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HORT 301</td>
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</tr>
<tr>
<td>HORT 341</td>
<td>Greenhouse Mgmt and Production 1</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>
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<tr>
<td>HORT 421</td>
<td>Horticultural Physiology 1</td>
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<tr>
<td>HORT 434</td>
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<tr>
<td>HORT 435</td>
<td>Urban Food Production</td>
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<tr>
<td>HORT 442</td>
<td>Plant Nutrition 1</td>
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<tr>
<td>HORT 447</td>
<td>Horticultural Plant Breeding</td>
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<tr>
<td>HORT 475</td>
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<tr>
<td>TSM 311</td>
<td>Humanity in the Food Web</td>
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</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.*