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 | 3-4 |

or ECON 102 | Microeconomics Principles | 3-4 |

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. 58-79

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</td>
<td>Elementary Organic Chemistry I or CPSC 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 | Introduction to Weed Science |
CPSC 270 | Applied Entomology |
CPSC 498 | Crop Sci Professional Develpmnt |
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 | Introductory Plant Pathology |

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 438 | 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 | Medicinal Plants and Herbology |
HORT 205 | Local Food Networks |

Information listed in this catalog is current as of 04/2020
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 301</td>
<td>Woody Landscape Plants</td>
</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>
</tr>
<tr>
<td>HORT 421</td>
<td>Horticultural Physiology (^{1})</td>
</tr>
<tr>
<td>HORT 434</td>
<td>Designing Urban Agriculture</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>Horticultural Plant Breeding</td>
</tr>
<tr>
<td>HORT 475</td>
<td>Permaculture &amp; Agroforestry</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.