CROP SCIENCES: BIOLOGICAL SCIENCES, BS

for the degree of Bachelor of Science Major in Crop Science, Biological Sciences 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/#text)
college website: https://aces.illinois.edu/

The biological sciences concentration is designed for students who plan to enter a graduate study program or who want professional positions that require more science than in included in the other concentrations. Students follow a first-year program of General Education courses similar to students in other Crop Sciences concentrations. Programs for the second, third, and fourth years are planned in consultation with the student's faculty advisor, in the area of biological sciences. Students and advisors are encouraged to consult individual graduate schools for the specific entrance requirements. Although flexibility in individual course selection is a characteristic of this concentration, graduation requirements are established by selection of elective courses.

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>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 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 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 102</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 103 &amp; General Chemistry Lab I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 105 &amp; General Chemistry Lab II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 232</td>
<td>Elementary Organic Chemistry I</td>
<td>3 or 4</td>
</tr>
<tr>
<td>IB 103</td>
<td>Introduction to Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>IB 150</td>
<td>Organismal &amp; Evolutionary Biology</td>
<td>4</td>
</tr>
<tr>
<td>MCB 150</td>
<td>Molec &amp; Cellular Basis of Life</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>College Physics: Mech &amp; Heat</td>
<td>5</td>
</tr>
</tbody>
</table>

Biological Sciences Concentration Required

CPSC 112 Introduction to Crop Sciences 4

CPSC 261 Biotechnology in Agriculture 3

or CPSC 263 Genetic Engineering Lab 3

CPSC 352 Plant Genetics 4

CPSC 498 Crop Sci Professional Development 1

Select one of the following: 3

- CPSC 226 Introduction to Weed Science
- CPSC 270 Applied Entomology
- PLPA 204 Introductory Plant Pathology

Select three of the following: 9

- CPSC 426 Weed Mgt in Agronomic Crops
- CPSC 431 Plants and Global Change
- CPSC 452 Advanced Plant Genetics
- CPSC 453 Principles of Plant Breeding
- CPSC 466 Genomics for Plant Improvement
- CPSC 473 Mgmt of Field Crop Insects
- CPSC 484 Plant Physiology
- or HORT 422 Agricultural Physiology
- PLPA 403 Advanced Plant Pathology
- PLPA 405 Plant Disease Diagnosis & Mgmt
- PLPA 407 Diseases of Field Crops

Select one of the following: 3-4

- ANSC 100 Intro to Animal Sciences
- FSHN 101 The Science of Food and How it Relates to You
- HORT 100 Introduction to Horticulture
- NRES 102 Introduction to NRES
- NRES 201 Introductory Soils
- TSM 100 Technical Systems in Agr

Select one of the following: 3-5
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCB 100</td>
<td>Introductory Microbiology</td>
<td></td>
</tr>
<tr>
<td>&amp; MCB 101</td>
<td>Intro Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>MCB 450</td>
<td>Introductory Biochemistry</td>
<td>6-9</td>
</tr>
</tbody>
</table>

Natural Science Electives

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

35