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 is 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 ACES 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</td>
<td>General Chemistry Lab I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 105</td>
<td>General Chemistry Lab II</td>
<td>4</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 Biol</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 265  Genetic Engineering Lab 3

CPSC 352  Plant Genetics 4

CPSC 498  Crop Sci Professional Developmt 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 456  Genomics for Plant Improvement

CPSC 473  Mgmt of Field Crop Insects

CPSC 484  Plant Physiology

or HORT 421  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

Information listed in this catalog is current as of 12/2020
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCB 100</td>
<td>Introductory Microbiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; MCB 101 and Intro Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>MCB 450</td>
<td>Introductory Biochemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural Science Electives</td>
<td>6-9</td>
</tr>
<tr>
<td></td>
<td>Total ACES prescribed and elective courses must total 35 hours, of which 20 hours must be completed in residence.</td>
<td>35</td>
</tr>
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</table>

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