CROP SCIENCES: PLANT BIOTECHNOLOGY AND MOLECULAR BIOLOGY, BS

for the degree of Bachelor of Science Major in Crop Sciences, Plant Biotechnology and Molecular Biology Concentration

department website: https://cropsiences.illinois.edu/
department faculty: https://cropsiences.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/

This program will no longer accept applications: Spring 2022
Please see our new major: Plant Biotechnology, BS (http://catalog.illinois.edu/undergraduate/aces/plant-biotechnology-bs/)

The plant biotechnology and molecular biology concentration provides a curriculum that prepares students for careers in biotechnology or for entrance into graduate or professional school. The basic sciences are emphasized, including a strong foundation in biology and genetics. Students are encouraged to participate in undergraduate independent study in a molecular biology laboratory. For those who wish to pursue graduate work later, adequate preparation may be obtained by suitable choices of electives within the framework of this concentration.

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Prescribed Courses including Campus General Education

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<tr>
<th>Code</th>
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</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>
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</tr>
<tr>
<td>CMN 101</td>
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Cultural Studies

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

Foreign Language

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

Quantitative Reasoning I

Select one of the following: 4-5

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<tr>
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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 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.

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Quantitative Reasoning II

CPSC 241 Intro to Applied Statistics 3

Information listed in this catalog is current as of 12/2021
### Natural Sciences and Technology

See Specific Concentration Requirements

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<td>General Chemistry I</td>
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<td>&amp; CHEM 103</td>
<td>and General Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 105</td>
<td>and General Chemistry Lab II</td>
<td></td>
</tr>
<tr>
<td>IB 150</td>
<td>Organismal &amp; Evolutionary Biol</td>
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### Plant Biotechnology and Molecular Biology Concentration

**Required**

- CHEM 232 Elementary Organic Chemistry I 3 or 4
- CHEM 233 Elementary Organic Chem Lab I 2
- CPSC 112 Introduction to Crop Sciences 4
- CPSC 261 Biotechnology in Agriculture 3
- CPSC 265 Genetic Engineering Lab 3
- CPSC 352 Plant Genetics 4
- CPSC 484 Plant Physiology 3
- CPSC 498 Crop Sci Professional Develpmnt 1
- MCB 450 Introductory Biochemistry 3

Select two of the following: 6

- CPSC 226
- CPSC 270 Applied Entomology
- PLPA 204

Select two of the following: 6-8

- CPSC 418 Crop Growth and Management
- CPSC 452 Advanced Plant Genetics
- CPSC 453 Principles of Plant Breeding
- CPSC 466 Genomics for Plant Improvement
- HORT 421 Horticultural Physiology
- HORT 442 Plant Nutrition
- HORT 466

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
- TSM 100 Technical Systems in Agr

Three courses/groups selected from: 10-15

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