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://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/

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>
<th>Title</th>
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<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>
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</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

<table>
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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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Information listed in this catalog is current as of 12/2021
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</tr>
<tr>
<td>&amp; CHEM 103</td>
<td>and General Chemistry Lab I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
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<td>and General Chemistry Lab II</td>
<td>4</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 Develpmt 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

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

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