BS in Plant Sciences

Degree Program Description

From the food on our plates to the homes we live in to the fuel in our vehicles, plants impact all aspects of our daily lives. As an ever-growing human population continues to increase the demand for crops and other plant products, so too does the demand for plant scientists. Plant Sciences addresses the challenges from the field to the laboratory. Students enroll in a generalized core curriculum, then further refine their expertise by choosing among a variety of emphasis areas including: Breeding, Biology & Biotechnology; Crop Management; and Horticultural Science and Design. A few of the plant sciences careers include crop management specialists, horticulturists, plant geneticists, biotechnologists, plant protection specialists, and turfgrass scientists.

Major Program Requirements

Students earning a Bachelor of Science in Plant Sciences are required to complete all University general education (http://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/), University graduation (http://catalog.missouri.edu/academicdegreerequirements/universityrequirements/), and degree requirements, including selected foundational courses, which may fulfill some University general education requirements. Students earning a degree in Plant Sciences must select at least one emphasis area (http://catalog.missouri.edu/collegeofagriculturefoodandnaturalresources/plantsciences/#undergraduatetext).

If you are planning to transfer courses (including AP credit) and would like to information on how they apply to this degree, you can email CAFNRadvising@missouri.edu for general recommendations.

<table>
<thead>
<tr>
<th>Foundational Courses</th>
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<tbody>
<tr>
<td>MATH 1100</td>
<td>College Algebra</td>
</tr>
<tr>
<td>BIO_SC 1200</td>
<td>General Botany with Laboratory</td>
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<tr>
<td>CHEM 1100</td>
<td>Atoms and Molecules with Lab</td>
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<tr>
<td>or CHEM 1320</td>
<td>College Chemistry I</td>
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<tr>
<td>SOIL 2100</td>
<td>Introduction to Soils</td>
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<tr>
<td>SOIL 2106</td>
<td>Soil Science Laboratory</td>
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<tr>
<td>ABM 1041</td>
<td>Applied Microeconomics</td>
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<tr>
<td>or ABM 1042</td>
<td>Applied Macroeconomics</td>
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<tr>
<td>or ECONOM 1014</td>
<td>Principles of Microeconomics</td>
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<td>or ECONOM 1015</td>
<td>Principles of Macroeconomics</td>
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<tr>
<td>AGSC_COM 2220</td>
<td>Verbal Communication in Agriculture, Food and Natural Resources</td>
</tr>
<tr>
<td>or COMMUN 1200</td>
<td>Public Speaking</td>
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<tr>
<th>Major Requirements General</th>
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<tbody>
<tr>
<td>PLNT_SCI 1120</td>
<td>Career Development</td>
</tr>
<tr>
<td>PLNT_SCI 2125</td>
<td>Plant Structure and Function</td>
</tr>
<tr>
<td>PLNT_SCI 2320W</td>
<td>Plant Propagation - Writing Intensive</td>
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<tr>
<td>PLNT_SCI 4500</td>
<td>Biology and Pathogenesis of Plant-Associated Microbes</td>
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<tr>
<td>PLNT_SCI 3210</td>
<td>Principles of Weed Science</td>
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<td>PLNT_SCI 3710</td>
<td>Introductory Entomology</td>
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<th>Professional Development (Select One)</th>
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<tr>
<td>AG_ED_LD 2250</td>
<td>Introduction to Leadership</td>
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<tr>
<td>or AG_ED_LD 2260</td>
<td>Team and Organizational Leadership</td>
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| or ENGLISH 2030 | Professional Writing |
| or AGSC_COM 3210 | Fundamentals of Communications |
| or AGSC_COM 3240 | Communicating on the Web |

Select one course (3 credit hours) from ACCTCY, ABM, ECONOM, FINANC, MANGMT, MRKTNG, or FINPLN

Emphasis Requirements

The BS in Plant Sciences consists of three emphasis areas: Breeding, Biology & Biotechnology; Crop Management; and Horticultural Science & Design. Each emphasis area has a list of required classes and electives in addition to Major Requirements.

Capstone Experience (select one):

| PLNT_SCI 4940 | Internship in Plant Science | 3 |
| or PLNT_SCI 4950 | Undergraduate Research in Plant Science | 3 |
| or PLNT_SCI 4975 | Advanced Landscape Design | 3 |

*PLNT_SCI 4975 is for Horticultural Science & Design students only

Total Credit Hours Required: 120

For additional course options see General Education List at http://generaleducation.missouri.edu/Courses (http://generaleducation.missouri.edu/courses) eligible must include an “HFA” in appropriate column.

Semester Plan

Below is a sample plan of study, semester by semester. A student’s actual plan may vary based on course choices where options are available.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Spring</th>
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<tbody>
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<tr>
<td>ABM 1041</td>
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<td>ENGLISH 1000</td>
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<td>AN_SC 3213</td>
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<td>Writing Intensive course</td>
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Total Credits: 120