

# 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 of foundational courses, then further refine their expertise by choosing among three emphasis areas: Breeding, Biology & Biotechnology; Crop Management; and Horticultural Science and Design.

## Major Program Requirements

Students earning a Bachelor of Science in Plant Sciences are required to complete all University general education (<https://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>), University graduation (<https://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 (<https://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](mailto:CAFNRadvising@missouri.edu) for general recommendations.

### Foundational Courses

MATH 1100	College Algebra	3
PLNT_SCI 1500	Fundamental Biology of Plants (Grade of C- or better is required)	4
CHEM 1400 & CHEM 1401	College Chemistry I and College Chemistry I Laboratory (Required for BBB & Crop Mang emphasis)	4
or CHEM 1100	Atoms and Molecules with Lab	
SOIL 2100	Introduction to Soils	3
ABM 1041	Applied Microeconomics	3
or ABM 1042	Applied Macroeconomics	
or ECONOM 1014	Principles of Microeconomics	
or ECONOM 1015	Principles of Macroeconomics	
AGSC_COM 2220	Verbal Communication in Agriculture, Food and Natural Resources	3
or COMMUN 1200	Public Speaking	

### Major Requirements

#### General

PLNT_SCI 1120	Career Development	1
PLNT_SCI 2125	Plant Structure and Function (Grade of C- or better is required)	4
PLNT_SCI 3210W	Principles of Weed Science - Writing Intensive	4
PLNT_SCI 3710	Introductory Entomology	3
PLNT_SCI 4500	Biology and Pathogenesis of Plant-Associated Microbes	4

#### Professional Development

AG_ED_LD 2250	Introduction to Leadership	3
or AG_ED_LD 2260	Team and Organizational Leadership	
or ENGLISH 2030	Professional Writing	
or AGSC_COM 3210	Fundamentals of Communications	
or AGSC_COM 3240	Communicating on the Web	

#### 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	
or PLNT_SCI 4975	Advanced Landscape Design	

\*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/> 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.

### First Year

Fall	CR	Spring	CR
PLNT_SCI 1120	1	ENGLISH 1000	3
PLNT_SCI 1500	4	CHEM 1400	3
MATH 1100	3	CHEM 1401	1
ABM 1041	3	AGSC_COM 2220	3
Humanities	3	State Requirement	3
		Elective	3
		<b>14</b>	<b>16</b>

### Second Year

Fall	CR	Spring	CR
Professional Development Course	3	SOIL 2100	3
Writing Intensive Course	3	PLNT_SCI 2125	4
Behavioral or Social Science Course	3	Emphasis Area Course	3
Emphasis Area Course	3	Elective	6
Elective	3		
		<b>15</b>	<b>16</b>

### Third Year

Fall	CR	Spring	CR	Summer	CR
PLNT_SCI 3210W	4	Emphasis Area Courses	9	Capstone: Internship or Research Experience	
Emphasis Area Courses	9	Electives	6		
Elective	3				
		<b>16</b>	<b>15</b>		<b>0</b>

<b>Fourth Year</b>			
<b>Fall</b>	<b>CR</b>	<b>Spring</b>	<b>CR</b>
PLNT_SCI 4500	4	PLNT_SCI 3710	3
Capstone Course	3	Emphasis Area Courses	6
Emphasis Area Course	3	Elective	3
Electives	6		
	<b>16</b>		<b>12</b>

**Total Credits: 120**