

AGRICULTURE: PLANT AND SOIL SCIENCE

Bachelor of Science (BS)

This is a guide based on the 2026-2027 Undergraduate Catalog and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

CURRICULUM CHECKLIST

120 Hours Required

82 Hours – No minor required

Required Courses (23 hours):

- ___ AG111 Agribusiness Orientation (1)
- ___ AG140 Communicating in Agriculture (1)
- ___ AG245 Agricultural Economics (3)
- ___ AG355 Agriculture Seminar & Career Preparation (2)
- ___ AG465 Agriculture Internship (3-6)
- OR ___ AG469 Undergraduate Research (3)
- ___ AO120 Introduction to Plant Science (3)
- ___ AO125 Introduction to Plant Science Lab (1)
- ___ AY101 Introduction to Animal Science (3)
- ___ HO110 Introduction to Horticulture (3)
- ___ MG301 Principles of Management (3)

Major Courses (45 hours)

- ___ AG447 Commodity Markets in Agriculture (3)
- ___ AG440 Precision Agriculture (3)
- OR ___ AO415 Crop Management Consulting Applications (3)
- ___ AO215 Introduction to Soil Science (3)
- ___ AO015 Introduction to Soil Science Lab (0)
- ___ AO244 Introduction to Plant Genetics (3)
- ___ AO260 Integrated Pest Management (3)
- ___ AO280 Crop Production (3)
- ___ AO301 Forages (3)
- OR ___ AO321 Cotton & Rice Culture (3)
- ___ AO322 Weed Science and Control Strategies (3)
- ___ AO323 Plant Pathology (3)
- ___ AO327 Sustainable Agriculture (3)
- OR ___ AO401 Agriculture & Natural Resource Management (3)
- ___ AO330 Soil Health
- OR ___ AO555 Soil Classification & Resource Management (3)
- ___ AO420 Crop Physiology (3)
- ___ AO427 Soil Fertility & Plant Nutrition (3)
- ___ AO444 Principles of Plant Breeding (3)
- ___ MA223 Elementary Probability and Statistics (3)
- OR ___ AG208 Ag Data Analysis

Choose 14 hours:

- ___ AG344 Plants and Humanity (3)
- ___ AG436 Agricultural Ethics (3)
- ___ AG444 Spatial Analysis (3)
- ___ AG551 Water Management & Irrigation Systems (3)
- ___ AO440 Agroecosystems Analysis Field Course (3)
- ___ AO425 Crop Scout Techniques (3)
- ___ AY105 Animal Science Experiences (1)
- ___ CH234 Organic & Biological Chemistry (3)
- ___ ET382 UAS Fundamentals (3)
- ___ ET385 UAS Mission Planning (3)
- ___ Any AG or AO Elective (3)

Additional Requirements:

Choose 4 hours:

- ___ CH181/184 Basic Principles of Chemistry and Lab (4)
- ___ CH184/185 General Chemistry I and Lab (4)

Choose 3 hours:

- ___ MA116 Precalculus A (3)
- ___ MA155 Statistical Reasoning (3)

General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	1	AO244	3
	EN100	3	AG111	1
	AO120/125	4	AG245	3
	HO110	3	AO215/015	3
	MA116 or MA155	3	AY101	3
	General Education	3	General Education	3
	Total	17	Total	16
SECOND YEAR	AO260	3	AO280	3
	Chemistry requirement	4	AG140	1
	MA223 or AG208	3	MG301	3
	General Education	3	General Education	3
	General Education	3	General Education	3
THIRD YEAR	AG440 or AO415	3	AO301 or AO321	3
	AO427	3	AG355	2
	AO327 or AO401	3	AO322	3
	General Education	3	AO420	3
	General Education	3	Major Elective	3
FOURTH YEAR	AG447	3	AO330 or AO555	3
	AO323	3	AO444	3
	General Education	3	Major Elective	3
	Major Elective	3	Major Elective	3
	Total	12	Total	12
SUMMER SESSION			AG465 or AG469	3

Degree requirements for all students: a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Catalog or Degree Works for additional graduation requirements for your program.

A minimum 2.0 GPA in the major and overall are required to graduate with a BS degree.



Revised
8/26/2026

DEGREE MAP

2026-2027



SOUTHEAST MISSOURI
STATE UNIVERSITY · 1873

Center for Academic Advising | semo.edu/advising
Office of Admissions | (573) 651-2590 | admissions@semo.edu