

Agribusiness: Plant & Soil Science Option

Bachelor of Science (BS)

Plant & Soil Science Option

Agriculture, like most of our world, has changed dramatically and is infinitely more complex than most people can imagine. Today, most agriculture is seen as a technology- based industry that includes production, agriscience and agribusiness. Not only are agriculture graduates in demand to produce food, but also to package and transport it, market it, regulate its production and finance it. Agriculture graduates play key roles in monitoring our lakes and streams and planning for the efficient and safe future use of our water supply, land and other natural resources.

Plant & Soil Science students take a variety of business-related courses, such as computer applications, accounting, economics, management, marketing, sales and finance. Many of these courses focus specifically on agriculture. Students also focus on the scientific aspects of plants and soils, such as soils and soil fertility; pest management; plant breeding, nutrition, and pathology; crop production and physiology, as well as the management of natural resources.

Your Home Department...

/ The Agriculture Department has a high number of scholarships, last year awarding more than \$650,000 to students.

/ Faculty sponsor nine Agriculture clubs to help students develop leadership skills and serve the community.

/ All Agriculture Department facilities employ eager students to expand experiential learning and facilitate career readiness.

Becoming Career Ready...

/ Faculty with experience in various agribusiness areas work closely with students by providing them with faculty-mentored guidance and professional development opportunities. Students receive personal curriculum advisement from their advisor.

/ The Plant & Soil Science option prepares graduates for scientific and technical careers related to field crops, precision agriculture, soils, farm management, sales, marketing, finance, policy, production, consulting and related areas. Example job titles include soil conservationist, county agricultural agent, agronomist, crop consultant, field inspector and farm manager. The Plant & Soil Science option also provides an excellent basis for graduate work leading to a master's degree or doctorate.

/ 100% of Southeast programs offer real-world experience. Agribusiness students earn this experience through a required internship or research project. Agribusiness students are also able to gain valuable hands-on experience in the classroom and at the departmental facilities

/ The path to a successful career starts with you! You can maximize your career development by working closely with Career Services and Southeast faculty – they are here to help you connect your passions, interests and skills to jobs and opportunities in the field. Career Services provides professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities and more.

Career Opportunities for Graduates:

- Agronomist
- Biotechnologist
- Crop Consultant
- Crop and Pest Advisor
- Extension Agent
- Farm Manager
- Field Inspector
- Grain Merchandiser
- Loan Officer
- Operations Manager
- Production Representative
- Quality Control Analyst
- Research Investigator
- Research Technician
- Rice Breeder
- Rice Buyer
- Soil Conservationist

Facilities

The department is committed to providing a variety of experiential-learning opportunities for students majoring in Agribusiness.

Students can gain experience at the following facilities:

- David M. Barton Agriculture Research Center
- Charles Hutson Horticulture Greenhouse
- Charles Nemanick Alternative Agriculture Garden
- Sikeston Irrigation Field
- With individual faculty and members on projects

For more information on the facilities, please visit

<http://www.semo.edu/agriculture/facilities.htm>

Special Options with Agribusiness: Plant and Soil Science

This program of study is also available at the Regional Campuses (Kennett and Sikeston).

Transfer and Dual Credit Students

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.



To learn more
 Office of Admissions
 (573) 651-2590
admissions@semo.edu
semo.edu

To explore
 the College of Science,
 Technology, Engineering and
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semo.edu/stem

For advising
 Center for Academic Advising
semo.edu/advising

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This is a guide based on the 2021-2022 Undergraduate Bulletin 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

Agribusiness: Plant & Soil Science Option – 71 Hours – No Minor Required

Required Courses:

- ___ AG 111 Agribusiness Orientation (1)
- ___ AG 140 Communicating in Agriculture (3)
- ___ AG 208 Agriculture Business Data Analysis (3)
- ___ AG 245 Agricultural Economics (3)
- ___ AG 250 Agribusiness Management (3)
- ___ AG 334 Agribusiness Finance (3)
- ___ AG 340 Agriculture Safety (3)
- ___ AG 355 Agriculture Seminar (2)
- ___ AG 381 Agribusiness Management II (3)

OR

- ___ AC 221 Principles of Accounting I (3)
- ___ AG 447 Mktg of Agri Products (3)
- ___ AG 465 Agriculture Internship (3-6)

OR

- ___ AG 469 Undergrad Research (3)
- ___ AG 470 Agribusiness Sales (3)
- ___ AO 120 Plant Science (3)
- ___ AO 125 Plant Science Lab (1)
- ___ AY 101 Animal Science (3)
- ___ HO 110 Intro to Horticulture (3)

Plant and Soil Science Option

- ___ AG440 Precision Agriculture (3)
- ___ AO215 Soils (3)
- ___ AO260 Integrated Pest Management (3)
- ___ AO323 Plant Pathology (3)
- ___ AO420 Crop Physiology (3)
- ___ AO427 Soil Fertility & Plant Nutrition (3)
- ___ AO480 Crop Production (3)

Choose 11-12 hours from the following:

- ___ AG444 Spatial Analysis (3)
- ___ AG551 Water Management (3)
- ___ AO301 Forages (3)
- ___ AO321 Cotton & Rice Culture (3)
- ___ AO322 Weed Science (3)
- ___ AO327 Sustainable Agriculture (3)
- ___ AO401 Agriculture & Natural Resource Management (3)
- ___ AO415 Crop Systems Management (3)
- ___ AO440 Agroecosystems Analysis Field Course (3)
- ___ AO444 Principles of Plant Breeding (3)
- ___ AO555 Soil Classification & Resource Management (3)
- ___ AY105 Animal Science Experiences (1)
- ___ UI436 Agricultural Ethics (3)

Additional Requirements:

Some courses may fulfill General Education requirements.

- ___ CH 181 Basic Principles of Chemistry (5)
- OR
- ___ CH 184/185 General Chemistry I and Lab (4)
- ___ MA 116 Precalculus A (3)
- OR
- ___ MA 155 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	AG208	3
	EN100	3	AG111	1
	AO120/125	4	AG245	3
	HO110	3	AO215/015	3
	MA116 or MA155	3	AY101	3
	General Education	3	Agriculture elective	2-3
Total	16		Total	15-16
SECOND YEAR	AO260	3	AC221 or AG381	3
	CH181 or CH184/185	4-5	AG140	3
	General Education	3	AG250	3
	General Education	3	General Education	3
	General Education	3	General Education	3
Total	16-17		Total	15
THIRD YEAR	AG440	3	AG334	3
	AO427	3	AG355	2
	Agriculture elective	3	AG470	3
	General Education	3	AO420	3
	General Education	3	Agriculture elective	3
Total	15		Total	14
FOURTH YEAR	AG447	3	AG340	3
	AO323	3	AO480	3
	General Education	3	Agriculture elective	3
	Elective	3	Elective	3
	Elective	3		
Total	15		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 Bulletin or Degree Works for additional graduation requirements for your program.

Revised
6/15/2021

Degree Map 2021-2022

To learn more
 Office of Admissions
 (573) 651-2590
 admissions@semo.edu
 semo.edu

To explore
 the College of Science,
 Technology, Engineering and
 Mathematics online, visit
 semo.edu/stem

For advising
 Center for Academic Advising
 semo.edu/advising