

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.

Agriculture is a challenging, multi-faceted industry. It also is the production of food and fiber, maintenance of our water, and wise use of our natural resources. People who choose to make agriculture a career, are choosing to make a difference in the American way of life.

Agribusiness: Plant and Soil Science students will...

- 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.
- Spend a good deal of time in courses focusing 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.
- Be prepared for scientific and technical careers related to field crops, precision agriculture, soils, farm management, sales, marketing, finance, policy, production, consulting and related areas.
- Be provided with a basis for graduate work.

Career Planning

Career preparation is part of the mission of Southeast. In fact, more than 90% of Southeast students participate in internships, clinical opportunities, student teaching, research assistantships, and study abroad.

Professional career counselors are available for all students. The Office of Career Services in Academic Hall 057 can provide students with professional career counseling, resume critiques, practice interviews, job search strategies, career events, networking opportunities, and more.

Demonstrated Career Proficiency is a Requirement of all Southeast Students		
CL001/CL002	First Semester	Complete the FOCUS2 assessment and develop a Career Action Plan.
CL003	Junior Year	Students gain information about career planning and job searching resources.
CL004	Senior Year	Students demonstrate advanced proficiency by identifying a position in their field, developing a cover letter, and tailoring a resume for the position. Materials are critiqued to ensure preparedness for a successful job search.

Career Opportunities

- 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 L. Hutson Horticulture Greenhouse,
- Missouri Rice Research Farm,
- Charles Nemanick Alternative Agriculture Garden
- Or with individual faculty 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, Malden, and Sikeston).

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

To explore the College of Science, Technology and Agriculture online, visit
www.semo.edu/costa

For advising
Center for Academic Advising - North
(573) 651-5090
www.semo.edu/advising
advisingnorth@semo.edu

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This is a guide based on the 2016-2017 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 DegreeWorks to monitor their individual progress.

CURRICULUM CHECKLIST

Agribusiness: Plant & Soil Science Option – 70 Hours

- ___ AC 221 Principles of Accounting I (3)
AND
- ___ AD 101 Introduction to Microcomputer Applications (3)
OR
- ___ AG 208 Agriculture Business Data Analysis (3)
AND
- ___ AG 381 Agribusiness Management II (3)
- ___ AG245 Agricultural Economics (3)
- ___ AG250 Agribusiness Management (3)
- ___ AG334 Agribusiness Finance (3)
- ___ AG355 Agriculture Seminar (1)
- ___ AG447 Marketing of Agricultural Products (3)
- ___ AG465 Agriculture Internship (3)
OR
- ___ AG469 Undergraduate Research (3)
- ___ AG470 Agribusiness Sales (3)
- ___ AO120 Plant Science (3)
- ___ AO125 Plant Science Lab (1)
- ___ AY101 Animal Science (3)
- ___ HO110 Introduction to Horticulture (3)
- ___ UI436 Agricultural Ethics (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)
 - ___ AO301 Forages (3)
 - ___ AO321 Cotton & Rice Culture (3)
 - ___ AO322 Weed Science (3)
 - ___ AO327 Sustainable Agriculture (3)
 - ___ AO340 Agroecosystems Analysis (3)
 - ___ AO401 Agriculture & Natural Resource Management (3)
 - ___ AO415 Crop Systems Management (3)
 - ___ AO444 Principles of Plant Breeding (3)
 - ___ AO555 Soil Classification & Resource Management (3)
 - ___ AY105 Animal Science Experience (2)

Additional Requirements – 8 Hours Required

Some courses may fulfill University Studies requirements.

- ___ CH181 Basic Principles of Chemistry
OR
- ___ CH185 General Chemistry (5)
- ___ MA134 College Algebra (3)

University Studies Requirements (not already listed above):

UI100 First Year Seminar, EN100 English Composition, Artistic Expression, Written Expression, Oral Expression Literary Expression,, Behavioral Systems, Development of a Major Civilization, Economic Systems, Political Systems, Social Systems, and two IU/UI3XXs

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	AD101 or AG208	3
	AO120	3	AG245	3
	AO125	1	AO215/015	3
	AY101	3	EN100	3
	HO110	3	MA134	3
	Agriculture elective	2		
Total	15		Total	15
SECOND YEAR	AO260	3	AC221 or AG381	3
	CH181 or CH185	5	AG250	3
	Literary Expression	3	Artistic Expression	3
	Written Expression	3	Behavioral Systems	3
			Oral Expression	3
	Total	14	Total	15
THIRD YEAR	AG440	3	AG334	3
	AO427	3	AG355	1
	Agriculture elective	3	AG470	3
	Economic Systems	3	Agriculture elective	3
	Political Systems	3	IU/UI3XX	3
	Total	15	Total	13
FOURTH YEAR	AG447	3	AO480	3
	AO323	3	UI436	3
	Develop of a Major Civ	3	Agriculture elective	3
	Social Systems	3	Elective	3
	IU/UI3XX	3	Elective	3
	Total	15	Total	15
SUMMER SESSION			AG465 or AG469	3

Degree requirements for all students: a minimum of 120 credit hours, completion of University Studies program, career proficiencies (CL001-004), Writing Proficiency Exam (WP003), and completion of the Measure of Academic Proficiency and Progress (MAPP) at the senior level.

Refer to the Undergraduate Bulletin or DegreeWorks for additional graduation requirements (i.e. minimum GPA and coursework) for your program of study.

Revised
2/23/2016