

Agribusiness: Agriculture Systems Management Option

Bachelor of Science (BS)

Agriculture Systems Management Option

The BS in Agribusiness/Agriculture Systems Management prepares students for positions in agricultural facilities management and operations for grain facilities and terminals, farm services, food processing facilities and precision production agriculture. It can also provide the basis for graduate work leading to a MS, or PhD. This option is designed for students who complete all four years at Southeast and for students transferring to Southeast with an AA degree.

Agriculture Systems Management students will learn to plan and manage machinery systems, building infrastructure, and soil and water resources used in the sustainable production of food, fiber and energy incorporating appropriate safety, environmental, legal and economic constraints. Students will implement and follow the business principles and ethical practices necessary to build and maintain a viable farm or agribusiness and become an accomplished professional in agriculture and related industries who continuously updates his or her technical and management skills and serves relevant industry association and organizations.

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 Agriculture Systems Management option prepares graduates to function effectively in a global society both as a team member and a leader interacting successfully with agricultural industry professionals, government officials, and an ethically and culturally diverse public. Example job titles include irrigation systems manager, production supervisor, agricultural engineering technician and production manager.

/ 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 Options for Graduates:

- Product Education – Use and Value
- Technical Assistance and Troubleshooting
- Technical Product Development, Testing, Application, and Sales
- Farm & Agribusiness Management
- Coordinating, Directing and Supervising Manufacturing and Processing Operations
- Building and Equipment Layout, Use (Materials Handling, Flow, Processing)
- Operations Manager and/or Supervisor
- Production Manager and/or Supervisor
- Product Quality Control Manager
- Financial Analyst and/or Advisor
- Research Analyst
- Insurance Agent
- Loan Officer
- GIS Specialist
- Water Resource Specialist
- Engineering Technician

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
- Missouri Rice Research Farm
- Charles Nemanick Alternative Agriculture Garden
- With individual faculty and members on projects

For more information on the facilities, visit <http://www.semo.edu/agriculture/facilities.htm>

Transfer and Dual Credit Students

Transfer students should consult the Transfer Handbook developed by Southeast and your community college for a suggested program of study appropriate for your situation or consult with your Southeast advisor.

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
 Mathematics online, visit
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 Core – 71 hours – No Minor Required

- ___ AG 111 Agribusiness Orientation (1)
- ___ AG 140 Communicating in Agriculture (3)
- ___ AG 208 Agriculture Bus 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)

Agriculture Systems Management Option

- ___ AG 303 Agriculture Mechanization (3)
- ___ AO 215 Soils (3)
- ___ MA 223 Elementary Probability and Statistics (3)
- ___ MI 375 Management Information Systems (3)
- ___ PH 120 Introductory Physics (5)

Choose one course:

- ___ AG 327 Sustainable Agriculture (3)
- ___ AG 440 Precision Agriculture (3)
- ___ AO 401 Agriculture and Natural Resource Management (3)

Choose one course:

- ___ AG 444 Spatial Analysis in GIS (3)
- ___ AG 551 Water Management (3)

Choose 9 hours of ET prefix courses OR 9 hours of FM prefix courses:

- ___ ET 160 Basic Electricity & Electronics (3)
- ___ ET 365 Industrial Electrical Power (3)
- ___ ET 470 Energy Management
- ___ FM 504 Facilities Management (3)
- ___ FM 554 Facilities Operations and Supervision (3)
- ___ FM 565 Building Automation and Technology (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	UI 100	1	AG208	3
	EN 100	3	AG111	1
	AO 120/125	4	AG245	3
	AY 101	3	HO 110	3
	MA 116 OR MA 155	3	General Education	3
	General Education	3	General Education	3
Total	17		Total	16
SECOND YEAR	AG 208 or MI 101	3	AG 250	3
	CH 181 or CH 184/185	4-5	ETxxx or FMxxx	3
	ETxxx or FMxxx	3	PH 120/020	5
	General Education	3	General Education	3
	Total	13-14	Total	14
THIRD YEAR	AC 221 or AG 381	3	AG 140	3
	AG 303	3	AO 215/015	3
	AG 334	3	MI 375	3
	General Education	3	ETxxx or FMxxx	3
	Elective*	3	General Education	3
Total	15	Total	15	
FOURTH YEAR	AG 327/AG 444/AO 401	3	AG340	3
	AG 440/AG 551	3	AG 355	2
	AG 447	3	AG 470	1
	General Education	3	Elective**	3
	General Education	3	Elective	3-4
	Total	15	Total	12-13
SUMMER SESSION			AG465 or AG469	3

*ET381 recommended

**AY320 recommended

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.

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