

## **Bachelor of Science in Agriculture Agricultural Systems Technology**

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### **Career Outlook**

The opportunities in agricultural systems technology are diverse and challenging. Skilled graduates are needed in areas of work related to agricultural structures, electronics/electrical power, precision agriculture/GPS, agricultural power, metal process, agricultural safety and food engineering/processing. A person with a degree in agricultural systems technology may be involved in one of a great number of agricultural careers, such as working for an agricultural equipment corporation, managing a machinery dealership, serving as a sales representative for an irrigation equipment company or as a farm manager.

Each year the agriculture industry is becoming more technologically advanced. This creates a need for trained specialists to manage agricultural systems. This field of study is geared toward a student with an inquisitive mind that enjoys solving problems and testing new ideas.

### **Academic Highlights**

The curriculum in Agricultural Systems Technology teaches the mechanical and physical principles that relate to the design, operation, maintenance and management of systems used in agriculture. A balanced selection of courses such as agricultural processing systems, agricultural buildings and construction, agricultural power systems, agriculture safety, agricultural electrification systems, precision agriculture/GPS and soil and water engineering incorporate theory and hands-on training that will permit graduates to enter into satisfying and rewarding careers.

**Visit Our Website**  
[www.murraystate.edu/agr](http://www.murraystate.edu/agr)

### **Facilities**

Agricultural Systems Technology facilities include classrooms, laboratories, a state-of-the-art computer lab and offices housed in the south wing of Oakley Applied Science Building, the E.B. Howton Agricultural Systems Technology Building and the West Farm Agricultural Systems Technology Facility.

Hutson School of Agriculture has four farm complexes located within a mile of the main campus. These complexes include three greenhouses, agronomy plots, the Beef Complex, the Wm. Bill Cherry Agricultural Exposition Center and the Equine Center. These facilities are utilized for classes, contests, field days, judging contests, clinics, agritourism events and numerous agricultural activities.

### **Organizations**

#### **Agriculture Engineering Technology Club**

- The club's mission is to promote the growth and science of Agricultural Systems Technology through fellowship among members with kindred interests.
- Furnishes career contacts for agricultural systems technology students.
- Helps to develop new interests and improve agricultural instruction.
- Promotes the Hutson School of Agriculture at Murray State University.

### **For More Information Contact**

**Recruitment Coordinator**  
**Murray State University**  
**Hutson School of Agriculture**  
**(270) 809-3329**  
**[msu.ag@murraystate.edu](mailto:msu.ag@murraystate.edu)**

**MURRAY STATE UNIVERSITY  
HUTSON SCHOOL OF AGRICULTURE  
AGRICULTURAL SYSTEMS TECHNOLOGY CURRICULUM  
2020-2021 CATALOG**

**GENERAL EDUCATION/UNIVERSITY STUDIES COURSES**

Dept.	No.	Description	Hrs.	Gr.
<b>ORAL AND WRITTEN COMMUNICATION</b>				<b>7 HRS</b>
ENG	105	Critical Reading, Writing & Inquiry	4	
COM	161	Intro. to Public Speaking	3	
<b>SCL. INQUIRY, METHODS, QUANT. SKILLS</b>				<b>12/13 HRS</b>
MAT	130	Technical Math I <b>OR</b>	5	
MAT	140	College Algebra	4	
CHE	105	Intro. Chemistry	4	
BIO	101	Biological Concepts	4	
<b>WORLD HISTORICAL LIT. AND PHILOSOPHY</b>				<b>6 HRS</b>
CIV	201	World Civilizations I	3	
HUM	211	Western Humanities Tradition	3	
<b>GLOBAL AWARENESS AND CULT. DIVERSITY</b>				<b>3 HRS</b>
<b>Select One of the Following Courses</b>				
AGR	200	International Ag Experience	3	
AGR	353	World Food, Ag & Society	3	
SPA	106	Basic Spanish & Culture for Agriculture	3	
<b>SOCIAL AND SELF AWARENESS</b>				<b>6 HRS</b>
AGR	199	Contemporary Issues in Ag	3	
		Elective	3	
<b>UNIVERSITY STUDIES ELECTIVES</b>				<b>6 HRS</b>
EES	199	Earth Science <b>OR</b>		
PHY	130	General Physics I <b>OR</b>		
CHE	210	Brief Organic Chem <b>AND</b>		
CHE	215	Organic Chem Lab	4	
		Electives	2	
<b>40-41 HOURS OF UNIVERSITY STUDIES</b>				

**AGRICULTURE CURRICULUM COURSES**

Dept.	No.	Description	Hrs.	Gr.
<b>AGRICULTURE CORE COURSES</b>				<b>26 HRS</b>
AGR	100T	Transitions	1	
AGR	100	Animal Science	3	
AGR	130	Ag Economics	3	
AGR	133	Field Applications for Ag	2	
AGR	160	Horticultural Science <b>OR</b>		
AGR	240	Crop Science	3	
AGR	170	Intro. to Ag Systems Tech	3	
AGR	199	Contemporary Issues in Ag	3	
AGR	339	Computer Apps for Ag	3	
AGR	345	Soil Science	3	
AGR	399	Prof Dev Seminar I <b>OR</b>	1	
AGR	499	Lead/Prof Dev Seminar II	1	
AGR	599	Ag Senior Capstone	1	
<b>AG SYSTEMS TECH. OPTION COURSES</b>				<b>24 HRS</b>
AGR	371	Ag Bldgs & Construction	3	
AGR	372	Ag Metal Processes	3	
AGR	377	Ag Safety	3	
AGR	477	Ag Power Units <b>OR</b>		
AGR	577	Tractor Power Principles	3	
Approved Ag Systems Tech. Electives*			9	
AGR Electives			3	
<b>REQUIRED SUPPORT COURSES</b>				<b>12 HRS</b>
AGR	471	App. In Precision Ag	3	
AGR	488	Coop Ed/Internship	3	
<b>AT LEAST 6 HOURS FROM THE FOLLOWING:</b>				
AGR	571	Adv. Precision Ag	3	
AGR	489	Coop Ed/Internship	3	
EGD	102	CAD Applications	3	
EGD	104	Computer-Aided Design	4	
CMA	107	Intro to Technical Drawing & Computer Aided Drafting	4	
EGD	330	Machine Tool Processes	4	
TSM	110	Electrical Systems I	4	
<b>UNRESTRICTED ELECTIVES</b>				<b>17-18 HRS</b>

**Approved Ag Systems Technology Electives\***

AGR 379 Field Equipment Technology Management  
 AGR 470 Soil and Water Engineering  
 AGR 471 Applications in Precision Agriculture  
 AGR 488 Cooperative Education/Internship  
 AGR 489 Cooperative Education/Internship  
 AGR 551 Selected Studies in Agriculture  
 AGR 570 Ag Systems Technology Lab Management  
 AGR 571 Advanced Precision Agriculture  
 AGR 572 Advanced Metal Work  
 AGR 573 Agriculture Processing Systems  
 AGR 574 Agriculture Irrigation and Water  
 AGR 575 Combine and Grain Handling Systems  
 AGR 576 Agriculture Electrification  
 AGR 578 Research and Development of Agriculture Tractors and Equipment

In addition to the BSA in Agricultural Systems Technology, MSU does offer an Unmanned Aerial Systems Minor and Certificate. The minor requires 21 hours of study including UAS 110, UAS 310, UAS 410, UAS 480 and 9 advisor approved electives. The certificate requires a total of 15 hours including UAS 110, UAS 310, UAS 410, UAS 480 and 3 advisor approved electives.