MURRAY STATE UNIVERSITY

Hutson School of Agriculture

Bachelor of Science in Agriculture
Agricultural Systems Technology

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

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
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Murray State University Hutson School of Agriculture
Agricultural Systems Technology Curriculum 2023-2024

University Studies - Foundations				
Cat.	**Dept.**	**No.**	**Description**	**Hrs.**
Oral Communications				3
	COM	161	Intro. to Public Speaking	
Written Communications				4
	ENG	105	Critical Reading, Writing & Inquiry	
Scientific Inquiry and Methodologies (must include lab)				4
	BIO BIO	101 100	Biological Concepts **AND** Intro to Biology Lab	
Quantitative Reasoning				4-5
	MAT	130	Technical Math **OR**	
	MAT	140	College Algebra	
University Studies - The Human Experience				
Literary & Philosophical Perspectives				3
Historical Perspectives				3
Creative Perspectives				3
Social & Behavioral Perspectives				3
	AGR	199	Contemp. Issues in Food, Fiber & NR	
Culture, Diverse Perspectives & Responsible Citizenship				3
	AGR	200	Cultural & Intl. Ag Perspectives **OR**	
	AGR	353	World, Food, Agriculture & Society	
BS Science/Mathematics Requirement				4
	CHE	101	Consumer Chemistry **OR**	
	CHE	105	Introductory Chemistry **OR**	
	PHY	130	General Physics I **AND**	
	PHY	131	General Physics I Lab **OR**	
	EES	199	Earth Science	

Agriculture Core Courses				
Cat.	**Dept.**	**No.**	**Description**	**Hrs.**
	AGR	100T	Transitions	1
	AGR	100	Animal Science	3
	AGR AGR	130 333	Agricultural Economics **OR** Record Keeping & Analysis for Agribusiness	3
	AGR	133	Field Applications for Ag	2
	AGR AGR AGR	140 160 240	Plant Science **OR** Horticultural Science **OR** Crop Science	3
	AGR AGR	170 370	Intro to Ag Systems Tech **OR** Intro to Precision Agriculture	3
	AGR	199	Contemp. Issues in Food, Fiber & NR	3
	AGR	339	Computer Apps for Ag	3
	AGR	345	Soil Science	3
	AGR AGR	399 499	Prof Development Sem I **OR** Leadership/Prof Development Sem II	1
	AGR	599	Ag Senior Capstone	1
Agricultural Systems Technology Track Courses				
	AGR AGR	170 370	Intro to Ag Systems Tech **OR** Intro to Precision Agriculture	3
	AGR AGR	371 372	Ag Buildings and Construction **OR** Ag Metal Processes	3
	AGR	377	Agriculture Safety	3
	AGR AGR	477 577	Agricultural Power Units **OR** Tractor Power Principles	3
	AGR	576	Agricultural Electrifications Systems	3
	AGR		Electives	6
	AST		Electives	9

Required Support Courses (Complete 1 of the following Emphases)

Agricultural Systems Technology Emphasis

	Complete 5 of the following:			15
	AGR	379	Field Equipment Tech Management	
	AGR	470	Soil and Water Engineering	
	AGR	471	Applications in Precision Agriculture	
	AGR	474	Agricultural Fluid Power Systems	
	AGR	475	Precision Agriculture Hardware	
	AGR	477	Agricultural Power Units	
	AGR	479	UAS Applications in Precision Ag	
	AGR	488	Cooperative Education/Internship	
	AGR	489	Cooperative Education/Internship	
	AGR	496	Selected Studies in Agriculture	
	AGR	570	Ag Systems Tech Lab Management	
	AGR	571	Advanced Precision Agriculture	
	AGR	572	Advance Metal Work	
	AGR	573	Ag Processing Systems	
	AGR	574	Ag Irrigation & Water Systems	
	AGR	575	Combine & Grain Handling Systems	
	AGR	578	R&D of Ag Tractors & Equipment	

Sales/Marketing Emphasis

	AGR	330	Principles of Agribusiness Management	3
	AGR AGR	130 333	Agricultural Economics **OR** Record Keeping & Analysis for Agribusiness	3
	AGR	337	Agricultural Sales and Marketing	3
	AGR	433	Farm Management	3
	AGR	531	Agricultural Finance	3

Crop Production Emphasis

	AGR	547	Crop Management	3
	AGR	549	Weeds & Their Control	3
	Complete at least 3 of the following:			9
	AGR	455	Soil Management	
	AGR	470	Soil & Water Engineering	
	AGR	542	Plant Breeding	
	AGR	546	Integrated Pest Management	
	AGR	555	Advanced Soil Fertility	
	UAS	110	Introduction to Aviation	
	AGR	479	UAS Applications in Agriculture	

Precision Agriculture Emphasis

	AGR	471	Applications in Precision Agriculture	3
	AGR	475	Precision Agriculture Hardware	3
	AGR	571	Advanced Precision Agriculture	3
	UAS	110	Introduction to Aviation	3
	Complete 1 of the following			3-4
	AGR	479	UAS Applications in Precision Ag	
	EES	312	Introduction to Remote Sensing	
	EES	561	Precision GIS/GPS Applications	
	EES	579	Remote Sensing of Vegetation	

Certificates

Unmanned Aerial Systems Certificate - 15 Hours

Geographic Information Science Certificates - 15-16 Hours

Minimum Credential Hours: 120