

# Bachelor of Science in Agriculture Crop and Soil Management

Offering career preparation in the development and practical application of plant and soil science to produce abundant, high-quality food, feed, and fiber crops. Crop and soil management is related to genetics, breeding, and physiology. It involves aspects of soil use, including reclamation, waste disposal, waterways, and construction.

### Career Outlook

Based on a recent U.S. Department of Agriculture survey, there will be a shortfall of agriculture graduates necessary for future growth in agricultural productivity. Recent advances in precision agriculture and the advent of genetically engineered crops are providing new career options for agronomists. There are new opportunities for those becoming Certified Crop Advisors (CCA). The variety of jobs for agronomics is extremely diverse. Typical career occupations include extension agent, grain buyer, soil scientist-USDA, soil conservationist-USDA, tobacco market specialist, grain grader, and seed analyst. Some agronomists serve as farm credit specialists with banks and farm lending agencies.

# **Organizations**

The Agronomy Club is organized to support students in crop and soil management through field trips and other club activities. Some of the club activities include off-campus trips, guest speakers, and the sale and distribution of crop, weed, and seed identification sets. The Agronomy Club also sponsors the MSU Soil Judging Team and Collegiate Crops Contest Test.

## **Visit Our Website**

www.murraystate.edu/agr



### **Facilities**

Hutson School of Agriculture facilities include classrooms, laboratories, and offices housed in the Oakley Applied Science Building; the A. Carman Animal Technology Center; the E.B. Howton Agricultural Engineering Building; the Agricultural Engineering Instructional Facility/Farm Shop; and the Rudolph Equine Education Center.

The university also owns five farm complexes. The West Farm Complex, The North Farm Complex, and The Pullen Farm Complex are all located within a mile of MSU's main campus. These complexes are utilized for classes, contests, field days, judging contests, clinics, and numerous agriculture activities.

The Pullen Farm Complex is of particular interest to students studying crop and soil management, and horticulture. The farm was bequeathed to the university by the late Mrs. Mabel Garrett Pullen. It is used as an agronomy and horticulture research and teaching center. This center allows students to get practical experience and provides a unique opportunity to expand the study of plant sciences at MSU.

The Garrett Farm and Eagle Rest Farm are other farm complexes within the Hutson School of Agriculture. The Garrett Farm is around 5 miles from the main campus and is an agronomy research facility where field crops are grown each year. Eagle Rest Farm is located in Ballard County, Kentucky, and is a multi-use farm complex.

### For More Information Contact

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

### Murray State University Hutson School of Agriculture Crop and Soil Management Curriculum 2025-2026

	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		
Scien	tific Inq	uiry an	d Methodologies (must include lab)	4	
	CHE	105	Introductory Chemistry		
Quar	Quantitative Reasoning				
	MAT	140	College Algebra		
		Unive	rsity 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		
Cultu	ıre, Dive	rse Per	spectives & Responsible Citizenship	3	
	AGR	200	Cultural & Intl. Ag Perspectives OR		
	AGR	353	World, Food, Agriculture & Society		
BS Science/Mathematics Requirement			4		
	EES	103	Saving Planet Earth OR		
	EES	199	Earth Science		
				2.1	

34

#### **Required Support Courses (Complete 1 of the following Emphases)**

**Practicum Emphasis** 

	AGR	498	Agronomy Practicum	12
Complete at least 1 of the following:				3
	AGR	330	Principles of Agribusiness Management	
	AGR	433	Farm Management	
	AGR	571	Advanced Precision Agriculture	

#### **Research Emphasis**

	AGR	328	Statistics for Food and Agriculture	3	
	AGR	571	Advanced Precision Agriculture	3	
	BIO	115	The Cellular Basis of Life	3	
	Agronomy Advisor Approved Research Elective				
Complete at least 1 of the following:				3	
	AGR	488	Cooperative Education/Internship		
	AGR	436	Undergraduate Research Experience		

**Minimum Credential Hours: 120** 

	Agriculture Core Courses			
Cat.	Dept.	No.	Description	Hrs.
	AGR	100T	Transitions	1
	AGR	100	Animal Science	3
	AGR AGR		Principles of Agribusiness Management <b>OR</b> Record Keeping & Analysis for Agribusiness	3
	AGR	133	Field Applications for Ag	2
	AGR	140	Plant Science	3
	AGR AGR		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		Prof Development Sem I <b>OR</b> Leadership/Prof Development Sem II	2
				26
	•		Agronomy Track Courses	
	AGR	240	Crop Science	3
	AGR	346	Soil Science Practicum	3
	AGR	378	Ag Environmental Mgmt Systems	3
	AGR	455	Soil Management	3
	AGR	470	Soil & Water Engineering	3
	AGR	471	Applications in Precision Agriculture	3
	AGR	542	Plant Breeding I	3
	AGR	546	Integrated Pest Management	3
	AGR	547	Crop Management	3
	AGR	549	Weeds & Their Control	3
	BIO	222	Botany: Plant Form & Function	4
	CHE	210	Brief Organic Chemistry	3
	CHE	215	Brief Organic Chemistry Laboratory	1

#### Sales/ Production Emphasis

Complete at least 3 of the following:			9
AGR	130	Agricultural Economics	
AGR	330	Principles of Agribusiness Management	
AGR	333	Record Keeping & Analysis for Agribusiness	
AGR	334	Entrepreneurship in Agribusiness	
AGR	433	Farm Management	
AGR	490	Agricultural Supply Chain Management	
Complete at least 1 of the following:			3
AGR	488	Cooperative Education/Internship	
AGR	436	Undergraduate Research Experience	
Complete at least 1 of the following:			3
AGR	336	Agricultural Commodity Marketing	
AGR	337	Agricultural Sales & Merchandising	