AGRICULTURAL SYSTEMS TECHNOLOGY, BSAG

Requirements for Students Matriculating in or before Academic Year 2025-2026. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 120

Code	Title	Hours
General Education Requirements		
English Composition		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
American History & Government		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
Quantitative Thought & Logical Reasoning (Q)		
Select one of the following:		3
MATH 2103	Business Calculus (Q)	
MATH 2123	Calculus for Technology Programs I (Q)	
MATH 2144	Calculus I (Q)	
STAT 2013	Elementary Statistics (Q)	3
or STAT 2023	Elementary Statistics for Business and Economics (Q)	
Understanding Humanities-Human Heritage & Cultures (H)		
Courses designated (H)		3
Courses designated (DH)		3
Reasoning in the Natural Sciences (N)		
Must include one Laboratory-Based Inquiry (L) course		
PHYS 1114	College Physics I (LN)	4
or PHYS 2114	University Physics II (LN)	
Course designated (N)		2
Exploring Society & Human Behavior (S)		
SPCH 2713	Introduction to Speech Communication (S)	3
or AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S)	
Diversity (D)		
Courses designated (D)		
May be paired with another designated course		
Global Cultural Competency (G)		
Courses designated (G)		3
Additional General Education		
Additional general education credit hours (at least 4 hours) are required to meet the total 40-hour minimum. If courses carry more than one general education designation and can be used to meet multiple minimum general education designation hours above, more than 4 hours of additional general education will be required here to meet the 40-hour minimum.		
Courses designated (Q), (H), (N), (S), (D), (G), or (F).		4
Hours Subtotal		**40**
College/Departmental Requirements		
Agricultural Sciences and Natural Resources		
UNIV 1111	First Year Seminar (or other approved first year seminar course)	1
SOIL 2124	Fundamentals of Soil Science (N)	4
Select one of the following:		3
PLNT 1213	Introduction to Plant and Soil Systems (N)	
ENVR 1113	Elements of Environmental Science (N)	
FDSC 1133	Fundamentals of Food Science	
AGEC 1113	Introduction to Agricultural Economics (S)	3
or ECON 2103	Introduction to Microeconomics (S)	
Written and Oral Communications		
Select one of the following:		3
AGCM 3103	Written Communications in Agricultural Sciences and Natural Resources	
BCOM 3113	Written Communication	
ENGL 3323	Technical Writing	
Select one of the following:		4
CHEM 1215	Chemical Principles I (LN)	
CHEM 1314	Chemistry I (LN)	
CHEM 1414	General Chemistry for Engineers (LN)	
Hours Subtotal		**18**
Major Requirements		
Core Courses		
AST 1413	Introduction to Engineering in Agriculture	3
AST 2313	Surveying	3
AST 3103	Electrical Power and Industrial Control in Agriculture	3
AST 4213	Safety and Health in Agriculture	3
AST 4203	Agricultural Water Management	3
AST 4303	Automation, Sensors and Controls for Agricultural Systems	3
AST 4013	Capstone for Agricultural Systems Technology	3
AGEC 3213	Quantitative Methods in Agricultural Economics	3
AGEC 3423	Farm and Agribusiness Management	3
or MGMT 3013	Fundamentals of Management (S)	
Select from one of the following pairs of courses:		6
ACCT 2103	Financial Accounting	
ACCT 2203	Managerial Accounting	
OR		
ACCT 2003	Survey of Accounting	
And select one of the following:		
FIN 3113	Principles of Finance	

AGEC 3603	Agricultural Finance	
ACCT 3003	Foundational Accounting Skills	
ACCT 3004	Foundational Accounting and Data Skills	
Technical Agriculture Electives		
Select 21 hours from any AST, BAE, any course that satisfies a Ferguson College of Agriculture minor requirement, or any of the following courses not used elsewhere with at least 12 of the 21 hours upper division. Check with your advisor about using these hours and electives to minor in an area in the Ferguson College of Agriculture:		21
ANSI 1124	Introduction to the Animal Sciences	
or ANSI 1023 & ANSI 1021	Introduction to the Animal Sciences and Introduction to the Animal Sciences Lab	
ANSI 2112	Live Animal Evaluation	
ANSI 2123	Livestock Feeding	
ANSI 2253	Meat Animal and Carcass Evaluation	
ANSI 3333	Meat Science	
ANSI 3423	Animal Genetics	
ENPP 2143	Global Agricultural Biosecurity and Forensics	
ENPP 4423	Pesticide Applications	
ENTO 2003	Insects and Society (N)	
ENTO 2223	Insects in Global Public Health (N)	
ENTO 2993	Introduction to Entomology (LN)	
ENTO 3003	Livestock Entomology	
ENTO 3421	Horticultural Insects	
ENTO 3461	Insects in Forest Ecosystems	
ENTO 4044	Insect Morphology and Physiology	
ENTO 4464	Insect Biology and Classification	
FDSC 3113	Quality Control	
FDSC 3123	HACCP in the Food Industry	
FDSC 3154	Food Microbiology	
FDSC 3133	Plant Sanitation for Food Processing Operations	
FDSC 3373	Food Chemistry I	
FDSC 4123	Principles of Food Engineering	
FDSC 4143	Food Safety Modernization Act	
FDSC 4233	Food Safety Audit Schemes	
HORT 1013	Principles of Horticultural Science (LN)	
HORT 2513	Herbaceous Plant Materials	
HORT 2613	Woody Plant Materials	
HORT 3084	Plant Propagation	
HORT 3113	Greenhouse Management	
HORT 3153	Turf Management	
HORT 3213	Fruit and Nut Production	
HORT 3433	Commercial Vegetable Production	
NREM 2083	Geospatial Technologies for Natural Resources	
NREM 3613	Principles of Rangeland Management	
NREM 3063	Natural Resource Biometrics	
PLNT 2013	Applied Plant Science	
PLNT 3554	Plant Genetics and Biotechnology	
PLNT 4013	Fundamentals of Weed Science	
SOIL 4234	Soil Nutrient Management	
SOIL 4213	Precision Agriculture	
SOIL 4363	Environmental Soil Science	
SOIL 4463	Soil and Water Conservation	
SOIL 4483	Soil Microbiology	
Hours Subtotal		**54**
Electives		
Select 8 hours or hours to complete required total for degree		8
Hours Subtotal		**8**
Total Hours		**120**

Other Requirements

- A minimum of 40 semester credit hours and 100 grade points earned in courses numbered 3000 or above.
- A 2.00 GPA or higher in upper-division hours.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2031.