From:	Smith, Randy
To:	Boening-Ulman, Kate; Osborne, Jeanne
Cc:	Sutherland, Sue; Kwiek, Nicole; Reed, Katie; Smith, Randy; Griffiths, Rob; Greenbaum, Rob; Duffy, Lisa; Hunt, Ryan; Shearer, Scott
Subject:	Proposal to revise the Agricultural Systems Management major
Date:	Friday, July 18, 2025 3:12:46 PM
Attachments:	image001.png

Jeanne and Kate:

The proposal from the Department of Food, Agricultural, and Biological Engineering to revise the Agricultural Systems Management major leading to the Bachelor of Science in Agriculture was approved by the Council on Academic Affairs at its meeting on July 17, 2025. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal review/approval is necessary. This action will be included in the Council's next Annual Activities Report to the University Senate (July 2025).

The Office of the University Registrar will work with you on any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Sue Sutherland (.43), or me.

I wish you success with this important program development.

Randy

THE OHIO STATE UNIVERSITY

W. Randy Smith, Ph.D.
Vice Provost for Academic Programs
Office of Academic Affairs
University Square South, 15 E. 15th Avenue, Columbus, OH 43201
614-292-5881 Office
smith.70@osu.edu
Assisted by:
Katie Reed
Executive Assistant
(614) 292-5672

From:	Osborne, Jeanne
To:	Smith, Randy
Cc:	Reed, Katie; Violet, Cynthia; Lewandowski, Monica; Boening-Ulman, Kate; Shearer, Scott
Subject:	Requesting CAA Approval for revision to the Agricultural Systems Management BS AGR
Date:	Monday, March 24, 2025 12:38:38 PM
Attachments:	image001.png ASM Program Curriculum Change2025_Final.pdf

Dear Dr. Smith,

The College of Food, Agricultural, and Environmental Sciences is requesting Council on Academic Affairs approval for revision to the Agricultural Systems Management BS AGR, effective AU25 as summarized below and outlined in the attached proposal.

The proposed changes to the Agricultural Systems Management major are the result of extensive input from students, alumni and the Industry Professional Advisory Group as well as the faculty and instructional staff in the Department of Food, Agricultural and Biological Engineering. The overarching change to the major is to create 5 specializations to formalize career pathways to better support students in their educational journey through this major and into the specific career they are targeting with their selection of major and elective courses. In addition, in consult with and with approval by the Department of Physics in the College of Arts and Sciences, a new course, AGSYSMT 2150 has been approved as an option with PHYSISC 1200 for those students more focused in applied physics in this major – the option of this course is included in the proposed change to this major. Current students will not be affected by these changes and any course offering changes will be managed by petition to ensure students' progress to graduation. In addition to the proposed change to the major, the Assessment Learning Goals and Outcomes have been updated to reflect the proposed curriculum and are included in the packet. Finally, with the nature of the specializations and inclusion of courses from other units in the CFAES, concurrence was sought from interested units and the Ohio State Agricultural Technical Institute was included in the process. Concurrence responses are included at the end of the proposal, and all units supported the proposed revision to the major through the curricular review process in the CFAES.

This proposal has been approved by the Academic Affairs Committee of the Department of Food, Agricultural and Biological Engineering and the CFAES Committee on Academic Affairs. Please let me know if any additional information is needed in support of this request.

Sincerely,

Jeanne

THE OHIO STATE UNIVERSITY

Jeanne M. Osborne | *Pronouns: She, Her, Hers*
Assistant Dean for Academic Affairs
College of Food, Agricultural, and Environmental Sciences
100E Agricultural Administration, 2120 Fyffe Rd.

Columbus, OH 43210
Tel: 614-292-1734
Fax: 614-292-1218
e-mail: Osborne.2@osu.edu

'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)

THE OHIO STATE UNIVERSITY

College of Food, Agricultural and Environmental Sciences
Department of Food, Agricultural and Biological Engineering
Agricultural Systems Management Program

Kathryn Boening-ulman.1@osu.edu

March 2025
Jeanne Osborne
Assistant Dean, Academic Affairs
100 Agricultural Administration
College of Food Agriculture and Environmental Science
The Ohio State University

Dear Jeanne,
We in the Department of Food, Agricultural and Biological Engineering would like you and the college to consider our request for the following changes to the Agricultural Systems Management Program curriculum. These curriculum changes and the creation of new specializations have full support of the FABE Department, passing unanimously within both the Academic Affairs Committee and Department Faculty. Current students, recent alumni, instructional staff, and our Industry Professional Advisory Group were all consulted and supportive of the changes as well.

The creation of 5 new specializations in ASM will allow for students to better plan their major and major supporting coursework to be tailored to their future industry career. The specializations are:

1) **Machine Automation Systems (Generalist):** tailored to be the most similar to the current curriculum while giving students a comprehensive technical and mechanical background for success in agricultural and machinery heavy systems
2) **Agro-environmental Systems:** helps students blend mechanical and natural management strategies for bettering agricultural production through the intentional protection of soil, water, and air qualities, and the enhancement of production facilities
3) **Food and Bio-Manufacturing Systems:** allows students to focus on the processes, equipment, and their management used in the production of value-added food and biobased products such as biofuels and pharmaceuticals
4) **Digital and Precision Agriculture Systems:** allows students to be at the forefront of precision agriculture and the digitization of agricultural industries with an emphasis on data analytics, precision technologies, and the electrification of agricultural machinery.
5) **Precision Livestock Systems:** designed to appeal to students interested in the mechanical and electronical systems within production facilities including understanding building wiring, capacities, and the heating and ventilation requirements for crop and livestock production

Kathryn Boening-ulman.1@osu.edu

Regardless of specialization chosen, the overall credit hours have not changed from the 121-credit hour minimum requirement. Of those 121 credit hours, a maximum of 15 of the 43 (35%) major required credit hours have been significantly altered so that 65% of the ASM major has been left unchanged. The new curriculum is structured so all specializations have the same 12 course core (Major Core: 28-29 credit hours) paired with a Specialization Core that has 3-4 courses specifically chosen from other AGSYSMT courses (most that were part of the previously required major core courses) and then students choose from a subset of specific courses pertinent to their specialization interests to reach a 15 credit hours minimum for that section. The general education, B.S. in Ag (including minor equivalency), and Supporting Coursework requirements remain the same as previous curriculum years. Additional management and science electives were evaluated and added into respective sections for students to choose from. The last major change to the curriculum is the removal of PHYSICS 1200 as a required course for the major, instead students will get to choose between PHYSICS 1200 and the new AGSYSMT 2150. This new course and its subsequent change in current degree requirements were approved after seeking and gaining concurrence from the OSU Department of Physics.

The rationale for this latest update in the curriculum for the Ag Systems Management degree program can be distilled into two main points:

1. The creation of specialization tracks (see list above) will formalize career pathways that our graduates were already achieving by targeting their major and elective classes to be most beneficial to specific agricultural industries. Students will be admitted to the AGSYSMT major as a generalist Ag Production and Processing Systems specialization and then can declare a different specialization within or shortly after their first semester in the program or choose to remain a generalist.
2. With the addition of departmental course AGSYSMT 2150 (to be taught SP25 and each spring thereafter), we can teach a strongly applied version of basic physics (mechanics, thermodynamics, and electronics) so that the previously required Physics 1200 is one of two options for students to meet prerequisites in major coursework (Physics 1200 currently required before taking AGSYSMT 2371, 3220, 3232, and 4575).

THE OHIO STATE UNIVERSITY

College of Food, Agricultural and Environmental Sciences
Department of Food, Agricultural and Biological Engineering
Agricultural Systems Management Program

Kathryn Boening-ulman.1@osu.edu

Current students are not expected to be negatively impacted by these changes as the overall credit hour requirement does not change. Over the past four years we have been making increasingly individualized curriculum plans and using multiple petitions to the current degree requirements frequently to account for different industry focuses with regards to a student's major supporting and elective choices. The inclusion of these specializations to the ASM program would give students a better idea of which courses will be most beneficial based on their projected career path. In addition to the curriculum, the ASM Program goals, student learning outcomes and assessment have all been reevaluated and updated with the new curriculum in mind and are included at the end of this packet.

Included in the remainder of this document to aid in the visualization of these changes are:

1) Summary of changes made to current curriculum
2) Current and Tracked change version of ASM curriculum bingo sheet (2023 version)
3) Table of AGSYSMT Major courses removed from major core to be used in other sections of the revised curriculum such as the Specialization Core and ASM Electives
4) New specialization curriculum sheets
5) New specialization 4-year plans
6) ASM Program Updated Goals, Student Learning Outcomes and Assessment Plan

Sincerely,

Kathryn Boening-Ulman
Assistant Professor of Professional Practice
Agricultural Systems Management Program Head
Department of Food, Agricultural and Biological Engineering

THE OHIO STATE UNIVERSITY

College of Food, Agricultural and Environmental Sciences
Department of Food, Agricultural and Biological Engineering
Agricultural Systems Management Program

Kathryn Boening-ulman.1@osu.edu

Summary of Changes made to Curriculum:

1. Removal of Physics 1200 as major requirement
2. Addition of AGSYSMT 2150 or Physics 1200 into ASM Major Core Coursework
3. ENR 3000 and 3001 turned into major requirement from B.S. in Ag requirement
4. Moved HCS 2200 and 2206 from Major Supporting to B.S. in Ag Additional science requirement for all specializations except Food and Biotech Systems Specialization
   a. After talks with HCS, also included HCS 2204 and 2205 as alternative course sequence for students in this category
5. Add BIOLOGY 1101 or 1113 as B.S. in Ag Additional Science requirement for Food and Biotech Systems Specialization
6. Added FDSCTE 2200 and ENR 2100 as options within Nat Sci category of Major Supporting Coursework
7. Removed 19 credit hours from block titled Major Coursework (See table below), Changed block name to Major Core Coursework
8. Added a block called Specialization Core Coursework that is different for each specialization (See Table 1).
   a. Each contains 3-4 required courses (9-11 credit hours) and additional courses to select from to meet required 15 credit minimum
   b. Specialization core courses are a combination of previous Major Coursework, Agricultural Science electives and new courses not previously included in the ASM curriculum.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Effective Term: Autumn 2023

Bachelor of Science in Agriculture
Major: Agricultural Systems Management

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science	Major requirement: **PHYSICS 1200** or **1250** * *(or Student Choice – see below)*	5
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme**: Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**34-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	**ENR 3000** & **3001**	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See pg. 2*	18-21
	Credit Hours:	**28-31**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.
[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

Major Supporting Coursework		
Natural Science Category (Choose 1 of the following courses)		
Course	**Title**	**Hours**
ANIMSCI 2200.01	Introductory Animal Sciences	3
HCS 2200	The World of Plants	3
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI or **HCS 2260**	Data Analysis & Interpretation for Decision Making	3
AEDECON 2005	Data Analysis for Agribusiness & Applied Economics	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours:	**6**

Major Coursework		
Course	**Title**	**Hours**
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 2241	Building Materials & Construction in Agriculture	3
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 3320	Facilities for Agricultural & Greenhouse Production	3
AGSYSMT 3360	Agricultural Machinery Management	3
AGSYSMT 3550	Animal & Rural Waste Management	2
AGSYSMT 4560	Fluid Power and Electronics in Agricultural Machinery	3
AGSYSMT 4575	Applied Agricultural Water Management	2
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
CSE 1111	Intro to Computer-Assisted Problem Solving	3
	Credit Hours:	**43**

General Education	**34-38**
Degree Requirements & Minor Eq.	**28-31**
Major Supporting Courses	**6**
Major	**43**
Open Electives	**3-10**
Minimum Total Credit Hours	**121**

ASM Supporting Courses (Minor Equivalent)		
Principles of Management (choose one)		**3**
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting (choose one)		**3**
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law (choose one)		**3**
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
ASM Electives: Select four courses, at least one in each category **Students are encouraged to take at least one AGSYSMT course per category*		
Agricultural Management		
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
BUSMHR 2000	Introduction to International Business	1.5
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
INTSTDS 3850	Introduction to Globalization	3
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5
Agricultural Science		
AGSYSMT 2580	Introduction to Digital Agriculture	2
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
AGSYSMT 5580	Data Analytics in Production Agriculture	3
ENTMLGY 4601	General Insect Pest Management	2
ENR 5270	Soil Fertility	3
HCS 3420	Seed Science	3
HCS 3521	Greenhouse Systems and Management	2
HCS 5411	Domestication and Utilization of Agronomic Crops	3
HCS 5412	Agroecology of Grasslands and Prairies	3
HCS 5422	Biology and Management of Weeds and Invasive Plants	3

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Autumn 2023

4-Year Course Plan
B.S. in Agriculture
Major: Agricultural Systems Management

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis.

Freshman Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Complete Math requirement *-Complete at least one science* *-Complete GE: WIL*	FAES 1100	College Survey	.5	GE Nat Sci: Physics 1200	Mech., Fluids, & Waves	5
	AGSYSMT 1100	Dept Survey	.5	GE Lit, Vis and Perf Arts		3
	GE Math: MATH 1148	College Algebra	4	GE WIL		3
	GE SBS: AEDECON 2001	Prin. of Food & Res. Econ.	3	CSE 1111	Intro to Computer-Assisted Problem Solving	3
	AGRCOMM 3130	Oral Communication	3	GENED 1201	GE Launch Seminar	1
	Open Elective		4			
Hours: 30						
		Total:	**15**		**Total:**	**15**
Sophomore Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Declare minor *-Complete three science courses by the end of this year* *-Begin to consider an internship location*	AGSYSMT 2241	Building Materials & Const.	3	AGSYSMT 2240	Metal Fabrication for Ag.	3
	ENR 3000 & 3001	Soil Science & Lab	4	AGSYSMT 2310	Elec. Systems	2
	GE Hist. & Cultural Studies		3	ASM Supporting Course		3
	AGSYSMT 2371	Land Surveying for Ag.	2	GE R.E. & G. Diversity		3
	AGSYSMT 2370	Environmental Hydrology	2	Major Supporting	ANIMSCI 2200.01 or HCS 2200	3
	AGSYSMT 2305	Profess. Dev. I	2			
Hours: 60						
		Total:	**16**		**Total:**	**14**
Junior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Apply to graduate *-Complete internship by end of the summer* *-Half of major hours to be completed by the end of the year*	AGSYSMT 3232	Engines & Power Trans.	3	AGSYSMT 3360	Ag. Machinery Mgmt.	3
	AGSYSMT 3550	Animal & Rural Waste Mgt.	2	AGSYSMT 3320	Facilities for Ag. & Greenhouse	3
	Major Supporting: Data Analysis	*See options*	3	ASM Supporting Course	*Accounting Option*	3
	GE Citizenship #1 [a]		3	ASM Supporting Course	*Law Option*	3
	ASM Supporting Course	*Management Option*	3	GE Citizenship #2 [a]		3
	Open Elective		1			
Hours: 90						
		Total:	**15**		**Total:**	**15**
Senior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Meet graduation requirements *-Meet with a Career Services Advisor* *-Complete Department Exit Survey (via email)*	GE Theme Choice #1 [a]		4	AGSYSMT 4560	Fluid Power & Elect.	3
	AGSYSMT 4575	Ag. Water Mgmt.	2	AGSYSMT 5600	Ag. Safety & Health	3
	AGSYSMT 4580	Precision Agriculture	2	AGSYSMT 4910	Capstone II	2
	AGSYSMT 4900	Capstone I	2	ASM Supporting Course		2-3
	AGSYSMT 3191	Internship	2	ASM Supporting Course		2-3
	FAES 3191	Internship	0	GENED 4001	GE Reflection	1
	AGSYSMT 4605	Profess. Dev. II	1			
	Open Elective	`	3			
		Total:	**16**		**Total:**	**15**
					Minimum credit hours for Bachelor of Science Degree:	**121**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

Degree requirements and course offerings are subject to change. This page was last updated on 5/30/23

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Effective Term: Autumn 2023

Bachelor of Science in Agriculture
Major: Agricultural Systems Management

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science ENR 3000 + 3001	Major requirement: ~~**PHYSICS 1200** or **1250** *~~ *(or Student Choice – see below)*	4 ~~5~~
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme: **Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**34-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	~~**ENR 3000** & **3001**~~ HCS 2200 + 2206/ 2204+05	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See pg. 2*	18-21
	Credit Hours:	**28-31**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.
[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

Major Supporting Coursework		
Natural Science Category (Choose 1 of the following courses)		
Course	**Title**	**Hours**
ANIMSCI 2200.01	Introductory Animal Sciences	3
~~**HCS 2200**~~	~~The World of Plants~~ Additional choices added	~~3~~
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI or **HCS 2260**	Data Analysis & Interpretation for Decision Making	3
AEDECON 2005	Data Analysis for Agribusiness & Applied Economics	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours:	**6**

Major Coursework		
Course	**Title**	**Hours**
~~**AGSYSMT 2240**~~	~~Basic Metal Fabrication for Agriculture~~	~~3~~
~~**AGSYSMT 2241**~~	~~Building Materials & Construction in Agriculture~~	~~3~~
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
~~**AGSYSMT 3320**~~	~~Facilities for Agricultural & Greenhouse Production~~	~~3~~
~~**AGSYSMT 3360**~~	~~Agricultural Machinery Management~~	~~3~~
~~**AGSYSMT 3550**~~	~~Animal & Rural Waste Management~~	~~2~~
~~**AGSYSMT 4560**~~	~~Fluid Power and Electronics in Agricultural Machinery~~	~~3~~
~~**AGSYSMT 4575**~~	~~Applied Agricultural Water Management~~	~~2~~
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
CSE 1111	Intro to Computer-Assisted Problem Solving	3
	Credit Hours:	28-29 ~~**43**~~

Add: AGSYSMT 2150/Physics 1200
4-5 Credits

New Specialization Core. 15

General Education	**34-38**
Degree Requirements & Minor Eq.	**28-31**
Major Supporting Courses	**6**
Major	28-29 ~~**43**~~
Open Electives	2-11 ~~**3-10**~~
Minimum Total Credit Hours	**121**

Add Specialization Core Coursework Block- 15 credit minimum
Courses from Major Coursework that are specific to specialization
Has 3-4 required and choices to reach minimum credit hours

ASM Supporting Courses (Minor Equivalent)		
Principles of Management (choose one)		**3**
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting (choose one)		**3**
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law (choose one)		**3**
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
ASM Electives: Select four courses, at least one in each category **Students are encouraged to take at least one AGSYSMT course per category*		
Agricultural Management		
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
BUSMHR 2000	Introduction to International Business	1.5
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
INTSTDS 3850	Introduction to Globalization	3
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5
Agricultural Science		
AGSYSMT 2580	Introduction to Digital Agriculture	2
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
AGSYSMT 5580	Data Analytics in Production Agriculture	3
ENTMLGY 4601	General Insect Pest Management	2
ENR 5270	Soil Fertility	3
HCS 3420	Seed Science	3
HCS 3521	Greenhouse Systems and Management	2
HCS 5411	Domestication and Utilization of Agronomic Crops	3
HCS 5412	Agroecology of Grasslands and Prairies	3
HCS 5422	Biology and Management of Weeds and Invasive Plants	3

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.

Additional courses added as choices to this section, some courses moved to specialization core block

THE OHIO STATE UNIVERSITY

College of Food, Agricultural and Environmental Sciences
Department of Food, Agricultural and Biological Engineering
Agricultural Systems Management Program

Kathryn Boening-ulman.1@osu.edu

Table 1. AGSYSMT Required Courses Adjusted: The following major courses were removed from the Major Core and were distributed into either 1) required within Specialization, 2) choice within Specialization, or 3) choice within ASM Science Electives. On average, only 15 credit hours was significantly altered within each specialization.

Removed Required Major Core Courses (19 credit hours)	**Machine Automation (Generalist)**	**Agro-Environmental**	**Food and Bio-Manufacturing**	**Precision Agriculture**	**Precision Livestock**
AGYSSMT 2240 (3)	Req. Specialization Core	ASM Science Elective Choice	Specialization Core Choice	Specialization Core Choice	ASM Science Elective Choice
AGSYSMT 2241 (3)	Req. Specialization Core	Specialization Core Choice	Specialization Core Choice	Specialization Core Choice	Req. Specialization Core
AGSYSMT 3320 (3)	Specialization Core Choice	Req. Specialization Core	ASM Science Elective Choice	ASM Science Elective Choice	Req. Specialization Core
AGSYSMT 3360 (3)	Req. Specialization Core	ASM Science Elective Choice	Specialization Core Choice	Specialization Core Choice	ASM Science Elective Choice
AGSYSMT 3550 (2)	ASM Science Elective Choice	Req. Specialization Core	ASM Science Elective Choice	ASM Science Elective Choice	Req. Specialization Core
AGSYSMT 4560 (3)	Specialization Core Choice	ASM Science Elective Choice	Req. Specialization Core	Req. Specialization Core	Specialization Core Choice
AGSYSMT 4575 (2)	Specialization Core Choice	Req. Specialization Core	Specialization Core Choice	Specialization Core Choice	Specialization Core Choice
Required courses from previously required major core	9	7	3	3	8
Other required specialization courses	0	3 (ENR 4260)	6 (AGSYSMT3330, FDSCTE 2400)	7 (AGSYSMT 3586, AGSYSMT 5560)	2 (ANIMSCI 2200.03)

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Proposed
Effective Term: Autumn 2025

Bachelor of Science in Agriculture
Major: Agricultural Systems Management

Proposed Specialization: Machine Automation Systems

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science	Major requirement: **ENR 3000 & 3001**	4
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme**: Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**33-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	**HCS 2200 and 2206 or HCS 2204 and 2205**	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See pg. 2*	18-21
	Credit Hours:	**28-31**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.
[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

General Education	**33-38**
Degree Requirements	**28-31**
Major Supporting Courses	**6**
Major Core	**28-29**
Specialization Core	**15**
Open Electives	**2-11**
Minimum Total Credit Hours	**121**

Major Supporting Coursework		
Course	**Title**	**Hours**
Natural Science Category (Choose 1 of the following courses)		
ANIMSCI 2200.01	Introductory Animal Sciences	3
FDSCTE 2200	The Science of Food	3
ENR 2100	Introduction to Environmental Sciences	3
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI or **HCS 2260**	Data Analysis & Interpretation for Decision Making	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours	**6**

Major Core Coursework		
Course	**Title**	**Hours**
AGSYSMT 2150 or PHYSICS 1200	Applied Agricultural Mechanics and Elecctronics/ Mechanics, Kinematics, Fluids, Waves	4-5
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
CSE 1111 or AGSYSMT 2120	Intro to Computer-Assisted Problem Solving/ Agricultural Data Visualization and Communication	3
	Credit Hours:	**28-29**

Specialization Core Coursework (minimum 15 credit hours)		
Course	**Title**	**Hours**
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 2241	Building Materials & Construction in Agriculture	3
AGSYSMT 3360	Agricultural Machinery Management	3
Select from the following courses for additional credit hours		
AGSYSMT 3586	Introduction to Digital Agriculture + Lab	4
AGSYSMT 3320	Facilities for Agricultural & Greenhouse Production	3
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AGSYSMT 4560	Fluid Power and Electronics in Agricultural Machinery	3
AGSYSMT 4575	Applied Agricultural Water Management	2
HCS 3100	Introduction to Agronomy	3
	Minimum Credit Hours:	**15**

ASM Supporting Courses (Minor Equivalent)		
Principles of Management Category (choose one)		
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting Category (choose one)		
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law Category (choose one)		
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
	Supporting Courses Credit Hours	**9**
	Add 3 ASM Elective Courses from table for Minor Equiv.	**9**
	Minimum Total Minor Equivalency	**18**

ASM Electives: Select minimum three courses for ASM Electives, at least one in each category (Ag Management and Ag Sciences) totaling min. 9 chs **Students are encouraged to take at least one additional AGSYSMT course*		
Agricultural Management		
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3121	Salesmanship in Agribusiness	
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
AGRCOMM 2330	Public Perceptions of Agriculture	4
BUSMHR 2000	Introduction to International Business	1.5
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
HCS 2307	Sustainable Agriculture Practical Experience	2
INTSTDS 3850	Introduction to Globalization	3
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.

Agricultural Science		
AGSYSMT 3550	Animal & Rural Waste Management	2
AGSYSMT 5580	Data Analytics in Production Agriculture	3
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
ENTMLGY 4601	General Insect Pest Management	2
ENR 4260	Soil Resource Management	3
ENR 5270	Soil Fertility	3
ANIMSCI 3600	Global Food and Agriculture	3
HCS 3220	Crop Origins and Diversity	2
HCS 3420	Seed Science	3
HCS 5411	Domestication and Utilization of Agronomic Crops	3
HCS 5412	Agroecology of Grasslands and Prairies	3
HCS 5422	Biology and Management of Weeds and Invasive Plants	3
FDSCTE 3110	Alternative Packaging for a Greener Planet	4

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Autumn 2025

4-Year Course Plan
B.S. in Agriculture
Major: Agricultural Systems Management
Specialization: Machine Automation Systems (Generalist)

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis. Major courses that are only offered one semester a school year are underlined.

Freshman Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Complete Math requirement *-Complete at least one science* *-Complete GE: WIL* *-Declare Specialization*	FAES 1100	College Survey	0.5	AGSYSMT 2150 or Physics 1200	Applied Agricultural Mech and Elec: Mech., Fluids, & Waves	4-5
	AGSYSMT 1100	Dept Survey	0.5	GE Lit, Vis and Perf Arts		3
	GE Math: MATH 1148	College Algebra	4	GE WIL		3
	GE SBS: AEDECON 2001	Prin. of Food & Res. Econ.	3	AGSYSMT 2120 or CSE 1111	Data Visualization and Communications in Ag; Intro to Computer-Assisted Problem Solving	3
	AGRCOMM 3130	Oral Communication	3	GENED 1201	GE Launch Seminar	1
Hours: 31-32	GE Nat Sci: ENR 3000 & 3001	Soil Science & Lab	4			
		Total:	**15**		**Total:**	**14**
Sophomore Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Declare minor *-Complete three science courses by the end of this year* *-Begin to consider an internship location*	AGSYSMT 2305	Profess. Dev. I	2	AGSYSMT 2310	Elec. Systems	2
	AGSYSMT 2370	Environmental Hydrology	2	ASM Supporting Course	*Science Elective*	3
	AGSYSMT 2371	Land Surveying for Ag.	2	GE Hist. & Cultural Studies		3
	HCS 2200 & 2206	World of Plants +Lab	4	GE R.E. & G. Diversity		3
	Major Supporting: Nat Sci	See Options	3	ASM Supporting Course	*Management Option*	3
	GE Theme Choice #1		3	Open Elective		2
Hours: 60		**Total:**	**16**		**Total:**	**16**
Junior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Apply to graduate *-Complete internship by end of the summer* *-Half of major hours to be completed by the end of the year*	AGSYSMT 3232	Engines & Power Trans.	3	Specialization Core: Req. 2	AGSYSMT 2240	3
	Specialization Core: Req. 1	AGSYSMT 2241	3	Specialization Core: Choice		3
	ASM Supporting Course	*Accounting Option*	3	ASM Supporting Course	*Management Elective*	3
	Major Supporting: Data Analysis	*See options*	3	ASM Supporting Course	*Law Option*	3
	GE Citizenship #1 [a]		3	GE Citizenship #2 [a]		3
Hours: 90		**Total:**	**15**		**Total:**	**15**
Senior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Meet graduation requirements *-Meet with a Career Services Advisor* *-Complete Department Exit Survey (via email)*	AGSYSMT 3191	Internship	2	AGSYSMT 5600	Ag. Safety & Health	3
	FAES 3191	Internship	0	AGSYSMT 4910	Capstone II	2
	AGSYSMT 4580	Precision Agriculture	2	Specialization Core: Req. 3	AGSYSMT 3360	3
	AGSYSMT 4605	Profess. Dev. II	1	ASM Supporting Course	*Elective See Options*	3
	AGSYSMT 4900	Capstone I	2	Specialization Core: Choice		3-4
	ASM Supporting Course or Specialization Core		3	GENED 4001	GE Reflection	1
	GE Theme Choice #2 [a]		3			
		Total:	**14**		**Total:**	**16**
					Minimum credit hours for Bachelor of Science Degree:	**121**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

Degree requirements and course offerings are subject to change. This page was last updated on 1/31/2025

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Proposed
Effective Term: Autumn 2025

Bachelor of Science in Agriculture
Major: Agricultural Systems Management

Proposed Specialization: Agro-Environmental Systems

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science	Major requirement: **ENR 3000 & 3001** *(or Student Choice – see below)*	4
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme**: Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**33-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	**HCS 2200 and 2206 or HCS 2204 and 2205**	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See p.2*	18-21
	Credit Hours:	**28-31**

[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

General Education	**33-38**
Degree Requirements	**28-31**
Major Supporting Courses	**6**
Major Core	**28-29**
Specialization Core	**15**
Open Electives	**2-11**
Minimum Total Credit Hours	**121**

Major Supporting Coursework		
Course	**Title**	**Hours**
Natural Science Category (Choose 1 of the following courses)		
ANIMSCI 2200.01	Introductory to Animal Science	3
FDSCTE 2200	The Science of Food	3
ENR 2100	Introduction to Environmental Sciences	3
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI 2260	Data Analysis & Interpretation for Decision Making	3
HCS 2260	Data Analysis & Interpretation for Decision Making	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours	**6**

Major Core Coursework		
Course	**Title**	**Hours**
AGSYSMT 2150 or **PHYSICS 1200**	Applied Agricultural Mechanics and Elecctronics/ Mechanics, Kinematics, Fluids, Waves	4-5
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
AGSYSMT 2120 or CSE 1111	Agricultural Data Visualization and Communication/ Intro to Computer-Assisted Problem Solving	3
	Credit Hours:	**28-29**

Specialization Core Coursework (minimum 15 credit hours)		
Course	**Title**	**Hours**
AGSYSMT 3320	Facilities for Agricultural & Greenhouse Production	3
AGSYSMT 3550	Animal & Rural Waste Management	2
AGSYSMT 4575	Applied Agricultural Water Management	2
ENR 4260	Soil Resource Management	3
Select from the following courses to meet minimum credit hours		
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
ENR 5261	Environmental Soil Physics	3
ENR 5270	Soil Fertility	3
HCS 2202	Form and Function in Cultivated Plants	4
HCS 3100	Introduction to Agronomy	3
HCS 2307	Sustainable Agriculture Practical Experience	2
	Minimum Credit Hours:	**15**

ASM Required Minor Equivalent Courses		
Principles of Management Category (choose one)		
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting Category (choose one)		
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law Category (choose one)		
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
	Supporting Courses Credit Hours	**9**
	Add 3+ ASM Elective Courses from tables for Minor Equiv.	**9**
	Minimum Total Minor Equivalency	**18**

ASM Electives: Select minimum 3 courses for ASM Electives, at least one in each category (Agricultural Management and Agricultural Science) totaling min. 9chs
**Students are encouraged to take at least one additional AGSYSMT course*

Agricultural Management		
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3121	Salesmanship in Agribusiness	
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
AGRCOMM 2330	Public Perceptioons of Agriculture	4
BUSMHR 2000	Introduction to International Business	1.5
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
ENR 3200	Environmental and Natural Resources Policy	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
INTSTDS 3850	Introduction to Globalization	3
HCS 3521	Greenhouse Systems and Management	2
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.

Agricultural Science		
AGSYSMT 3560	Introduction to Digital Agriculture	3
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 3360	Agricultural Machinery Management	3
AGSYSMT 5580	Data Analytics in Production Agriculture	3
AGSYSMT 4560	Fluid Power and Electronics in Agricultural Machinery	3
ENTMLGY 4601	General Insect Pest Management	2
ENTMLGY 5610	Greenhouse Plant Health and Pest Management	3
ENR 3700	Introduction to Spatial Information for Environment and Natural Resources	3
ANIMSCI 3600	Global Food and Agriculture	3
HCS 3200	Introduction to Horticulture	3
HCS 3220	Crop Origins and Diversity	2
HCS 3310	Crop Responses to the Environment	3
HCS 3420	Seed Science	3
HCS 5411	Domestication and Utilization of Agronomic Crops	3
HCS 5412	Agroecology of Grasslands and Prairies	3
HCS 5422	Biology and Management of Weeds and Invasive Plants	3

Policies and General Requirements for Degree contd.

- A cumulative point-hour ratio of at least **2.00** on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Autumn 2025

4-Year Course Plan
B.S. in Agriculture
Major: Agricultural Systems Management
Specialization: Agro-Environmental Systems

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis. Major courses that are only offered one semester a school year are underlined.

Freshman Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Complete Math requirement *-Complete at least one science* *-Complete GE: WIL* *-Declare Specialization*	FAES 1100	College Survey	0.5	AGSYSMT 2150 or Physics 1200	Applied Agricultural Mech and Elec: Mech., Fluids, & Waves	4-5
	AGSYSMT 1100	Dept Survey	0.5	GE Lit, Vis and Perf Arts		3
	GE Math: MATH 1148	College Algebra	4	GE WIL		3
	GE SBS: AEDECON 2001	Prin. of Food & Res. Econ.	3	AGSYSMT 2120 or CSE 1111	Data Visualization and Communications in Ag; Intro to Computer-Assisted Problem Solving	3
	AGRCOMM 3130	Oral Communication	3	GENED 1201	GE Launch Seminar	1
Hours: 31-32	GE Nat Sci: ENR 3000 & 3001	Soil Science & Lab	4			
		Total:	**15**		**Total:**	**14**
Sophomore Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Declare minor *-Complete three science courses by the end of this year* *-Begin to consider an internship location*	AGSYSMT 2305	Profess. Dev. I	2	AGSYSMT 2310	Elec. Systems	2
	AGSYSMT 2370	Environmental Hydrology	2	ASM Supporting Course	*Science Elective*	3
	AGSYSMT 2371	Land Surveying for Ag.	2	GE Hist. & Cultural Studies		3
	HCS 2200 & 2206	World of Plants +Lab	4	GE R.E. & G. Diversity		3
	Major Supporting: Nat Sci	See Options	3	ASM Supporting Course	*Management Option*	3
Hours: 60	GE Theme #1 [a]		3	Open Elective		2
		Total:	**16**		**Total:**	**16**
Junior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Apply to graduate *-Complete internship by end of the summer* *-Half of major hours to be completed by the end of the year*	AGSYSMT 3232	Engines & Power Trans.	3	Specialization Core: Req. 2	AGSYSMT 3320	3
	Specialization Core: Req. 1	AGSYSMT 3550	2	Specialization Core: Choice		3
	AGSYSMT 4580	Precision Agriculture	2	ASM Supporting Course	*Management Elective*	3
	ASM Supporting Course	*Accounting Option*	3	ASM Supporting Course	*Law Option*	3
	Major Supporting: Data Analysis	*See options*	3	GE Citizenship #2 [a]		3
Hours: 90	GE Citizenship #1 [a]		3			
		Total:	**16**		**Total:**	**15**
Senior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Meet graduation requirements *-Meet with a Career Services Advisor* *-Complete Department Exit Survey (via email)*	AGSYSMT 3191	Internship	2	AGSYSMT 5600	Ag. Safety & Health	3
	FAES 3191	Internship	0	AGSYSMT 4910	Capstone II	2
	AGSYSMT 4605	Profess. Dev. II	1	Specialization Core: Req. 4	ENR 4260	3
	AGSYSMT 4900	Capstone I	2	ASM Supporting Course	*See Options*	2-3
	Specialization Core: Req. 3	AGSYSMT 4575	2	ASM Supporting Course or Specialization Core		2-3
	Specialization Core: Choice		3	GENED 4001	GE Reflection	1
	GE Theme Choice #2 [a]		3			
		Total:	**14**		**Total:**	**15**
					Minimum credit hours for Bachelor of Science Degree:	**121**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

Degree requirements and course offerings are subject to change. This page was last updated on 1/31/2025

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Bachelor of Science in Agriculture
Major: Agricultural Systems Management

Proposed
Effective Term: Autumn 2025

Proposed Specialization: Food and Bio-Manufacturing Systems

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science	Major requirement: **ENR 3000 and 3001*** (or Student Choice- see below)	4
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme**: Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**33-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	**BIOLOGY 1101 or 1113**	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See pg. 2*	18-21
	Credit Hours:	**28-31**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.
[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

General Education	**33-38**
Degree Requirements	**28-31**
Major Supporting Courses.	**6**
Major Core	**28-29**
Specialization Core	**15**
ASM Open Electives	**2-11**
Minimum Total Credit Hours	**121**

Major Supporting Coursework		
Course	**Title**	**Hours**
Natural Science Category (Choose 1 of the following courses)		
ANIMSCI 2200.01	Introductory to Animal Science	3
FDSCTE 2200	The Science of Food	3
ENR 2100	Introduction to Environmental Sciences	3
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI 2260	Data Analysis & Interpretation for Decision Making	3
HCS 2260	Data Analysis & Interpretation for Decision Making	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours:	**6**

Major Core Coursework		
Course	**Title**	**Hours**
AGSYSMT 2150 or PHYSICS 1200	Applied Agricultural Mechanics and Elecctronics/ Mechanics, Kinematics, Fluids, Waves	4-5
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
ASM 2120 or CSE 1111	Data Visualization and Communication in Agricultural/ Intro to Computer-Assisted Problem Solving	3
	Credit Hours:	**28-29**

ASM Supporting Courses (Minor Equivalent)		
Principles of Management Category (choose one)		
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting Category (choose one)		
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law Category (choose one)		
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
	Supporting Courses Credit Hours	**9**
	Add 3+ ASM Elective Courses from table for Minor Equiv.	**9**
	Minimum Total Minor Equivalency	**18**

Specialization Core Coursework (minimum 15 credit hours)		
Course	**Title**	**Hours**
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AGSYSMT 3360	Agricultural Machinery Management	3
FDSCTE 2400	Introduction to Food Processing	3
	Select from the following courses to meet minimum credit hours	
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 3320	Facilities for Agricultural & Greenhouse Production	3
AGSYSMT 3550	Animal & Rural Waste Management	2
AGSYSMT 4575	Applied Agricultural Water Management	2
ANIMSCI 3600	Global Food and Agriculture	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
FDSCTE 3110	Alternative Packaging for a Greener Planet	4
FDSCTE 3400	Food Supply Chain Equipment Operations	2
	Minimum Credit Hours:	**15**

ASM Electives: Select at least three courses for ASM Electives, at least one in each category (Ag Management and Ag Sciences) totaling min. 9chs **Students are encouraged to take at least one additional AGSYSMT course*		
Agricultural Management		
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3121	Salesmanship in Agribusiness	
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
AGRCOMM 2330	Public Perceptioons of Agriculture	4
BUSMHR 2000	Introduction to International Business	1.5
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
FDSCTE 5310	Food Quality Assurance	3
INTSTDS 3850	Introduction to Globalization	3
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5

Agricultural Science		
AGSYSMT 3585	Introduction to Digital Agriculture	3
AGSYSMT 4560	Fluid Power and Electronics in Agricultural Machinery	3
AGSYSMT 5580	Data Analytics in Production Agriculture	3
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
FDSCTE 1200	The Science of Cooking	4
FDSCTE 3100	Global Cuisines: Food Science and Health	3
FDSCTE 3410	Physical Principles in the Food Process	3
ENTMLGY 4601	General Insect Pest Management	2
ENR 5270	Soil Fertility	3
HCS 2307	Sustainable Agriculture Practical Experience	2
HCS 3100	Introduction to Agronomy	3
HCS 3420	Seed Science	3
HCS 3521	Greenhouse Systems and Management	2
HCS 5411	Domestication and Utilization of Agronomic Crops	3

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Autumn 2025

4-Year Course Plan
B.S. in Agriculture
Major: Agricultural Systems Management
Specialization: Food and Bio-Manufacturing Systems

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis. Major courses that are only offered one semester a school year are underlined.

Freshman Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Complete Math requirement *-Complete at least one science* *-Complete GE: WIL* *-Declare Specialization*	FAES 1100	College Survey	0.5	AGSYSMT 2150 or Physics 1200	Applied Agricultural Mech and Elec: Mech., Fluids, & Waves	4-5
	AGSYSMT 1100	Dept Survey	0.5	GE Lit, Vis and Perf Arts		3
	GE Math: MATH 1148	College Algebra	4	GE WIL		3
	GE SBS: AEDECON 2001	Prin. of Food & Res. Econ.	3	AGSYSMT 2120 or CSE 1111	Data Visualization and Communications in Ag; Intro to Computer-Assisted Problem Solving	3
	AGRCOMM 3130	Oral Communication	3	GENED 1201	GE Launch Seminar	1
Hours: 31-32	GE Nat Sci: ENR 3000 & 3001	Soil Science & Lab	4			
		Total:	**15**		**Total:**	**14**
Sophomore Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Declare minor *-Complete three science courses by the end of this year* *-Begin to consider an internship location*	AGSYSMT 2305	Profess. Dev. I	2	AGSYSMT 2310	Elec. Systems	2
	AGSYSMT 2370	Environmental Hydrology	2	ASM Supporting Course	*Science Elective*	3
	AGSYSMT 2371	Land Surveying for Ag.	2	Major Supporting: Nat Sci	See Options	3
	BIOLOGY 1101 or 1113		4	GE R.E. & G. Diversity		3
	GE Hist. & Cultural Studies		3	ASM Supporting Course	*Management Option*	3
	GE Theme Choice #1 [a]		3	Open Elective		2
Hours: 60		**Total:**	**16**		**Total:**	**16**
Junior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Apply to graduate *-Complete internship by end of the summer* *-Half of major hours to be completed by the end of the year*	AGSYSMT 3232	Engines & Power Trans.	3	Specialization Core: Req. 2	AGSYSMT 3330	3
	Specialization Core: Req. 1	FDSCTE 2400	3	Specialization Core: Choice		3
	ASM Supporting Course	*Accounting Option*	3	ASM Supporting Course	*Management Elective*	3
	Major Supporting: Data Analysis	*See options*	3	ASM Supporting Course	*Law Option*	3
Hours: 90	GE Citizenship #1 [a]		3	GE Citizenship #2 [a]		3
		Total:	**15**		**Total:**	**15**
Senior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Meet graduation requirements *-Meet with a Career Services Advisor* *-Complete Department Exit Survey (via email)*	AGSYSMT 3191	Internship	2	AGSYSMT 5600	Ag. Safety & Health	3
	FAES 3191	Internship	0	AGSYSMT 4910	Capstone II	2
	AGSYSMT 4580	Precision Agriculture	2	Specialization Core: Req. 3	AGSYSMT 3360	3
	AGSYSMT 4605	Profess. Dev. II	1	ASM Supporting Course	*See Options*	3
	AGSYSMT 4900	Capstone I	2	ASM Supporting Course or Specialization Core		2-3
	Specialization Core: Choice		3	GENED 4001	GE Reflection	1
	GE Theme Choice #2[a]		3			
		Total:	**14**		**Total:**	**16**
					Minimum credit hours for Bachelor of Science Degree:	**121**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Proposed
Effective Term: Autumn 2025

Bachelor of Science in Agriculture
Major: Agricultural Systems Management

Proposed Specialization: Precision Agriculture Systems

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science	Major requirement: **ENR 3000 & 3001*** *(or Student Choice – see below)*	4
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme**: Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**33-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	**HCS 2200 and 2206 or HCS 2204 and 2205**	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See pg. 2*	18-21
	Credit Hours:	**28-31**

[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

General Education	**33-38**
Degree Requirements	**28-31**
Major Supporting Courses	**6**
Major Core	**28-29**
Specialization Core	**15**
Open Electives	**2-11**
Minimum Total Credit Hours	**121**

Major Supporting Coursework		
Course	**Title**	**Hours**
Natural Science Category (Choose 1 of the following courses)		
ANIMSCI 2200.01	Introductory Animal Sciences	3
FDSCTE 2200	The Science of Food	3
ENR 2100	Introduction to Environmental Sciences	3
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI 2260	Data Analysis & Interpretation for Decision Making	3
HCS 2260	Data Analysis & Interpretation for Decision Making	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours	**6**

Major Core Coursework		
Course	**Title**	**Hours**
AGSYSMT 2150 or PHYSICS 1200	Applied Agricultural Mechanics and Elecctronics/ Mechanics, Kinematics, Fluids, Waves	4-5
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
AGSYSMT 2120 or CSE 1111	Agricultural Data Visualization and Communication/ Intro to Computer-Assisted Problem Solving	3
	Credit Hours:	**28-29**

ASM Supporting Courses (Minor Equivalent)		
Principles of Management Category (choose one)		
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting Category (choose one)		
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law Category (choose one)		
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
	Supporting Courses Credit Hours	**9**
	Add 3+ ASM Elective Courses from table for Minor Equiv.	**9**
	Minimum Total Minor Equivalency	**18**

Specialization Core Coursework (minimum 15 credit hours)		
Course	**Title**	**Hours**
AGSYSMT 3586	Introduction to Digital Agriculture + Lab	4
AGSYSMT 4560	Fluid Power and Electronics in Agricultural Machinery	3
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
Select from the following courses to meet minimum credit hours		
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 3360	Agricultural Machinery Management	3
AGSYSMT 4575	Applied Agricultural Water Management	2
AGSYSMT 5580	Data Analytics in Production Agriculture	3
AEDECON 2005	Data Analysis for Agribusiness & Applied Economics	3
ENR 3700	Introduction to Spatial Information for Environment and Natural Resources	3
	Credit Hours:	**15**

ASM Electives: Select minimum three courses for ASM Electives, at least one in each category (Ag Management and Ag Sciences) totalling minimum 9 chs
**Students are encouraged to take at least one additional AGSYSMT course*

Agricultural Management		
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3121	Salesmanship in Agribusiness	3
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
AGRCOMM 2330	Public Perceptioons of Agriculture	4
BUSMHR 2000	Introduction to International Business	1.5
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
HCS 2307	Sustainable Agriculture Practical Exoerience	2
ENR 4260	Soil Resource Management	3
INTSTDS 3850	Introduction to Globalization	3
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5

Agricultural Science		
AGSYSMT 3320	Facilities for Agricultural & Greenhouse Production	3
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AGSYSMT 3550	Animal & Rural Waste Management	2
ENTMLGY 4601	General Insect Pest Management	2
ENR 5270	Soil Fertility	3
ANIMSCI 3600	Global Food and Agriculture	3
HCS 3100	Introduction to Agronomy	3
HCS 3200	Introduction to Horticulture	3
HCS 3220	Crop Origins and Diversity	2
HCS 3420	Seed Science	3
HCS 3521	Greenhouse Systems and Management	2
HCS 5411	Domestication and Utilization of Agronomic Crops	3
HCS 5412	Agroecology of Grasslands and Prairies	3
HCS 5422	Biology and Management of Weeds and Invasive Plants	3

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Autumn 2025

4-Year Course Plan
B.S. in Agriculture
Major: Agricultural Systems Management
Specialization: Precision Agriculture Systems

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis. Major courses that are only offered one semester a school year are underlined.

Freshman Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Complete Math requirement *-Complete at least one science* *-Complete GE: WIL* *-Declare Specialization*	FAES 1100	College Survey	0.5	AGSYSMT 2150 or Physics 1200	Applied Agricultural Mech and Elec: Mech., Fluids, & Waves	4-5
	AGSYSMT 1100	Dept Survey	0.5	GE Lit, Vis and Perf Arts		3
	GE Math: MATH 1148	College Algebra	4	GE WIL		3
	GE SBS: AEDECON 2001	Prin. of Food & Res. Econ.	3	AGSYSMT 2120 or CSE 1111	Data Visualization and Communications in Ag; Intro to Computer-Assisted Problem Solving	3
	AGRCOMM 3130	Oral Communication	3	GENED 1201	GE Launch Seminar	1
Hours: 31-32	GE Nat Sci: ENR 3000 & 3001	Soil Science & Lab	4			
		Total:	**15**		**Total:**	**14**
Sophomore Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Declare minor *-Complete three science courses by the end of this year* *-Begin to consider an internship location*	AGSYSMT 2305	Profess. Dev. I	2	AGSYSMT 2310	Elec. Systems	2
	AGSYSMT 2370	Environmental Hydrology	2	ASM Supporting Course	*Science Elective*	3
	AGSYSMT 2371	Land Surveying for Ag.	2	GE Hist. & Cultural Studies		3
	HCS 2200 & 2206	World of Plants +Lab	4	GE R.E. & G. Diversity		3
	Major Supporting: Nat Sci	See Options	3	ASM Supporting Course	*Management Option*	3
	GE Theme Choice #1[a]		3	Open Elective		2-3
Hours: 60		**Total:**	**16**		**Total:**	**16**
Junior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Apply to graduate *-Complete internship by end of the summer* *-Half of major hours to be completed by the end of the year*	AGSYSMT 3232	Engines & Power Trans.	3	Specialization Core: Req. 2	AGSYSMT 3586	4
	Specialization Core: Choice		2-3	Specialization Core: Choice		3
	AGSYSMT 4580	Precision Agriculture	2	ASM Supporting Course	*Management Elective*	3
	ASM Supporting Course	*Accounting Option*	3	ASM Supporting Course	*Law Option*	3
	Major Supporting: Data Analysis	*See options*	3	GE Citizenship #2 [a]		3
Hours: 90	GE Citizenship #1 [a]		3			
		Total:	**15**		**Total:**	**15**
Senior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Meet graduation requirements *-Meet with a Career Services Advisor* *-Complete Department Exit Survey (via email)*	AGSYSMT 3191	Internship	2	AGSYSMT 5600	Ag. Safety & Health	3
	FAES 3191	Internship	0	AGSYSMT 4910	Capstone II	2
	AGSYSMT 4605	Profess. Dev. II	1	Specialization Core: Req. 2	AGSYSMT 4560	3
	AGSYSMT 4900	Capstone I	2	Specialization Core: Req. 3	AGSYSMT 5560	3
	ASM Supporting Course	*Management Elective*	3	ASM Supporting Course or Specialization Core		2-3
	Specialization Core: Choice		3	GENED 4001	GE Reflection	1
	GE Theme Choice #2[a]		4			
		Total:	**15**		**Total:**	**15**
					Minimum credit hours for Bachelor of Science Degree:	**121**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

Degree requirements and course offerings are subject to change. This page was last updated on 1/31/2025

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Effective Term: Autumn 2025

Bachelor of Science in Agriculture
Major: Agricultural Systems Management
Proposed Specialization: Precision Livestock Systems

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	**Course Options**	**Hours**
GE Launch Seminar	**GENED 1201**	1
Writing and Information Literacy	*Student Choice*	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: **MATH 1148** * *(or Student Choice – see below)*	4
Literary, Visual and Performing Arts	*Student Choice*	3
Historical & Cultural Studies	*Student Choice*	3
Natural Science	Major requirement: **ENR 3000 & 3001*** *(or Student Choice – see below)*	4
Social & Behavioral Sciences	Major requirement: **AEDECON 2001** or **ECON 2001.01** * *(or Student Choice – see below)*	3
Race, Ethnic and Gender Diversity	*Student Choice*	3
Theme**: Citizenship for a Diverse & Just World** [a]	*Student Choice*	4-6
Theme: **Student Choice** [a]	*Student Choice*	4-6
GE Reflection	**GENED 4001**	1
	General Education Credit Hours:	**33-38**

***** Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student chooses an alternative course in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	**Course Options**	**Hours**
College & Department Survey	**FAES 1100** (0.5) & **AGSYSMT1100** (0.5)	1
Oral Expression	**AGRCOMM 3130** or **COMM 2110**	3
Additional Science	**HCS 2200 and 2206 or HCS 2204 and 2205**	4
Internship	**FAES 3191** & **AGSYSMT 3191**	2
Minor Equiv. [b]	*See pg. 2*	18-21
	Credit Hours:	**28-31**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.
[b] Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

General Education	**33-38**
Degree Requirements	**28-31**
Major Supporting Courses	**6**
Major Core	**28-29**
Specialization Core	**15**
Open Electives	**2-11**
Minimum Total Credit Hours	**121**

Major Supporting Coursework		
Course	**Title**	**Hours**
Natural Science Category (Choose 1 of the following courses)		
ANIMSCI 2200.01	Introductory Animal Sciences	3
ENR 2100	Introduction to Environmental Sciences	3
FDSCTE 2200	The Science of Food	3
Data Analysis Category (Choose 1 of the following courses)		
COMLDR 3537	Data Analysis in the Applied Sciences	3
ANIMSCI or **HCS 2260**	Data Analysis & Interpretation for Decision Making	3
ENR 2000	Natural Resources Data Analysis	3
STAT 1450	Introduction to the Practice of Statistics	3
	Credit Hours:	**6**

Major Core Coursework		
Course	**Title**	**Hours**
AGSYSMT 2150 or Physics 1200	Applied Agricultural Mechanics and Electronics/ Mechanics, Kinematics, Fluids, Waves	4-5
AGSYSMT 2305	Professional Development I	2
AGSYSMT 2310	Electrical Power for Agricultural & Residential Applications	2
AGSYSMT 2370	Environmental Hydrology	2
AGSYSMT 2371	Land Surveying for Agricultural & Environmental Systems	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 4580	Precision Agriculture	2
AGSYSMT 4605	Professional Development II	1
AGSYSMT 4900	Capstone in Ag. Systems Management I	2
AGSYSMT 4910	Capstone in Ag. Systems Management II	2
AGSYSMT 5600	Agricultural Safety and Health	3
CSE 1111-or ASM 2120	Intro to Computer-Assisted Problem Solving/ Data Visualization and Communication in Ag	3
	Credit Hours:	**28-29**

Specialization Core Coursework (Minimum 15 credit hours)		
Course	**Title**	**Hours**
AGSYSMT 2241	Building Materials & Construction in Agriculture	3
AGSYSMT 3320	Facilities for Agricultural & Greenhouse Production	3
AGSYSMT 3550	Animal & Rural Waste Management	2
ANIMSCI 2200.03	Animal Systems	2
Select from the following courses for additional credit hours		
ANIMSCI 3170	Animal Health I	2
AGSYSMT 3330	Grain Handling, Drying, and Milling	3
AGSYSMT 3585	Introduction to Digital Agriculture	3
AGSYSMT 4575	Applied Agricultural Water Management	2
AGSYSMT 4560	Fluid Power and Electronics in Agricultural Machinery	3
AGSYSMT 5580	Data Analytics in Production Agriculture	3
HCS 5412	Agroecology of Grasslands and Praries	3
	Credit Hours:	**15**

Degree requirements and course offerings are subject to change. Last updated on: **5/30/23**

ASM Supporting Courses (Minor Equivalent)		
Principles of Management Category (choose one)		
AEDECON 3101	Principles of Agribusiness Management	3
BUSMHR 3100	Foundations of Management and HR	3
Accounting Category (choose one)		
AEDECON 2105	Managerial Records and Analysis	3
ACCTMIS 2200	Introduction to Accounting I	3
ACCTMIS 2000	Foundations of Accounting	3
Business Law Category (choose one)		
AEDECON 3170	Agribusiness Law	3
BUSFIN 3500 & BUSFIN 4510	Legal Environment of Business (1.5) & Legal Business Issue (1.5)	3
	Supporting Courses Credit Hours	**9**
	Add 3+ ASM Elective Courses from table for Minor Equiv.	**9**
	Minimum Total Minor Equivalency	**18**

ASM Electives: Select at least three courses for ASM Electives, at least one in each category (Ag Management and Ag Sciences) totalling minimum 9 chs
**Students are encouraged to take at least one additional AGSYSMT course*

Agricultural Management		
ENR 4260	Soil Resource Management	3
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance *Pre-req: AEDECON 2105 or ACCTMIS 2200*	3
AEDECON 3104	Farm Business Management	3
AEDECON 3114	Commodity Futures & Options Markets	3
AEDECON 3121	Salesmanship in Agribusiness	
AEDECON 3124	Grain Merchandising	3
AEDECON 3160	Human Resource Management in Small Business	3
AEDECON 4540	International Commerce & World Economy	3
AGRCOMM 2330	Public Perceptions of Agriculture	4
ANIMSCI 2507	Challenges and Opportunities for the Dairy Industry	1
COMLDR 3530	Foundations of Personal and Professional Leadership	3
COMLDR 4430	Leadership in Teams and Community Organizations	3
CONSYSM 2205	Introduction to Construction Systems Management	3
FABENG/FDSCTE 3400.01	Sustainability of the Food Supply Chain ❖	3
HCS 2307	Sustainable Agriculture Practical Experience	2
INTSTDS 3850	Introduction to Globalization	3
XXXX 3797	Study Abroad	1-5
XXXX 5797	Study Abroad	1-5

Agricultural Science		
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 3360	Agricultural Machinery Management	3
ENTMLGY 4601	General Insect Pest Management	2
ANIMSCI 2221	Introduction to Equine Studies	3
ANIMSCI 2400.05	Human and Animal Interactions	2
ANIMSCI 3100	Animal Growth and Development	3
ANIMSCI 3600	Global Food and Agriculture	3
ANIMSCI 31350	Principles of Genetic Improvement	3
HCS 5411	Domestication and Utilization of Agronomic Crops	3
HCS 5422	Biology and Management of Weeds and Invasive Plants	3
FDSCTE 3110	Alternative Packaging for a Greener Planet	4

Policies and General Requirements for Degree

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Autumn 2025

4-Year Course Plan
B.S. in Agriculture
Major: Agricultural Systems Management
Specialization: Precision Livestock Systems

This model plan of study is presented as a suggested path to graduate in four years. It is intended to be a useful guide; however, each student is unique and should review the Degree Requirements for their catalog year and work with their advisor to develop an individualized course plan that best fits their personal academic background and goals.

NOTE: This sheet should not be used in isolation. To graduate in a timely manner, students must consult their academic advisor on a regular basis. Major courses that are only offered one semester a school year are underlined.

Freshman Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Complete Math requirement *-Complete at least one science* *-Complete GE: WIL* *-Declare Specialization*	FAES 1100	College Survey	0.5	AGSYSMT 2150 or Physics 1200	Applied Agricultural Mech and Elec: Mech., Fluids, & Waves	4-5
	AGSYSMT 1100	Dept Survey	0.5	GE Lit, Vis and Perf Arts		3
	GE Math: MATH 1148	College Algebra	4	GE WIL		3
	GE SBS: AEDECON 2001	Prin. of Food & Res. Econ.	3	AGSYSMT 2120 or CSE 1111	Data Visualization and Communications in Ag; Intro to Computer-Assisted Problem Solving	3
	AGRCOMM 3130	Oral Communication	3	GENED 1201	GE Launch Seminar	1
Hours: 31-32	GE Nat Sci: ENR 3000 & 3001	Soil Science & Lab	4			
		Total:	**15**		**Total:**	**14**
Sophomore Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Declare minor *-Complete three science courses by the end of this year* *-Begin to consider an internship location*	AGSYSMT 2305	Profess. Dev. I	2	AGSYSMT 2310	Elec. Systems	2
	AGSYSMT 2370	Environmental Hydrology	2	Major Supporting: Nat Sci	See Options	3
	AGSYSMT 2371	Land Surveying for Ag.	2	GE Hist. & Cultural Studies		3
	Specialization Core: Req 1	AGSYSMT 2241	3	GE R.E. & G. Diversity		3
	HCS 2200 & 2206	World of Plants +Lab	4	ASM Supporting Course	Management Option	3
Hours: 60	GE Theme Choice #1[a]		3	*Elective*	Open Elective	2
		Total:	**16**		**Total:**	**16**
Junior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Apply to graduate *-Complete internship by end of the summer* *-Half of major hours to be completed by the end of the year*	AGSYSMT 3232	Engines & Power Trans.	3	Specialization Core: Req. 3	AGSYSMT 3320	3
	Specialization Core: Req. 2	AGSYSMT 3550	2	ASM Supporting Course	*Management Elective*	3
	AGSYSMT 4580	Precision Agriculture	2	ASM Supporting Course	*Law Option*	3
	ASM Supporting Course	*Accounting Option*	3	GE Citizenship #2 [a]		3
	Major Supporting: Data Analysis	*See options*	3	ASM Supporting Course	*Science Elective*	3
Hours: 90	GE Citizenship #1 [a]		3			
		Total:	**16**		**Total:**	**15**
Senior Year	**Autumn Semester**			**Spring Semester**		
Benchmarks	**Course/Requirement**	**Course Name**	**Hours**	**Course/Requirement**	**Course Name**	**Hours**
-Meet graduation requirements *-Meet with a Career Services Advisor* *-Complete Department Exit Survey (via email)*	AGSYSMT 3191	Internship	2	AGSYSMT 5600	Ag. Safety & Health	3
	FAES 3191	Internship	0	AGSYSMT 4910	Capstone II	2
	AGSYSMT 4605	Profess. Dev. II	1	Specialization Core: Req. 4	ANIMSCI 2200.03	2
	AGSYSMT 4900	Capstone I	2	ASM Supporting Course	*See Options*	3
	Specialization Core: Choice		2-3	ASM Supporting Course or Specialization Core		3
	Specialization Core: Choice		3	GENED 4001	GE Reflection	1
	GE Theme Choice #2 [a]		4			
		Total:	**14**		**Total:**	**15**
					Minimum credit hours for Bachelor of Science Degree:	**121**

[a] Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required) , and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ❖ symbol.

Degree requirements and course offerings are subject to change. This page was last updated on 1/31/2025

College of Food, Agricultural and Environmental Sciences
Department of Food, Agricultural and Biological Engineering

THE OHIO STATE UNIVERSITY

Agricultural Systems Management Program

Agricultural Engineering Building 262B
590 Woody Hayes Dr
Columbus, OH 43210

Kathryn Boening-ulman.1@osu.edu
osu.edu
fabe.osu.edu

Agricultural Systems Management (ASM)
Program Goals and Student Outcomes
Updated February 2025

Students in the Agricultural Systems Management program will complete the following goals centered around the planning and management of food, agricultural and biomanufacturing systems (henceforth known as Ag- and Biomanufacturing Systems) which includes machinery systems, building infrastructure, and soil and water resources used in the sustainable production of food, fiber, energy, and/or renewable materials.

Goal 1: Connect mechanical and electronic technical skills with business and management principles to holistically troubleshoot Ag- and Biomanufacturing issues related to specific equipment, infrastructure or processing steps

- *SLO 1.1 Analyze and manage a system with the opportunity to improve on an agricultural production practice while considering functional, economic, environmental, safety and/or legal constraints*
- *SLO 1.2 Plan and solve solutions for implementation to agricultural production problems or opportunities to improve efficiency*

Goal 2: Students will recognize, understand, and apply key business principles, practices, and tools necessary to manage the physical assets of Ag- and Biomanufacturing systems including production and processing resources.

- *SLO 2.1 Estimate the cost of various agricultural operations and technologies*
- *SLO 2.2 Evaluate the machinery and technology requirements of a farm*
- *SLO 2.3 Assess the economics of improving agricultural management practices including facilities, environmental, or mechanical systems*

Goal 3: Students will master technical, computational, problem-solving, and managerial skills essential for advancement of the Ag- and Biomanufacturing systems.

- *SLO 3.1 Evaluate and compare the use of current technology used in Ag- and Biomanufacturing systems including machinery, buildings, material handling systems and soil and water resources*
- *SLO 3.2 Demonstrate with the help of current technologies ways to identify, analyze and improve upon complex agro-environmental and manufacturing systems.*
- *SLO 3.3 Demonstrate with the help of current technologies ways to identify, analyze and improve upon facility infrastructure.*

Goal 4: Students will learn and exhibit quality professional and interpersonal communication skills essential for success and advancement in Ag- and Biomanufacturing industries.

- *SLO 4.1 Demonstrate the ability to function within diverse and/or multi-disciplinary teams*
- *SLO 4.2 Demonstrate the ability to communicate effectively both orally and via written communications*
- *SLO 4.3 Recognize the importance of serving in relevant industry associations and organizations*
- *SLO 4.4 Recognize the need to engage in continuous professional and personal development*

Changes to Agricultural Systems Management Goals and Student Learning Outcomes

Current Goals and SLOs	Updated (2025) Goals and SLOs
1. Have the necessary proficiency and understanding for planning and managing the machinery systems, building infrastructure, and soil and water resources used in the sustainable production of food, fiber, and energy	1. Connect mechanical and electronic technical skills with business and management principles to holistically troubleshoot Ag- and Biomanufacturing issues related to specific equipment, infrastructure or processing steps
• 1.1 Demonstrate knowledge of the current technology used in agricultural production including machinery, buildings, material handling systems and soil and water resources	• SLO 1.1 Analyze and manage a system with the opportunity to improve on an agricultural production practice while considering functional, economic, environmental, safety and/or legal constraints
• 1.2 Define a problem with or an opportunity to improve an agricultural production practice including functional, economic, environmental, safety and legal constraints	• SLO 1.2 Plan and solve solutions for implementation to agricultural production problems or opportunities to improve efficiency
• 1.3 Develop solutions for implementation to agricultural production problems or opportunities to improve efficiency	•
2. Recognize, understand, and utilize the key business principles and tools necessary to manage the physical assets of a farm or agribusiness	2. Students will recognize, understand, and apply key business principles, practices, and tools necessary to manage the physical assets of Ag- and Biomanufacturing systems including production and processing resources.
• 2.1 Estimate the cost of various field operations	• SLO 2.1 Estimate the cost of various agricultural operations and technologies
• 2.2 Evaluate the machinery requirements of a farm	• SLO 2.2 Evaluate the machinery and technology requirements of a farm
• 2.3 Assess the economics of improving drainage or other agricultural water management practices	• SLO 2.3 Assess the economics of improving agricultural management practices including facilities, environmental, or mechanical systems

Current Goals and SLOs	Updated (2025) Goals and SLOs
	3. Students will master technical, computational, problem-solving, and managerial skills essential for advancement of the Ag- and Biomanufacturing systems.
	• SLO 3.1 Evaluate and compare the use of current technology used in Ag- and Biomanufacturing systems including machinery, buildings, material handling systems and soil and water resources
	• SLO 3.2 Demonstrate with the help of current technologies ways to identify, analyze and improve upon complex agro-environmental and manufacturing systems.
	• SLO 3.3 Demonstrate with the help of current technologies ways to identify, analyze and improve upon facility infrastructure.
3. Know and exhibit the professional, interpersonal, and communication expertise essential for success and advancement in agriculture and the related industries	4. Students will learn and exhibit quality professional and interpersonal communication skills essential for success and advancement in Ag- and Biomanufacturing industries.
• 3.1 Demonstrate the ability to function within multi-disciplinary teams	• SLO 4.1 Demonstrate the ability to function within diverse and/or multi-disciplinary teams
• 3.2 Demonstrate the ability to communicate effectively	• SLO 4.2 Demonstrate the ability to communicate effectively both orally and via written communications

• 3.3 Recognize the importance of serving in relevant industry associations and organizations	• SLO 4.3 Recognize the importance of serving in relevant industry associations and organizations
• 3.4 Recognize the need to engage in continuous professional and personal development	• SLO 4.4 Recognize the need to engage in continuous professional and personal development

Program Concurrence

The following departments were extended opportunities to review, make suggestions, and send concurrence for the ASM program curriculum change. Departments where concurrence was formally received are included after this page. All other departments were either informally/verbally approved or neglected to reply by the three week deadline given.

Department of Food Science and Technology

Department of Horticulture and Crop Sciences

School of Environmental and Natural Resources

Department of Animal Sciences

OSU Agricultural Technical Institute

Subject: RE: ASM Curriculum Change with Areas of Specialization
Date: Wednesday, February 5, 2025 at 9:25:20 AM Eastern Standard Time
From: Belury, Martha
To: Shearer, Scott, Lyvers Peffer, Pasha, Karcher, Doug, Haab, Timothy, Wellert, Shaun, Gerber, Carri
CC: Boening-Ulman, Kate, Fulton, John, Chen, Qian, Boone, Kristina, Osborne, Jeanne, Simons, Christopher
Attachments: image001.png

Hi Scott,
The academic affairs committee of FST unanimously recommends concurrence for the new areas of specialization.
Martha

Martha Ann Belury, PhD, RDN
Professor and Chair
Department of Food Science and Technology
1-614-292-1680

From: Shearer, Scott <shearer.95@osu.edu>
Sent: Wednesday, January 22, 2025 11:58 AM
To: Belury, Martha <belury.1@osu.edu>; Lyvers Peffer, Pasha <lyverspeffer.1@osu.edu>; Karcher, Doug <karcher.3@osu.edu>; Haab, Timothy <haab.1@osu.edu>; Wellert, Shaun <wellert.1@osu.edu>; Gerber, Carri <gerber.140@osu.edu>
Cc: Boening-Ulman, Kate <boening-ulman.1@osu.edu>; Fulton, John <fulton.20@osu.edu>; Chen, Qian <chen.1399@osu.edu>; Boone, Kristina <boone.3@osu.edu>; Osborne, Jeanne <osborne.2@osu.edu>
Subject: ASM Curriculum Change with Areas of Specialization
Importance: High

Martha, Pasha, Doug, and Tim,

FABE is updating the Agricultural Systems Management B.S. degree program by reflecting newly developed courses within the department, removing Physics 1200 as a prerequisite, and creation of five areas of specializations for students to better focus elective coursework selection (see attached pdf pacvkage). Below, I have indicated which specializations may impact your respective academic units as the revised ASM curriculum will continue to rely on existing course offerings.

- Department of Food Science and Technology: Food and Bio- Manufacturing Systems
- Department of Animal Sciences: Precision Livestock Systems
- Department of Horticulture and Crop Sciences: Agro-Environmental Systems, Precision Agriculture Systems
- School of Environment and Natural Resources: Precision Agriculture Systems, Agro-environmental Systems

I'm asking for your concurrence on creation of areas of specialization within the ASM curriculum and value any comments or concerns you would like to share. ***It would be most helpful to receive your response by no later than Thursday, February 6th.*** I want to thank you in

advance for your time with this request.

Carri and Shaun,

I'm sharing this request so that you are in the loop on this curriculum update. We value our association with ATI and want to ensure a smooth transition for graduates of ATI who desire to complete four-year degree requirements in Columbus. Again, I'm asking for your concurrence on creating of the areas of specialization and value any comments or concerns you would like to share ***by Thursday, February 6th***.

Regards,
Scott

THE OHIO STATE UNIVERSITY

Scott A. Shearer, PhD, PE | Professor and Chair
Food, Agricultural and Biological Engineering | 200A Agricultural Engineering Building
590 Woody Hayes Drive | Columbus, OH 43210-1058
Office: 614.292.7284 | Mobile: 859.509.5026 | FAX: 614.292.9448
www.fabe.osu.edu | twitter.com/ScottShearer95

Subject: RE: ASM curriculum revision
Date: Tuesday, January 28, 2025 at 10:16:32 AM Eastern Standard Time
From: Barker, David
To: Boening-Ulman, Kate, Shearer, Scott
Attachments: image001.png

Kate

Many thanks.. I believe these options will be beneficial to your students.

DB

From: Boening-Ulman, Kate <boening-ulman.1@osu.edu>
Sent: Tuesday, January 28, 2025 9:28 AM
To: Barker, David <barker.169@osu.edu>; Shearer, Scott <shearer.95@osu.edu>
Subject: Re: ASM curriculum revision

Thank you and the rest of HCS for your suggestions! I believe we will add HCS 2204/05 as a secondary option. We also will fix the Precision Livestock to account for HCS 5412, I am thinking it will be a choice in their specialization core due to the practicality of it.

Best,
Kate

Kathryn Boening-Ulman, Ph.D., E.I.
Assistant Professor of Professional Practice
Agricultural Systems Management Program Head

The Ohio State University
College of Food, Agricultural and Environmental Sciences
Department of Food, Agricultural and Biological Engineering
Agricultural Engineering Building Room 262B
590 Woody Hayes Dr, Columbus, OH 43210
614-857-5436 Mobile
boening-ulman.1@osu.edu

From: Barker, David <barker.169@osu.edu>
Sent: Friday, January 24, 2025 2:39:35 PM
To: Boening-Ulman, Kate <boening-ulman.1@osu.edu>; Shearer, Scott <shearer.95@osu.edu>
Subject: ASM curriculum revision

Kate and Scott
I had the opportunity to review the ASM curriculum revision..
I saw a couple of suggestions you might consider...

1. All/most of your specializations are using HCS2200/06 as the 2nd science course. One option you might consider is to use: HCS2200 and 2206; or HCS2204 and 2205.

These course pairs are substantially similar.. HCS2200/06 is used as a science foundation in HCS, mainly for non-majors. Its mostly taught online.
HCS2204/05 is used by students within the SPS major. HCS2204 is a GE-sustainability theme and might be a useful option for your students.

2. Another suggestion is to add HCS5412 (Agroecology of Grasslands and Prairies) to the Livestock specialization. HCS5412 is used as an elective within several other specializations, but not the Precision Livestock specialization. HCS5412 (previously "Forage Crops") is relevant to Livestock production.

Dr David Barker
Professor and Associate Chair
Dept of Horticulture and Crop Science
226 Kottman Hall, 2021 Coffey Rd, Columbus OH 43210
Ph: 614-247-6258 Fax: 614-292-7162
Email: barker.169@osu.edu