

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

\* 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	<b>FAES 1100 (0.5) &amp; AGSYSMT1100 (0.5)</b>	1
Oral Expression	<b>AGRCOMM 3130</b> or <b>COMM 2110</b>	3
Additional Science	<b>ENR 3000 &amp; 3001</b>	4
Internship	<b>FAES 3191 &amp; AGSYSMT 3191</b>	2
Minor Equiv. <sup>b</sup>	<i>See pg. 2</i>	18-21
<b>Credit Hours:</b>		<b>28-31</b>

<sup>a</sup> 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.

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

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

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

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

**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.*

<b>Freshman Year</b>	<b>Autumn Semester</b>			<b>Spring Semester</b>		
<b>Benchmarks</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>
-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			
		<b>Total:</b>	<b>15</b>		<b>Total:</b>	<b>15</b>
<b>Hours: 30</b>						
<b>Sophomore Year</b>	<b>Autumn Semester</b>			<b>Spring Semester</b>		
<b>Benchmarks</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>
-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			
		<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>14</b>
<b>Hours: 60</b>						
<b>Junior Year</b>	<b>Autumn Semester</b>			<b>Spring Semester</b>		
<b>Benchmarks</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>
-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 <sup>a</sup>		3	ASM Supporting Course	Law Option	3
	ASM Supporting Course	Management Option	3	GE Citizenship #2 <sup>a</sup>		3
	Open Elective		1			
		<b>Total:</b>	<b>15</b>		<b>Total:</b>	<b>15</b>
<b>Hours: 90</b>						
<b>Senior Year</b>	<b>Autumn Semester</b>			<b>Spring Semester</b>		
<b>Benchmarks</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>	<b>Course/Requirement</b>	<b>Course Name</b>	<b>Hours</b>
-Meet graduation requirements -Meet with a Career Services Advisor -Complete Department Exit Survey (via email)	GE Theme Choice #1 <sup>a</sup>		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			
		<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>15</b>
<b>Minimum credit hours for Bachelor of Science Degree:</b>						<b>121</b>

<sup>a</sup> 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.

## 4-Year Completion Checklist

Freshman Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b> <input type="checkbox"/> Complete Math requirement <input type="checkbox"/> Complete at least one science <input type="checkbox"/> Complete GE: WIL  <b>Hours:</b> _____	<b>Course/Requirement</b> FAES 1100 AGSYSMT 1100	✓	<b>Course/Requirement</b>	✓		
Notes:		Notes:				
Sophomore Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b> <input type="checkbox"/> Declare minor <input type="checkbox"/> Complete three science courses by the end of this year <input type="checkbox"/> Begin to consider an internship location  <b>Hours:</b> _____	<b>Course/Requirement</b>	✓	<b>Course/Requirement</b>	✓		
Notes:		Notes:				
Junior Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b> <input type="checkbox"/> Apply to graduate <input type="checkbox"/> Complete internship by end of the summer <input type="checkbox"/> Half of major hours to be completed by the end of the year  <b>Hours:</b> _____	<b>Course/Requirement</b>	✓	<b>Course/Requirement</b>	✓		
Notes:		Notes:				
Senior Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b> <input type="checkbox"/> Meet graduation requirements <input type="checkbox"/> Meet with a Career Services Advisor <input type="checkbox"/> Complete Department Exit Survey (via email)  <b>Hours:</b> _____	<b>Course/Requirement</b>	✓	<b>Course/Requirement</b>	✓		
Notes:		Notes:				

Minimum credit hours for Bachelor of Science Degree: 121