

**Bachelor of Science in Agriculture**  
**Major: Animal Sciences**  
**Specialization: Animal Biosciences**

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	Major requirement: <b>ENGLISH 1110 *</b> (or Student Choice – see below)	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: <b>MATH 1148 *</b> (or Student Choice – see below)	4
Literary, Visual and Performing Arts	<b>Student Choice</b>	3
Historical & Cultural Studies	<b>Student Choice</b>	3
Natural Science	Major Requirement: <b>BIOLOGY 1113 *</b> (or Student Choice – see below)	4
Social & Behavioral Sciences	Major requirement: <b>AEDECON 2001</b> or <b>ECON 2001.01 *</b> (or Student Choice – see below)	3
Race, Ethnic and Gender Diversity	<b>Student Choice</b>	3
Theme: <b>Citizenship for a Diverse &amp; Just World</b> <sup>a</sup>	<b>Student Choice</b>	4-6
Theme: <b>Student Choice</b> <sup>a</sup>	<b>Student Choice</b>	4-6
GE Reflection	<b>GENED 4001</b>	1
<b>General Education Credit Hours:</b>		<b>33-37</b>

\* Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student makes an alternative selection 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; ANIMSCI 1100 (0.5)</b>	1
Oral Expression	<b>AGRCOMM 3130</b> or <b>COMM 2110</b>	3
Additional Science	<b>CHEM 1210</b>	5
Internship	<b>FAES 3191 &amp; ANIMSCI 3191</b>	2
Minor Equiv. <sup>b</sup>		15
Select 15 credit hours from the following list: <b>ANATOMY 2300.04, BIOLOGY 1114, BIOCHEM 4511, CHEM 2510, CHEM 2520, CHEM 2540, EEOB 2510, ENTMLGY 4607, MATH 1151, MICROBIO 4000.01 or .02, MOLGEN 4500, PHYSICS 1200, or PHYSICS 1201</b>		
<b>Credit Hours:</b>		<b>26</b>

Major Supporting Coursework		
Course		Hours
Choose a course from the following list (courses will not double count in the minor equivalent): <b>BIOLOGY 1114, MICROBIO 4000.01 or .02, PHYSICS 1200, CHEM 1220, or MOLGEN 4500</b>		
<b>Credit Hours:</b>		<b>3-5</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.

<sup>c</sup> Two short-term study abroad experiences include a combination of two courses from ANIMSCI 3797.01 or 3797.03 or 3797.04, or 3797.07 or 5797.05.

<sup>d</sup> Participation in two different disciplinary, intercollegiate animal science judging experiences. Requires registration in ANIMSCI 3488 or equivalent.

<sup>e</sup> No more than 6 combined hours of ANIMSCI 3488, 4193, and 4999 can count toward graduation.

Major Coursework		
Course	Title	Hours
<b>ANIMSCI 2000</b>	Animal Handling	2
<b>ANIMSCI 2200.01 or 2300H</b>	Introduction to Animal Sciences Lecture	3
<b>ANIMSCI 2200.02</b>	Introduction to Animal Sciences Laboratory	1
<b>ANIMSCI 2200.03</b>	Animal Systems	2
<b>ANIMSCI 2260</b>	Data Analysis and Interpretation for Decision Making	3
<b>ANIMSCI 2367</b>	Animals in Society	3
<b>ANIMSCI 3130</b>	Principles of Animal Nutrition	3
<b>ANIMSCI 3140</b>	Principles of Animal Systems Physiology	3
<b>ANIMSCI 3150</b>	Principles of Genetic Improvement	3
<b>ANIMSCI 3170</b>	Animal Health I	2
<b>ANIMSCI 3270</b>	Animal Health II	2
<b>ANIMSCI 3180</b>	Introduction to Animal Welfare	2
<b>Laboratory Requirement: Select two options (7-week courses)</b>		<b>1</b>
<b>ANIMSCI 3420</b>	Animal Laboratory Research Methods (0.5)	
<b>ANIMSCI 3430</b>	Animal Nutrition Laboratory (0.5)	
<b>ANIMSCI 3440</b>	Animal Physiology Laboratory (0.5)	
<b>ANIMSCI 3470</b>	Animal Health Laboratory (0.5)	
<b>ANIMSCI 3480</b>	Animal Welfare Laboratory (0.5)	
<b>Physiology Requirement: Select one option</b>		<b>2-3</b>
<b>ANIMSCI 3100</b>	Growth and Development (3)	
<b>ANIMSCI 3110</b>	Introduction to Meat Science (3)	
<b>ANIMSCI 3147</b>	Milk Secretion (2)	
<b>ANIMSCI 3160</b>	Reproductive Physiology (3)	
<b>Production Course 1: Select one option</b>		<b>4</b>
<b>ANIMSCI 4001</b>	Equine Production (4)	
<b>ANIMSCI 4002.01 &amp; 4002.02</b>	Beef Cattle Production and Management (3 cr) & Beef Cattle Prod. and Management Lab (1cr)	
<b>ANIMSCI 4003.01 &amp; 4003.02</b>	Swine Production (3 cr) & Swine Production Lab (1cr)	
<b>ANIMSCI 4004.01 &amp; 4004.02</b>	Small Ruminant and Pseudo Ruminant (3 cr) & Small and Pseudo Ruminant Lab (1cr)	
<b>ANIMSCI 4005</b>	Companion Animal Biology and Behavior (4)	
<b>ANIMSCI 4006.01 &amp; 4006.02</b>	Poultry and Avian Management (3 cr) & Poultry and Avian Management Lab (1 cr)	
<b>ANIMSCI 4007</b>	Dairy Herd Management (4)	
<b>Production Course 2: Select one option</b>		<b>3-4</b>
<b>MEATSCI 4510</b>	Processed Meats (3)	
<b>ANIMSCI 5100</b>	Advanced Growth and Development (3)	
<b>ANIMSCI 5530</b>	Comparative Animal Nutrient Metabolism (3)	
An additional selection from Production Course 1 lecture options		
Education Abroad <sup>c</sup>		
Animal Science Judging Experience <sup>d</sup>		
<b>Animal Science Electives: Select 11 credit hours from pg. 2 (at least 3 cr hr must be at the 4000 level or above)</b>		<b>11</b>
<b>Credit Hours:</b>		<b>50-52</b>

General Education	<b>33-37</b>
Degree Requirements	<b>26</b>
Major Supporting Courses	<b>3-5</b>
Major	<b>50-52</b>
Open Electives	<b>1-9</b>
<b>Minimum Total Credit Hours</b>	<b>121</b>

### Major Elective Options

*Note: Courses present as options elsewhere in the major may only be selected for credit in one area. MEATSCI courses are not allowed to double count in the major and the Meat Science Minor.*

Course	Title	Hours
ANIMSCI 2221	Introduction to Equine Studies	3
ANIMSCI 2301	Equine Behavior and Training	3
ANIMSCI 2400.01	Equine Studies in Europe	1
ANIMSCI 2400.04	Scotland's Ruminants	1
ANIMSCI 2400.05	Human and Animal Interactions	2
ANIMSCI 2400.07	Global Dairy Industries	1
ANIMSCI 2401	Advanced Equine Behavior and Training	3
ANIMSCI 2507	Challenges/Opps. in the Dairy Industry	1
ANIMSCI 2700	Animal Sciences Careers	1
ANIMSCI 3046	Poultry Biology	3
ANIMSCI 3101	Equine Facilities, Marketing, and Mgmt.	3
ANIMSCI 3131	Equine Feeds and Feeding	3
ANIMSCI 3171	Equine Health & Disease	2
ANIMSCI 3300	Livestock Selection and Evaluation	3
ANIMSCI 3301	Equine Evaluation	2
ANIMSCI 3306	Poultry Selection and Evaluation	2
ANIMSCI 3307	Dairy Cattle Selection and Evaluation	2
ANIMSCI 3400	Management Intensive Grazing	2
ANIMSCI 3500	Prof. Networking in Animal Sciences	2
ANIMSCI 3600	Global Food and Agriculture	3
ANIMSCI 3488 °	Prof. Development in Animal Sciences	varies
ANIMSCI 3797.01	Equine Studies in Europe	3
ANIMSCI 3797.03	Human and Animal Interactions Study Abroad	3
ANIMSCI 3797.04	Scotland's Ruminants – Education Abroad	3
ANIMSCI 3797.07	Dairy Industry Outside the U.S.	3
ANIMSCI 4035	Pet Food Production	3
ANIMSCI 4105	Domestication, Form & Function of Dogs	3
ANIMSCI 4193 °	Individual Studies	varies
ANIMSCI 4999/H °	Research with Distinction	varies
ANIMSCI 5000	Humans Dimension in Animal Sciences	3
ANIMSCI 5031	Ruminant Nutrition	3
ANIMSCI 5032	Non-Ruminant Nutrition	3
ANIMSCI 5033	Feed Mgmt. & Records Analysis for Dairy Cattle	3
ANIMSCI 5070	Nutritional Immunology in Animal Systems	3
ANIMSCI 5090	Gut Microbiology	2
ANIMSCI 5100	Advanced Growth & Development	3
ANIMSCI 5400	Southern African Animals I	3
ANIMSCI 5420	Env. Impacts of Crop-Livestock Systems	3
ANIMSCI 5530	Comparative Animal Nutrient Metabolism	3
ANIMSCI 5551	Equine Assisted Therapy	2
ANIMSCI 5797.05	Exotic Animal Behavior and Welfare	3
ANIMSCI 5810	Branded Meat Products	4
MEATSCI 3210	Food Animal Processing	3
MEATSCI 3310	Meat Animal and Carcass Evaluation	3
MEATSCI 5510	Advanced Meat Science	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 pursuing a B.S. in Agriculture 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: Animal Sciences  
Specialization: Animal Biosciences**

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 English 1110.01 -Schedule a meeting with your academic advisor	FAES 1100	College Survey	0.5	GE Sci: BIOLOGY 1113	Energy Transfer & Dev.	4
	ANIMSCI 1100	Dept Survey	0.5	GE WIL: ENGLISH 1110	First-Year English Comp.	3
	GE Math: MATH 1148	College Algebra	4	ANIMSCI 2000	Animal Handling	2
	CHEM 1210	General Chemistry I	5	CHEM 1220 <sup>a</sup>	General Chemistry II	5
	ANIMSCI 2200.01	Intro to Animal Sciences	3	GENED 1201	GE Launch Seminar	1
	ANIMSCI 2200.02	Intro to Animal Sciences Lab	1			
	ANIMSCI 2200.03	Animal Systems	2			
<b>Hours: 31</b>		<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>15</b>
Sophomore Year	Autumn Semester			Spring Semester		
Benchmarks	Course/Requirement	Course Name	Hours	Course/Requirement	Course Name	Hours
-Complete three science courses by the end of this year -Begin to consider an internship location -Schedule a meeting with your academic advisor	Minor Equiv. Course	See options	4	GE Theme Choice #1 <sup>b</sup>		3-4
	GE Lit, Vis and Perf Arts		3	Minor Equiv. Course	See options	4
	ANIMSCI 2260	Data Analysis	3	GE R.E. & G. Diversity		3
	GE SBS: AEDECON 2001 <sup>a</sup>	Prin. of Food & Res. Econ.	3	ANIMSCI 3150	Prin. of Genetic Improvement	3
	ANIMSCI 3140	Prin. of Animal Physiology	3	ANIMSCI 2367	Animals in Society	3
<b>Hours: 63</b>		<b>Total:</b>	<b>16</b>		<b>Total:</b>	<b>16</b>
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 -Schedule a meeting with your academic advisor	Minor Equiv. Course	See options	4	Minor Equiv. Course	See options	3
	GE Citizenship #1 <sup>b</sup>		3-4	GE Hist. & Cultural Studies		3
	Major Elective	See options	2-3	ANIMSCI 3170	Animal Health I	2
	ANIMSCI 3130	Prin. of Animal Nutrition	3	ANIMSCI 3270	Animal Health II	2
	AGRCOMM 3130	Oral Expression	3	GE Citizenship #2 <sup>b</sup> (or Open Elective)		3
				Physiology Option	See options	2-3
<b>Hours: 93</b>		<b>Total:</b>	<b>15</b>		<b>Total:</b>	<b>15</b>
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 -Schedule a meeting with your academic advisor	GE Theme Choice #2 <sup>b</sup> (or Open Elective)		3	Production Course #2	See options	3-4
	Laboratory Option #1	See options	0.5	Major Elective	See options	3
	Laboratory Option #2	See options	0.5	Major Elective	See options	3
	ANIMSCI 3191 & FAES 3191	Internship	2	Major Elective (4000 level or above)	See options	3
	Production Course #1	See options	4	Open Elective		3
	ANIMSCI 3180	Intro. Animal Welfare	2			
	GENED 4001	GE Reflection	1			
<b>Hours: 13</b>		<b>Total:</b>	<b>13</b>		<b>Total:</b>	<b>15</b>

**Total credit hours for Bachelor of Science Degree: 121**

<sup>a</sup> One possible course from approved GE list or major requirement that has multiple options, as outlined in corresponding Degree Requirements document.

<sup>b</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>	<b>Course/Requirement</b>		✓	<b>Course/Requirement</b>		✓
<input type="checkbox"/> Complete Math requirement	FAES 1100					
<input type="checkbox"/> Complete at least one science	ANIMSCI 1100					
<input type="checkbox"/> Complete English 1110.01						
<b>Hours:</b> _____	<b>Notes:</b>			<b>Notes:</b>		
Sophomore Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b>	<b>Course/Requirement</b>		✓	<b>Course/Requirement</b>		✓
<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>Notes:</b>			<b>Notes:</b>		
Junior Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b>	<b>Course/Requirement</b>		✓	<b>Course/Requirement</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>Notes:</b>			<b>Notes:</b>		
Senior Year	Autumn Semester			Spring Semester		
<b>Benchmarks</b>	<b>Course/Requirement</b>		✓	<b>Course/Requirement</b>		✓
<input type="checkbox"/> Meet graduation requirements						
<input type="checkbox"/> Meet with a Career Services Advisor						
<b>Hours:</b> _____	<b>Notes:</b>			<b>Notes:</b>		

**Total credit hours for Bachelor of Science Degree: 121**

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