Agricultural Education (BS): Poultry Science Concentration

To see more about what you will learn in this program, visit the Learning Outcomes website (https://apps.oirp.ncsu.edu/pgas/)!

The Agricultural Education major within the Department of Agricultural and Human Sciences prepares graduates to teach agriculture, serve as FFA advisors, and supervise agricultural experiences (SAE) in public and private schools.

The Poultry Science concentration is one of seven concentrations offered for the Bachelor of Science in Agricultural Education.

- Students interested in Agricultural Education may be eligible to apply for the North Carolina Teaching Fellows Program at NC State.
- Student teachers of agriculture may apply for Ed Scholars through NC State.
- Many alumni pursue careers in middle and high schools, universities and community colleges, county extension offices, and in the agricultural industry

Teacher Licensure

Completion of the B.S. program in Agricultural Education leads to teacher licensure in North Carolina for grades 6-12. Because of North Carolina's reciprocity agreements, graduates also can pursue certification in about 35 states. Download the Teacher Licensure Checklist (https://cals.ncsu.edu/agricultural-and-human-sciences/wp-content/uploads/sites/13/2017/06/Teacher-Licensure-Checklist.pdf) to review the requirements for admissions to teacher education candidacy and help you stay on course.

For more information about this program, including contact information, visit our website (https://cals.ncsu.edu/agricultural-and-human-sciences/undergraduate/#agricultural-education-major).

Contact

Dr. Travis Park
Director of Undergraduate Programs
919.515.9441
tdpark@ncsu.edu

Plan Requirements

Code	Title	Hours	Counts towards
Orientation			
AEE 103	Fundamentals of Agricultural and Extension Education	1	
or ALS 103	Freshman Transitions and Diversity in Agriculture & Life Sciences		
or ALS 303	Transfer Transitions and Diversity in Agriculture & Life Sciences		
Writing and Speaking			
COM 110	Public Speaking	3	
Sciences			
BIO 181	Introductory Biology: Ecology, Evolution, and Biodiversity	4	
BIO 183	Introductory Biology: Cellular and Molecular Biology	4	
CH 101 & CH 102	Chemistry - A Molecular Science and General Chemistry Laboratory	4	
Agricultural Education			
AEE 101	Introduction to Career and Technical Education [1]	1	
AEE 206	Introduction to Teaching Agriculture [1]	3	
AEE 226	Computer Applications and Information Technology in Agricultural & Extension Ed [1]	3	
AEE 303	Administration and Supervision of Student Organizations [1]	3	
AEE 322	Experiential Learning in Agriculture [1]	3	
AEE 326	Teaching Diverse Learners in AED [1]	3	
AEE 327	Conducting Summer Programs in Agricultural Education	1	
AEE 424	Planning Agricultural Educational Programs [1]	3	
AEE 426	Methods of Teaching Agriculture [1]	3	
AEE 427	Student Teaching in Agriculture [1]	8	
AEE 491	Seminar in Agricultural Education	1	
Other Professional Education			

ELP 344	School and Society [1]	3
EDP 304	Educational Psychology [1]	3
ED 311	Classroom Assessment Principles and Practices [1]	2
ED 312	Classroom Assessment Principles and Practices Professional Learning Lab [1]	1
Teaching Content Courses		
BAET 201	Shop Processes and Management	3
or TDE 110	Materials & Processes Technology	
Plant Science Elective (p. 2)		3
SSC 200 & SSC 201	Soil Science and Soil Science Laboratory	4
ANS 150 & ANS 151	Introduction to Animal Science and Introduction to Animal Science Lab	4
Select one of the following Economics Electives:		3
ARE 201	Introduction to Agricultural & Resource Economics	
ARE 201A	Introduction to Agricultural & Resource Economics	
EC 201	Principles of Microeconomics	
EC 205	Fundamentals of Economics	
Poultry Science Concentration		
PO 201 & PO 202	Poultry Science and Production and Poultry Science and Production Laboratory	4
PO 290	Poultry Seminar	1
PO 340	Live Poultry and Poultry Product Evaluation, Grading, and Inspection	3
PO 421	Commercial Egg Production	2
PO 424	Poultry Meat Production	3
PO 435	Poultry Incubation & Breeding	4
Poultry Science Elective (p. 7)		3
GEP Courses In The Major		
ENG 101	Academic Writing and Research [1]	4
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		6
GEP Mathematical Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-mathematical-sciences/)		6
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		2
GEP US Diversity, Equity, and Inclusion (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-usdei/)		3
GEP Interdisciplinary Perspectives (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-interdisciplinary-perspectives/)		5
GEP Global Knowledge (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-global-knowledge/) (verify requirement)		
Foreign Language Proficiency (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/foreign-language-proficiency/) (verify requirement)		
Total Hours		**120**

[1] A grade of C- or higher is required.

Plant Science Electives

Code	Title	Hours	Counts towards
AEC 423	Introduction to Fisheries Sciences Laboratory	1	
ALS 103	Freshman Transitions and Diversity in Agriculture & Life Sciences	1	

ALS 303	Transfer Transitions and Diversity in Agriculture & Life Sciences	1
ANS 215	Agricultural Genetics	3
CS 200	Introduction to Turfgrass Management	4
CS 211	Plant Genetics	3
CS 213	Crop Science	3
CS 214	Crop Science Laboratory	1
CS 216	Southern Row Crop Production - Cotton, Peanuts, and Tobacco	3
CS 218	Southern Row Crop Production - Corn, Small Grains and Soybeans	3
CS 224	Seeds, Biotechnology and Societies	3
CS 230	Introduction to Agroecology	3
CS 312		3
CS 400	Turf Cultural Systems	3
CS 410	Community Food Systems	3
CS 411	Crop Ecology	3
CS 413	Plant Breeding	2
CS 414	Weed Science	4
CS 415	Integrated Pest Management	3
CS 418	Introduction to Regulatory Science in Agriculture	3
CS 424	Seed Physiology	3
CS 430	Advanced Agroecology	4
CS 465	Turf Management Systems and Environmental Quality	3
CS 470	Advanced Turfgrass Pest Management	2
CS 480	Sustainable Food Production (capstone)	1
CS 502	Plant Disease: Methods & Diagnosis	2
CS 524	Seed Physiology	3
CS 541	Plant Breeding Methods	3
CS 565	Turf Management Systems and Environmental Quality	3
CS 590	Special Topics	1-6
CS 591		1-6
CSSC 290	Professional Development in Crop & Soil Sciences	1
CSSC 490	Senior Seminar in Crop Science and Soil Science	1
CSSC 492	Professional Internship Experience in Crop and Soil Sciences	1-3
CSSC 493	Research Experience in Crop and Soil Sciences	1-3
CSSC 495	Special Topics in Crop and Soil Sciences	1-6
ENT 402	Forest Entomology	3
ENT 470	Advanced Turfgrass Pest Management	2
FOR 150	Critical Thinking and Data Analysis	2
FOR 172	Forest System Mapping and Mensuration I	2
FOR 204	Silviculture	2
FOR 248	Forest History, Technology and Society	3
FOR 250	Professional Development II: Communications in Natural Resources	1
FOR 252	Introduction to Forest Science	3
FOR 260	Forest Ecology	4
FOR 261	Forest Communities	2
FOR 264	Forest Wildlife	1
FOR 265	Fire Management	1

FOR 273	Forest System Mapping and Mensuration II	3
FOR 293	Independent Study in Forest Management	1-6
FOR 294	Independent Study in Forest Management	1-6
FOR 295	Special Topics in Forestry	1-6
FOR 303	Silvics and Forest Tree Physiology	3
FOR 304	Theory of Silviculture	4
FOR 318	Forest Pathology	3
FOR 319	Forest Economics	3
FOR 330	North Carolina Forests	3
FOR 334	Operations Research Applications in Natural Resources	1
FOR 339	Dendrology	4
FOR 350	Professional Development III: Ethical Dilemmas in Natural Resource Management	1
FOR 353	GIS and Remote Sensing for Environmental Analysis and Assessment	3
FOR 374	Forest Measurement, Modeling, and Inventory	3
FOR 402	Forest Entomology	3
FOR 405	Forest Management	4
FOR 406	Forest Inventory, Analysis and Planning	4
FOR 408	Applied Forest Ecology: Natural Forest Silviculture	3
FOR 411	Forest Tree Genetics and Biology	3
FOR 414	World Forestry	3
FOR 415	World Forestry Study Tour	1
FOR 420	Watershed and Wetlands Hydrology	4
FOR 422	Consulting Forestry	3
FOR 430	Forest Health and Protection	3
FOR 434	Forest Operations and Analysis	3
FOR 472	Forest Soils	4
FOR 491	Special Topics in Forestry and Related Natural Resources	1-4
FOR 493	Independent Study in Forest Management	1-6
FOR 494	Independent Study in Forest Management	1-6
FOR 501	Dendrology	3
FOR 502	Forest Measurements	1
FOR 503	Tree Physiology	1
FOR 504	The Practice of Silviculture	3
FOR 505	Forest Management	4
FOR 506	Silviculture Laboratory	1
FOR 507	Silviculture Mini Course	1
FOR 508	Applied Forest Ecology: Natural Forest Silviculture	3
FOR 509	Forest Resource Policy	1
FOR 510	Introduction to GPS	1
FOR 513	Silviculture for Intensively Managed Plantations	3
FOR 514	Woodland Stewardship	3
FOR 519	Forest Economics	3
FOR 520	Watershed and Wetlands Hydrology	4
FOR 522	Consulting Forestry	3
FOR 531	Wildland Fire Science	3

FOR 532	Wildland Firefighter	3
FOR 534	Forest Operations and Analysis	3
FOR 540	Advanced Dendrology	3
FOR 561	Forest Communities of the Southeastern Coastal Plain	1
FOR 562	Forest Communities of the Southern Appalachians	1
FOR 565	Plant Community Ecology	4
FOR 574	Forest Mensuration and Modeling	3
FOR 575	Advanced Terrestrial Ecosystem Ecology	3
FOR 583	Tropical Forestry	3
FOR 595	Special Topics	1-6
FS 462	Postharvest Physiology	3
FS 562	Postharvest Physiology	3
FW 221	Conservation of Natural Resources	3
FW 404	Wildlife Habitat Management	3
GIS 512	Introduction to Environmental Remote Sensing	3
HS 131	Fruit & Vegetable Production	3
HS 144	Weeds & Diseases of Ornamentals	3
HS 200	Home Horticulture	3
HS 201	The World of Horticulture: Principles and Practices	3
HS 202	Home Plant Identification	3
HS 203	Home Plant Propagation	3
HS 204	Home Landscape Maintenance	3
HS 205	Home Food Production	3
HS 215	Agricultural Genetics	3
HS 242	Introduction to Small Scale Landscape Design	3
HS 250	Home Landscape Design: Creating Garden Spaces	3
HS 252	Landscape Graphic Communication	2
HS 272	Landscape Design/Build	6
HS 280	Hands-On-Horticulture	3
HS 290	Horticulture: Careers and Opportunities	1
HS 301	Plant Propagation	4
HS 302	Gardening with Herbaceous Perennials	3
HS 303	Ornamental Plant Identification I	3
HS 304	Ornamental Plant Identification II	3
HS 357	Landscape Grading and Drainage	4
HS 400	Residential Landscaping	6
HS 410	Community Food Systems	3
HS 411	Nursery Management	3
HS 416	Planting Design	4
HS 418	Digital Media Graphic for Landscape Designers	3
HS 420	Green Infrastructure	3
HS 421	Temperate-Zone Tree Fruits: Physiology and Culture	3
HS 422	Small Fruit Production	3
HS 423		3
HS 428	Service-Learning in Urban Agriculture Systems	1
HS 431	Vegetable Production	4

HS 432	Introduction to Permaculture	3
HS 433	Public Garden Administration	3
HS 440	Greenhouse Management	3
HS 442	Floriculture Crop Production	3
HS 451	Plant Nutrition	3
HS 462	Postharvest Physiology	3
HS 471	Landscape Ecosystem Management	4
HS 475	Horticulture Entrepreneurship	3
HS 476	Crop Physiology and Production in Controlled Environments	3
HS 480	Sustainable Food Production (capstone)	1
HS 491	Sustainable Agriculture Entrepreneurship Study Abroad	3
HS 492	Horticulture Internship	1-3
HS 493	Research Experience in Horticultural Science	1-3
HS 494	Teaching Experience in Horticultural Science	1-3
HS 495	Experimental Courses in Horticultural Science	1-6
HS 502	Plant Disease: Methods & Diagnosis	2
HS 516	Planting Design	4
HS 520	Green Infrastructure	3
HS 521	Temperate-Zone Tree Fruits: Physiology and Culture	3
HS 523		3
HS 532	Introduction to Permaculture	3
HS 533	Public Garden Administration	3
HS 541	Plant Breeding Methods	3
HS 550	Environmental Nursery Production	3
HS 551	Plant Nutrition	3
HS 562	Postharvest Physiology	3
HS 576	Crop Physiology and Production in Controlled Environments	3
HS 583		3
HS 590	Special Problems in Horticultural Science	1-6
NR 420	Watershed and Wetlands Hydrology	4
NR 460	Renewable Natural Resource Management and Policy	3
NR 491	Special Topics in Forestry and Related Natural Resources	1-4
NR 520	Watershed and Wetlands Hydrology	4
NR 560	Renewable Natural Resource Management and Policy	3
PP 144	Weeds & Diseases of Ornamentals	3
PP 318	Forest Pathology	3
PP 470	Advanced Turfgrass Pest Management	2
PP 502	Plant Disease: Methods & Diagnosis	2
SMT 202	Anatomy and Properties of Renewable Materials	3
SSC 428	Service-Learning in Urban Agriculture Systems	1
SSC 440	Geographic Information Systems (GIS) in Soil Science and Agriculture	3
SSC 462	Soil-Crop Management Systems	3

SSC 540	Geographic Information Systems (GIS) in Soil Science and Agriculture	3

Poultry Science Electives

Code	Title	Hours	Counts towards
ANS 425	Feed Manufacturing Technology	3	
ANS 525	Feed Manufacturing Technology	3	
FM 425	Feed Manufacturing Technology	3	
FM 525	Feed Manufacturing Technology	3	
NTR 425	Feed Manufacturing Technology	3	
NTR 525	Feed Manufacturing Technology	3	
PO 406	Physiological Aspects of Poultry Management	3	
PO 410	Production and Management of Game Birds in Confinement	3	
PO 411	Agrosecurity	3	
PO 425	Feed Manufacturing Technology	3	
PO 506	Physiological Aspects of Poultry Management	3	
PO 525	Feed Manufacturing Technology	3	

Semester Sequence

This is a sample.

First Year		
Fall Semester		**Hours**
AEE 101	Introduction to Career and Technical Education [1]	1
AEE 103	Fundamentals of Agricultural and Extension Education [2]	1
BIO 181	Introductory Biology: Ecology, Evolution, and Biodiversity	4
COM 110	Public Speaking	3
ENG 101	Academic Writing and Research	4
GEP Mathematical Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-mathematical-sciences/)		3
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		1
	Hours	**17**
Spring Semester		
AEE 226	Computer Applications and Information Technology in Agricultural & Extension Ed [1]	3
PO 201 & PO 202	Poultry Science and Production and Poultry Science and Production Laboratory	4
BIO 183	Introductory Biology: Cellular and Molecular Biology	4
GEP Mathematical Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-mathematical-sciences/)		3
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		1
	Hours	**15**
Second Year		
Fall Semester		
AEE 206	Introduction to Teaching Agriculture [1]	3
CH 101 & CH 102	Chemistry - A Molecular Science and General Chemistry Laboratory	4
BAET 201 or TDE 110	Shop Processes and Management or Materials & Processes Technology	3
Economics Elective (p. 1)		3
PO 290	Poultry Seminar	1
PO 340	Live Poultry and Poultry Product Evaluation, Grading, and Inspection	3
	Hours	**17**
Spring Semester		
ANS 150 & ANS 151	Introduction to Animal Science and Introduction to Animal Science Lab	4
PO 424	Poultry Meat Production	3
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		3
Plant Science Elective (p. 2)		3
GEP Interdisciplinary Perspectives (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-interdisciplinary-perspectives/)		3
	Hours	**16**
Third Year		
Fall Semester		
AEE 322	Experiential Learning in Agriculture	3
EDP 304	Educational Psychology	3
Poultry Science Elective (p. 7)		3
PO 421	Commercial Egg Production	3

SSC 200 & SSC 201	Soil Science and Soil Science Laboratory	4
	Hours	**16**
Spring Semester		
AEE 303	Administration and Supervision of Student Organizations	3
AEE 326	Teaching Diverse Learners in AED	3
ED 311	Classroom Assessment Principles and Practices [1]	2
ED 312	Classroom Assessment Principles and Practices Professional Learning Lab [1]	1
ELP 344	School and Society [1]	3
PO 435	Poultry Incubation & Breeding	4
	Hours	**16**
Fourth Year		
Fall Semester		
AEE 327	Conducting Summer Programs in Agricultural Education	1
AEE 426	Methods of Teaching Agriculture	3
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		3
GEP Interdisciplinary Perspectives (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-interdisciplinary-perspectives/)		2
GEP US Diversity, Equity, and Inclusion (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-usdei/)		3
	Hours	**12**
Spring Semester		
AEE 424	Planning Agricultural Educational Programs	3
AEE 427	Student Teaching in Agriculture	8
AEE 491	Seminar in Agricultural Education	1
	Hours	**12**
	Total Hours	**121**

[1] A minimum grade of C- is required for graduation. A minimum grade of C is required for teacher licensure.

[2] Incoming freshmen complete AEE 103 Fundamentals of Agricultural and Extension Education. Transfer students may complete ALS 103 Freshman Transitions and Diversity in Agriculture & Life Sciences or ALS 303 Transfer Transitions and Diversity in Agriculture & Life Sciences.