

# AGRICULTURE, BACHELOR OF SCIENCE (B.S.)

## Program Requirements

CIP Code: 01.0901

### Major

Code	Title	Hours
<b>University Graduation Requirements</b>		
General Education ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/</a> )		36
<i>Student Success Seminar</i>		
GSD 101	Foundations of Learning	3
Upper division courses (42 hrs. distributed throughout Major/ Supporting/Gen Ed/Free Electives categories)		
<b>Major Requirements</b>		
<i>Core Courses</i>		47
AGR 125	Principles of Animal Science	3
Choose from one of the following:		4
AGR 130 & AGR 131	Plant Science and Plant Science Laboratory	3
OHO 131 & OHO 132	Plant Science and Plant Science Laboratory	
AGR 115	Operation of Agricultural Equipment	3
AGR 213	Principles of Agricultural Mechanics and Energy Systems	3
AGR 215	Principles of Soils	3
AGR 216	Principles of Soils Laboratory	1
AGR 301 or AGR 349	Directed Work Experience Applied Learning in Agriculture	3
AGR 304	Pest Management	4
AGR 305	Professional Skills Seminar	1
AGR 308	Agricultural Economics	3
AGR 310	Principles of Agribusiness Management	3
AGR 319	Renewable and Sustainable Energy Systems	3
AGR 340	Conservation of Agricultural Resources	3
AGR 411	Senior Seminar	1
AGR 499 or AGR 509	Agricultural Advocacy and Issues Capstone Agriculture Research Methods and Interpretation	3
AGR 520	Global Food Systems	3
INF 104 or TEC 161	Computer Literacy with Software Applications Computer Applications in Technology	3
<i>Supporting Course Requirements</i>		
ACC 200	Survey of Accounting	3
BIO 111 & 111L or BIO 112 & 112L	Cell and Molecular Biology and Cell and Molecular Biology Lab (Element 4) <sup>G</sup> Ecology and Evolution and Ecology and Evolution Lab	
CHE 101 & 101L	Introductory Chemistry and Introductory Chemistry Lab (Element 4) <sup>G</sup>	
ECO 120	Economic Reasoning and Issues (Element 5B) <sup>G</sup>	
MAT 112A	Algebra: Polynomials <sup>G</sup>	

MAT 112B	Algebra: Functions & Matrices	
STA 215	Introduction to Statistical Reasoning (Element 2) <sup>G</sup>	
<b>Concentrations</b>		
Students must select one of the following Concentrations:		25-36
Agribusiness Management		
Agriculture Engineering Technology		
Agronomy, Soils and Natural Resources		
Livestock Management		
Fruit, Vegetable, Nursery and Greenhouse Production		
Turfgrass and Landscape		
<i>Free Electives</i>		0-4
<b>Total Hours</b>		<b>120-124</b>

### Agribusiness Management Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
AGR 126	Animal Science Laboratory	1
AGR 350	Agricultural Marketing	3
AGR 409	Agriculture Business Records and Analysis	3
AGR 440	Agricultural Financing	3
Plus six hours selected from upper division AGR and/or OHO courses		6
Plus one of the following programs:		9-12
<i>Advisor Approved Personalized Program</i>		
Choose from nine hours of advisor approved courses		
<i>Certificate in Corporate Communications</i>		
CCT 310	International Business Communication	
CCT 550	Integrated Corporate Communication	
BUS 207	Fund of Interpersonal Bus Comm	
or BUS 300	Professional Development Three	
or BUS 301	Essentials of Formal Communication	
<i>Certificate in Financial Literacy</i>		
FIN 201	Personal Money Management	
FIN 310	Entrepreneurial Finance	
FIN 311	Personal Financial Planning	
<i>Certificate in Marketing Research and Analytics</i>		
BUS 301	Essentials of Formal Communication	
or BUS 305	Essentials of Marketing	
MKT 455	Marketing Research and Analysis	
MKT 456	Qualitative Research in Marketing	
MKT 457	Experimental Design for Marketing	
<i>Certificate in Sales</i>		
BUS 301	Essentials of Formal Communication	
or BUS 305	Essentials of Marketing	
MKT 310	Professional Selling	
MKT 408	Sales Management	
MKT 431	Strategic Procurement	
<b>Total Hours</b>		<b>25-28</b>

### Agriculture Engineering Technology Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
AEM 195	Computer Aided Drafting	3

AEM 201	Metallic Material Processes	3
AEM 202	Introduction to Quality	3
AEM 301	Non-Metallic Material Processes	3
AEM 308	Methods of Lean Operations	3
AEM 310	Technical Communication	3
AEM 330	Material Testing and Metrology	3
AEM 352	Robotics and Automated Systems	3
AEM 407	Fundamentals of Project Management	3
AGR 362	Hydraulic Systems	2
<b>Total Hours</b>		<b>29</b>

### Agronomy, Soils and Natural Resources Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
AGR 126	Animal Science Laboratory	1
AGR 312	Ecology and Management of Grasslands and Pastures	4
AGR 345	Sustainable Agroecosystems	3
AGR 404	Advanced Pest Management	3
AGR 416	Soil Fertility and Management	3
AGR 430	Field Crop Production	3
AGR 570	Advanced Technical Agriculture:____	3
Plus nine hours selected from upper division AGR and/or OHO courses		9
<b>Total Hours</b>		<b>29</b>

### Fruit, Vegetable, Nursery and Greenhouse Production Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
AGR 404	Advanced Pest Management	3
AGR 416	Soil Fertility and Management	3
OHO 354	Irrigation Systems and Horticultural Equipment	3
OHO 365	Plant Identification	3
OHO 372	Horticulture Retail and Wholesale Management	2
OHO 375	Post Harvest Technology of Horticultural Crops	3
OHO 388	Greenhouse Operation and Management	3
Plus twelve hours of advisor approved electives		12
<b>Total Hours</b>		<b>32</b>

### Livestock Management Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
AGR 126	Animal Science Laboratory	1
AGR 225	Evaluation and Selection of Livestock	3
or AGR 330	Animal Products	
AGR 321	Feeds and Feeding	4
Plus two courses selected from the following:		7-8
AGR 326	Light Horse Production and Management	
AGR 327	Beef Production	
AGR 328	Swine Production	
AGR 329	Small Ruminant Production	
AGR 332	Poultry Production and Management	

AGR 380	Technical Management of Dairy Cattle	
Plus three courses selected from the following:		9-12
AGR 312	Ecology and Management of Grasslands and Pastures	
AGR 372	Topics and Laboratories in Animal Sciences	
AGR 373	Animal Diseases	
AGR 374	Genetics of Livestock Improvement	
AGR 375	Reproduction and Artificial Insemination of Domestic Animals	
AGR 376	Domestic Animal Anatomy	
AGR 377	Livestock Behavior and Welfare	
AGR 421	Animal Nutrient Metabolism	
Plus eight hours of advisor approved electives in AGR and/or OHO courses		8
<b>Total Hours</b>		<b>32-36</b>

### Turfgrass and Landscape Concentration

Code	Title	Hours
<b>Concentration Courses</b>		
AGR 404	Advanced Pest Management	3
AGR 416	Soil Fertility and Management	3
OHO 351	Turf Grass Management	4
OHO 354	Irrigation Systems and Horticultural Equipment	3
OHO 365	Plant Identification	3
OHO 370	Landscape Operations Management	3
Plus twelve hours of advisor approved electives		12
<b>Total Hours</b>		<b>31</b>

G Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.