

# AGRICULTURE, BACHELOR OF SCIENCE WITH A CONCENTRATION IN AGRICULTURE ENGINEERING TECHNOLOGY (B.S.)

## Program Requirements

CIP Code: 01.0301

### Summary Checklist for General Education

Code	Title	Hours
<b>Element 1</b>		
A:	Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
B:	Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
C:	Oral Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )	3
<b>Element 2</b>		
	Quantitative Reasoning ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/</a> )	3
<b>Element 3</b>		
A:	Arts ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )	3
B:	Humanities ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )	3
<b>Element 4</b>		
	Natural Sciences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/</a> )	6
<b>Element 5</b>		
A:	Historical Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )	3
B:	Social Behavioral Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )	3
<b>Element 6</b>		
	Diversity of Perspectives Experiences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/</a> )	6
<b>Total Hours</b>		<b>36</b>

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

## Major

Code	Title	Hours
<b>University Graduation Requirements</b>		
General Education		36
<i>Student Success Seminar</i>		
SCO 100	Student Success Seminar	1
Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
<b>Major Requirements</b>		
<i>College Requirement: Professional Skills Seminar</i>		
BUS 400	Professional Development Four (CR only, no hours)	0
<i>Core Courses</i>		
Choose from one of the following:		4
AGR 130 & AGR 131	Plant Science and Plant Science Laboratory	
OHO 131 & OHO 132	Plant Science and Plant Science Laboratory	
AGR 115	Operation of Agricultural Equipment	2
AGR 170	Appl Unmanned Aerial Sys Agri	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 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
<b>Concentrations</b>		
Students must select one of the following Concentrations:		
Agribusiness Management		
Agriculture Engineering Technology		44
Agronomy, Soils and Natural Resources		
Livestock Management		
Fruit, Vegetable, Nursery and Greenhouse Production		
Turfgrass and Landscape		
<i>Supporting Course Requirements</i>		
BIO 111 or BIO 112	Cell and Molecular Biology (Element 4) <sup>G</sup> or Ecology and Evolution	
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>	
Choose from one of the following:		3
CIS 212	Introduction to Computer Information Systems	
INF 104	Computer Literacy with Software Applications	
TEC 161	Computer Applications in Technology	
<i>Free Electives</i>		
Choose from 2 hours of free electives		2
<b>Total Hours</b>		<b>120</b>

**G**

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

**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 330	Material Testing and Metrology	3
AEM 352	Robotics and Automated Systems	3
AGR 362	Hydraulic Systems	2
AGR 383	Diesel Power Systems	3
AGR 570	Advanced Technical Agriculture:___	3
<i>Additional Supporting Course Requirements</i>		
STA 215	Introduction to Statistical Reasoning	3
Choose from one of the following: (included in General Education hours)		
MAT 112A & MAT 112B	Algebra: Polynomials and Algebra: Functions & Matrices	
MAT 114	College Algebra	
<i>Program Electives</i>		
Experiential Learning:		
Choose from three hours of the following:		3
AGR 301	Directed Work Experience	
AGR 302	Directed Work Experience- Management Practicum	
AGR 349	Applied Learning in Agriculture	
OHO 301	Directed Work Experience	
OHO 349	Applied Learning in Horticulture	
ACCT Capstone:		
Choose from one of the following:		3
AGR 499	Agricultural Advocacy and Issues Capstone	
AGR 509	Agriculture Research Methods and Interpretation	
OHO 498	Turf Grass Capstone	
OHO 499	Horticultural Issues Capstone	
AEM 308	Methods of Lean Operations	3
AEM 310W	Technical Communication	3
AEM 407	Fundamentals of Project Management	3
<b>Total Hours</b>		<b>44</b>