

CURRICULUM GUIDE
Agriculture, BS (Agriculture Engineering Technology)
2021-2022

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The schedule below is an **EXAMPLE** of how you can arrange your class schedule.
 Please consult your advisor for specific changes that may need to be made.

	Fall Semester	Spring Semester		
Freshman Year	BTO 100	1	AEM 195	3
	AEM 201	3	AGR 130 <i>or</i> OHO 131	3
	AGR 115	2	AGR 131 <i>or</i> OHO 132	1
	⁶ BIO 111 <i>or</i> 112 (fulfills Gen. Ed. 4)	3	AGR 213	3
	MAT 112A/B <i>or</i> 114 (fulfills Gen. Ed. 2)	4	CIS 212, INF 104 <i>or</i> TEC 161	3
	Gen. Ed. 1A (ENG 101)	3	Gen. Ed. 1B (ENG 102)	3
	TOTAL	16	TOTAL	16
Sophomore Year	AEM 330	3	AEM 301 (spring only)	3
	AGR 304	4	AGR 215	3
	†AGR/OHO (experimental learning elective)	1	AGR 216	1
	⁶ CHE 101 (fulfills Gen. Ed. 4)	3	AGR 308	3
	CHE 101L	1	STA 215	3
	⁶ ECO 120 (fulfills Gen. Ed. 5B)	3	Gen. Ed. 1C (Oral Comm.)	3
	TOTAL	15	TOTAL	16
Junior Year	AEM 308	3	AEM 202	3
	AGR 170	3	AEM 352	3
	AGR 305	1	AGR 319	3
	AGR 310	3	Gen. Ed. 3A (Arts)	3
	AGR 340	3	Gen. Ed. 6 (Diversity)	3
	TOTAL	13	TOTAL	15
Senior Year	AEM 407	3	AEM 310W	3
	AGR 362	2	AGR 411	1
	AGR 383 (fall only)	3	BTS 400	0
	AGR 570	3	†AGR/OHO (experimental learning elective)	1
	†AGR/OHO (experimental learning elective)	1	AGR 499, 509, OHO 498, <i>or</i> 499 (ACCT capstone)	3
	Gen. Ed. 3B (Humanities)	3	Gen. Ed. 5A (History)	3
	TOTAL	15	TOTAL	14
TOTAL HOURS TO DEGREE COMPLETION		120		

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
BTO 100	Business and Technology Orientation (1)
COLLEGE OF BUSINESS REQUIREMENT	
BTS 400	College to Careers Seminar (0)
CORE COURSE REQUIREMENTS (40)	
[AGR 130 <i>and</i> AGR 131 <i>OR</i> OHO 131 <i>and</i> OHO 132]	Plant Science (3) Plant Science Laboratory (1) Plant Science (3) Plant Science Laboratory (1)
AGR 115	Operation of Agricultural Equipment (2) (fall only)
AGR 170	Application of Unmanned Aircraft Systems in Agriculture (3)
AGR 213	Principles of Agricultural Mechanics and Energy Systems (3)
[AGR 215 AGR 216]	Principles of Soils (3) 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)
Bracketed items must be taken concurrently	
†PLUS THREE (3) HOURS selected from (experimental learning):	
AGR 301	Directed Work Experience (1-4)
AGR 302	Directed Work Experience-Management Practicum (3)
AGR 349	Applied Learning in Agriculture (.5-8)
OHO 301	Directed Work Experience (1-4)
OHO 349	Applied Learning in Horticulture (.5-8)
††PLUS ONE (1) COURSE selected from (ACCT Capstone):	
AGR 499	Agricultural Advocacy and Issues Capstone (3)
AGR 509	Agricultural Research Methods and Interpretation (3) (fall only)
OHO 498	Turfgrass Capstone (3)
OHO 499	Horticultural Issues Capstone (3)
AGRICULTURE ENGINEERING TECHNOLOGY CONCENTRATION REQUIREMENTS (35)	
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) (spring only)
AEM 308	Methods of Lean Operations (3)
AEM 310W	Technical Communication (3) (writing intensive)
AEM 330	Materials Testing and Metrology (3)
AEM 352	Robotics and Automated Systems (3)
AGR 362	Hydraulic Systems (2)
AGR 383	Diesel Power Systems (3) (fall only)
AEM 407	Fundamentals of Project Management (3)
AGR 570	Advanced Technical Agriculture: _____ (3)
SUPPORTING COURSE REQUIREMENTS (8)	
⁶ BIO 111 <i>or</i> ⁶ BIO 112	Cell and Molecular Biology (4) Ecology and Evolution (4)
[⁶ CHE 101 <i>and</i> CHE 101L]	Introductory Chemistry (3) Introductory Chemistry Lab (1)
CIS 212 <i>or</i> INF 104 <i>or</i> TEC 161	Introduction to Computer Information Systems (3) Computer Literacy with Software Applications (3) Computer Applications in Technology (3)
⁶ ECO 120	Economic Reasoning and Issues (3)
[⁶ MAT 112A <i>and</i> ⁶ MAT 112B <i>or</i> ⁶ MAT 114]	Algebra: Polynomials (1.5) Algebra: Functions and Matrices (1.5) College Algebra (3)
STA 215	Introduction to Statistical Reasoning (3)
FREE ELECTIVES (0)	

⁶ Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division AEM, AGR, and OHO courses.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300 level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

Applied Critical & Creative Thinking (ACCT) Requirement: Agriculture majors will fulfill ACCT with AGR 499, AGR 509, OHO 498, or OHO 499 (Credit hours are incorporated into program requirements.)