

**Undergraduate Curriculum in Agricultural Engineering
Land and Water Resources Engineering Option**

2019-2020 Catalog

Total Credits 126

First Year (32 cr.)

Semester 1 (16 cr.)		Semester 2 (16 cr.)	
R	Engr 101 Orientation (FS)	1	A B E 110 Experiencing ABE (S)
3	A B E 170 Graphics and Design (FS)	3	A B E 160 Engineering Problems (FS)
4	Chem 167 General Chemistry (FS)	4	Math 166 Calculus II (FS)
1	Chem 167L General Chemistry Lab (FS)	5	Phys 221 Classical Physics I (FSSS)
4	Math 165 Calculus I (FS)	3	Engl 250 WOVE Composition (FSSS)
3	Engl 150 Crit. Think. and Comm.(FSSS)		
1	Lib 160 Library Instruction (FSSS)		

Second Year (30 cr.)

Semester 3 (15 cr.)		Semester 4 (15 cr.)	
3	A B E 216 Fundamentals of AE (F)	2	A B E 218 Project Mgmt & Design (S)
3	EM 274 Statics of Engineering (FSSS)	1	A B E 201 Sophomore Seminar (FS)
3	Math 266 Differential Equations (FSSS)	3	EM 324 Mechanics of Materials (FSSS)
3	Agron 181 Intro to Crop Science (FS)	3	ME 231 Thermodynamics (FS)
3	Agron 182 Intro to Soil Science (FS)	3	Stat 305 Engr Statistics (FSSS)
		3	Biol 251 Biological Processes in the Environment (S)
		or	Biol 211 Principles of Biology I (FSSS)

Third Year (33 cr.)

Semester 5 (17 cr.)		Semester 6 (16 cr.)	
3	A B E 316 Systems Modeling (FS)	1	A B E 273 CAD for Proc. Fac. And Land Use Planning
4	A B E 363 Electric Power and Electronics (FS)	3	CE 326 Principles of Environmental Eng. (FS)
1	EM 327 Mechanics of Materials Lab (FSSS)	3	CE 372 Hydrology/Hydraulics (FS)
3	EM 378 Mechanics of Fluids (FSSS)	2	Micro 201 Introduction to Microbiology (FS)
3	→ GIS Elective	1	Micro 201L Introduction to Microbiology Lab (FS)
3	→ International Perspective Elective	3	→ ABE Breadth Elective
		3	→ U.S. Diversity Elective

Fourth Year (31 cr.)

Semester 7 (17 cr.)		Semester 8 (14 cr.)	
2	A B E 415 AE Design I (FS)	2	A B E 416 AE Design II (FS)
3	A B E 404 Instrumentation for Ag and Bio Engr (F)	3	IE 305 Engineering Economic Analysis (FSSS)
3	A B E 431 Soil and Water Conservation (F)	3	→ Subsurface Systems Elective
3	Geol 201 Geology for Engrs and Env Sci (F)	3	→ Water Quality Elective
3	→ Communication Elective (FSSS)	3	→ SS/H Elective
3	→ SS/H Elective		

Highly recommended (not required):

1 A B E 418 Fundamentals of Engr Review

***Please check the current catalog and Schedule of Classes for most recent offerings.**