

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

2023-2024 Catalog

Total Credits 126

**First Year (32 cr.)**

<b>Semester 1 (16 cr.)</b>			<b>Semester 2 (16 cr.)</b>		
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 (S)
4	Chem 167	General Chemistry (FS)	4	Math 166	Calculus II (FS)
1	Chem 167L	General Chemistry Lab (FS)	4	Phys 231	Classical Physics I (FSSS)
4	Math 165	Calculus I (FS)	1	Phys 231L	Classical Physics I Lab (FS)
3	Engl 150	Crit. Think. and Com (FSSS)	3	Engl 250	WOVE Composition (FSSS)
1	Lib 160	Library Instruction (FSSS)			

**Second Year (30 cr.)**

<b>Semester 3 (15 cr.)</b>			<b>Semester 4 (15 cr.)</b>		
3	A B E 216	Fundamentals of AE (F)	2	A B E 218	Project Mgmt & Design (S)
3	C E 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 (FSSS)
3	Agron 182	Intro to Soil Science (FS)	3	Stat 305	Engr Statistics (FSSS)
			3	Biol 251	Biological Processes in the Environment (S)
			<b>or</b>	Biol 211	Principles of Biology I (FS)

**Third Year (33 cr.)**

<b>Semester 5 (17 cr.)</b>			<b>Semester 6 (16 cr.)</b>		
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)
3	A B E 378	Mechanics of Fluids (FS)	3	CE 372	Hydrology/Hydraulics (FS)
1	→	Lab Elective ( <i>ABE 378L preferred</i> )	2	Micro 201	Introduction to Microbiology (FS)
3	→	GIS Elective	1	Micro 201L	Introduction to Microbiology Lab (FS)
3	→	Communication Elective	3	→	ABE Breadth Elective
			3	→	U.S. Diversity Elective

**Fourth Year (31 cr.)**

<b>Semester 7 (17 cr.)</b>			<b>Semester 8 (14 cr.)</b>		
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	→	International Perspectives Elective	3	→	SS/H Elective
3	→	SS/H Elective			

\*\*\**Highly recommended (not required)*\*\*\*

*FE Exam See adviser for review materials*

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