

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

2024-2025 Catalog

Total Credits 126

**First Year (32 cr.)**

<b>Semester 1 (16 cr.)</b>			<b>Semester 2 (16 cr.)</b>		
R	Engr 1010	Orientation (FS)	1	A B E 1100	Experiencing ABE (S)
3	A B E 1700	Graphics and Design (FS)	3	A B E 1600	Engineering Problems (S)
4	Chem 1670	General Chemistry (FS)	4	Math 1660	Calculus II (FS)
1	Chem 1670L	General Chemistry Lab (FS)	4	Phys 2310	Classical Physics I (FSSS)
4	Math 1650	Calculus I (FS)	1	Phys 2310L	Classical Physics I Lab (FS)
3	Engr 1500	Crit. Think. and Comm.(FSSS)	3	Engr 2500	WOVE Composition (FSSS)
1	Lib 1600	Library Instruction (FSSS)			

**Second Year (30 cr.)**

<b>Semester 3 (15 cr.)</b>			<b>Semester 4 (15 cr.)</b>		
3	A B E 2160	Fundamentals of AE (F)	2	ABE 2180	Project Mgmt & Design (S)
3	C E 2740	Statics of Engineering (FSSS)	1	ABE 2010	Sophomore Seminar (FS)
3	Math 2660	Differential Equations (FSSS)	3	EM 3240	Mechanics of Materials (FSSS)
3	Agron 1810	Intro to Crop Science (FS)	3	ME 2310	Thermodynamics (FSSS)
3	Agron 1820	Intro to Soil Science (FS)	3	Stat 3050	Engr Statistics (FSSS)
			3	Biol 2510	Biological Processes in the Environment (S)
			<b>or</b>	Biol 2110	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 3160	Systems Modeling (FS)	1	A B E 2730	CAD for Proc. Fac. And Land Use Planning
4	A B E 3630	Electric Power and Electronics (FS)	3	CE 3260	Principles of Environmental Eng. (FS)
3	A B E 3780	Mechanics of Fluids (FS)	3	CE 3720	Hydrology/Hydraulics (FS)
1	EM 3270	Mechanics of Materials Lab (FS)	2	Micro 2010	Introduction to Microbiology (FS)
3	→	GIS Elective	1	Micro 2010L	Introduction to Microbiology Lab (FS)
3	→	Communication Elective	3	→	ABE Breadth Elective
			3	→	U.S. Cultures & Communities Elective

**Fourth Year (31 cr.)**

<b>Semester 7 (17 cr.)</b>			<b>Semester 8 (14 cr.)</b>		
2	A B E 4150	AE Design I (FS)	2	ABE 4160	AE Design II (FS)
3	A B E 4040	Instrumentation for Ag and Bio Engr (F)	3	IE 3050	Engineering Economic Analysis (FSSS)
3	A B E 4310	Soil and Water Conservation (F)	3	→	Subsurface Systems Elective
3	Geol 2010	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.**