

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

2013-2014 Catalog

Total Credits 128

**First Year (32 cr.)**

<b>Semester 1 (16 cr.)</b>		<b>Semester 2 (16 cr.)</b>	
R	Engr 101 Orientation (FS)	1	AE 110 Experiencing ABE (S)
3	AE 170 Graphics and Design (FS)	3	Engr 160 Engineering Problems (FS)
4	Math 165 Calculus I (FS)	4	Math 166 Calculus II (FS)
4	Chem 167 General Chemistry (FS)	5	Phys 221 Classical Physics I (FSSS)
1	Chem 167L General Chemistry Lab (FS)	3	Biol 211 Principles of Biology I (FSSS)
3	Engl 150 Crit. Think. and Comm.(FSSS)		
1	Lib 160 Library Instruction (FSSS)		

**Second Year (33 cr.)**

<b>Semester 3 (17 cr.)</b>		<b>Semester 4 (16 cr.)</b>	
3	EM 274 Statics of Engineering (FSSS)	1	AE 201 Sophomore Seminar (FS)
3	Math 266 Differential Equations (FSSS)	3	Stat 305 Engr Statistics (FSSS)
3	AE 216 Fundamentals of AE (F)	3	EM 324 Mechanics of Materials (FSSS)
5	Phys 222 Classical Physics II (FSSS)	1	EM 327 Mechanics of Materials Lab (FSSS)
3	Elective SSH Elective	3	ME 231 Thermodynamics (FS)
		3	Engl 250 WOVE Composition (FSSS)
		2	AE 218 Project Mgmt & Design (S)

**Third Year (32 cr.)**

<b>Semester 5 (16 cr.)</b>		<b>Semester 6 (16 cr.)</b>	
4	AE 363 Electric Power and Electronics (F)	3	CE 372 Hydrology/Hydraulics (FS)
3	AE 408 GIS and Natural Res. Mgmt (F)	3	Agron 154 Fundamentals of Soil Science (FS)
3	EM 378 Mechanics of Fluids (FSSS)	3	CE 326 Principles of Environmental Eng. (FS)
3	Elective International Perspective Elective	2	Micro 201 Introduction to Microbiology (FS)
3	AE 316 Systems Modeling (F)	1	Micro 201L Introduction to Microbiology Lab (FS)
		3	Elective ABE Breadth Elective (or SSH Elective)
		1	AE 271/272 Engineering Graphics (FS)

**Fourth Year (31 cr.)**

<b>Semester 7 (17 cr.)</b>		<b>Semester 8 (14 cr.)</b>	
3	AE 404 Instrumentation for Ag and Bio Engr (F)	3	AE Elect Water Quality Elective
2	AE 415 AE Design I (FS)	3	AE Elect Structures Elective
3	AE 431 Soil and Water Conservation (F)	3	Elective Subsurface Systems Elective
3	Geol 201 Geology for Engrs and Env Sci (F)	2	AE 416 AE Design II (FS)
3	Elective SSH elective (or ABE Breadth Elective)	3	Elective US Diversity Elective
3	Elective Communication Elective (FSSS)		

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