

**Undergraduate Curriculum in Agricultural Engineering  
Power & Machinery Engineering Option**

2011-2012 Catalog  
Total Credits 127.5

**First Year (31.5 cr.)**

<b>Semester 1 (15.5 cr.)</b>		<b>Semester 2 (16 cr.)</b>	
R	Engr101 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	SS&H Elective (FSSS)
3	Engl 150 Crit. Think. and Comm.(FSSS)		
.5	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	Mat E 273 Principles of Mat Science & Engr (FSSS)	2	AE 218 Project Mgmt & Design (S)
5	Phys 222 Classical Physics II (FSSS)	3	Stat 305 Engr Statistics (FSSS)
3	Agron 154 Fundamentals of Soil Science (FS)	3	EM 324 Mechanics of Materials (FSSS)
3	AE 216 Fund. Ag. and Biol. Engineering (F)	1	EM 327 Mechanics of Materials Lab (FSSS)
		3	Math 266 Differential Equations (FSSS)
		3	Engl 250 WOVE Composition (FSSS)

**Third Year (33 cr.)**

<b>Semester 5 (17 cr.)</b>		<b>Semester 6 (16 cr.)</b>	
4	AE 363 Electric Power and Electronics (F)	3	AE 342 Tractor Power (S)
3	AE 340 Ag Field Machinery (F)	4	ME 324 Manufacturing (FS)
3	EM 345 Dynamics (FSSS)	3	EM 378 Mechanics of Fluids (FSSS)
3	ME 231 Thermodynamics (FS)	3	Biol 211 Principles of Biol I (FSSS)
3	AE 316 Systems Modeling (F)	3	Communication Elective (FSSS)
1	AE 271 or Modeling (FS)		
	272		

**Fourth Year (30 cr.)**

<b>Semester 7 (17 cr.)</b>		<b>Semester 8 (13 cr.)</b>	
3	AE 404 Instrumentation for Ag and Bio Engr (F)	2	AE 416 AE Design II (FS)
2	AE 415 AE Design I (FS)	3	AE Elective
3	AE 413 Fluid Power Engineering (F)	3	Diversity Elective
3	ME 325 Machine Design (FS)	5	Technical Elective
3	SS & H Elective (FSSS)		
3	International Elective (FSSS)		