

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

2012-2013 Catalog

Total Credits 128

First Year (32 cr.)

Semester 1 (16 cr.)

R	Engr101	Orientation (FS)
3	AE 170	Graphics and Design (FS)
4	Math 165	Calculus I (FS)
4	Chem 167	General Chemistry (FS)
1	Chem 167L	General Chemistry Lab (FS)
3	Engl 150	Crit. Think. and Comm.(FSSS)
1	Lib 160	Library Instruction (FSSS)

Semester 2 (16 cr.)

1	AE 110	Experiencing ABE (S)
3	Engr 160	Engineering Problems (FS)
4	Math 166	Calculus II (FS)
5	Phys 221	Classical Physics I (FSSS)
3	Elective	SS&H Elective (FSSS)

Second Year (33 cr.)

Semester 3 (17 cr.)

3	EM 274	Statics of Engineering (FSSS)
3	Mat E 273	Principles of Mat Science & Engr (FSSS)
5	Phys 222	Classical Physics II (FSSS)
3	Agron 154	Fundamentals of Soil Science (FS)
3	AE 216	Fund. Ag. and Biol. Engineering (F)

Semester 4 (16 cr.)

1	AE 201	Sophomore Seminar (FS)
2	AE 218	Project Mgmt & Design (S)
3	Stat 305	Engr Statistics (FSSS)
3	EM 324	Mechanics of Materials (FSSS)
1	EM 327	Mechanics of Materials Lab (FSSS)
3	Math 266	Differential Equations (FSSS)
3	Engl 250	WOVE Composition (FSSS)

Third Year (33 cr.)

Semester 5 (17 cr.)

4	AE 363	Electric Power and Electronics (F)
3	AE 340	Ag Field Machinery (F)
3	EM 345	Dynamics (FSSS)
3	ME 231	Thermodynamics (FS)
3	AE 316	Systems Modeling (F)
1	AE 271 or 272	Modeling (FS)

Semester 6 (16 cr.)

3	AE 342	Tractor Power (S)
4	ME 324	Manufacturing (FS)
3	EM 378	Mechanics of Fluids (FSSS)
3	Biol 211	Principles of Biol I (FSSS)
3	Elective	Communication Elective (FSSS)

Fourth Year (30 cr.)

Semester 7 (17 cr.)

3	AE 404	Instrumentation for Ag and Bio Engr (F)
2	AE 415	AE Design I (FS)
3	AE 413	Fluid Power Engineering (F)
3	ME 325	Machine Design (FS)
3	Elective	SS & H Elective (FSSS)
3	Elective	International Elective (FSSS)

Semester 8 (13 cr.)

2	AE 416	AE Design II (FS)
3	Elective	AE Elective
3	Elective	Diversity Elective
5	Elective	Technical Elective