

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

2021-2022 Catalog

Total Credits 128

First Year (32 cr.)

Semester 1 (16 cr.)		Semester 2 (16 cr.)		
R	Engr101	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 (FS)
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 (FSSS)
3	Engl 150	Crit. Think. and Comm.(FSSS)	3 Engl 250	WOVE Composition (FSSS)
1	Lib 160	Library Instruction (FSSS)		

Second Year (30 cr.)

Semester 3 (15 cr.)		Semester 4 (15 cr.)		
3	A B E 216	Fund. Ag. and Biol. Engineering (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	Mat E 273	Principles of Mat Science & Engr (FSSS)	3 EM 324	Mechanics of Materials (FSSS)
3	Agron 182	Introduction to Soil Science (FS)	3 Math 266	Differential Equations (FSSS)
3	→	Math/Science Elective	3 Stat 305	Engr Statistics (FSSS)
			3 →	International Perspectives Elective

Third Year (32 cr.)

Semester 5 (17 cr.)		Semester 6 (15 cr.)		
3	A B E 340	Ag Field Machinery (F)	3 A B E 316	Systems Modeling (FS)
4	A B E 363	Electric Power and Electronics (FS)	3 A B E 342	Tractor Power (S)
1	EM 327	Mechanics of Materials Lab (FSSS)	3 A B E 378	Mechanics of Fluids (FS)
3	M E 231	Thermodynamics (FS)	1 M E 324L	Manufacturing Engr Lab (FSSS)
3	M E 345	Dynamics (FSSS)	2 →	Computer Graphics Elective
3	→	Communication Elective	3 Biol 211	Principles of Biol I (FSSS)
			or Biol 251	Biological Processes in the Environment (S)

Fourth Year (34 cr.)

Semester 7 (17 cr.)		Semester 8 (17 cr.)		
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 A B E 410	Elect. Systems Integration (S)
3	A B E 413	Fluid Power Engineering (F)	3 →	ABE Elective
3	M E 324	Manufacturing Engineering (FSSS)	3 I E 305	Engineering Economic Analysis (FSSS)
3	M E 325	Machine Design (FS)	3 →	SS/H Elective
3	→	US Diversity Elective	3 →	SS/H Elective

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