

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

2023-2024 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 (S)
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 (FS)
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 (18 cr.)		Semester 6 (14 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)
2	→ Computer Graphics Elective	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)	1	→ Lab Elective (<i>ABE 378L preferred</i>)
3	→ Communication Elective	3	Biol 211 Principles of Biol I (FS)
		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 Breadth Elective
3	M E 324 Manufacturing Engineering (FSSS)	3	I E 305 Engineering Economic Analysis (FSSS)
3	M E 325 Machine Design (FSSS)	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*