

**Undergraduate Curriculum in Agricultural Engineering  
Animal Production Systems Engineering Option**

2019-2020 Catalog

Total Credits 128

**First Year (32 cr.)**

Semester 1 (16 cr.)		Semester 2 (16 cr.)	
R	Engr 101 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 (FSSS)
1	Chem 167L General Chemistry Lab (FS)	5	Phys 221 Classical Physics I (FSSS)
4	Math 165 Calculus I (FSSS)	3	Engr 250 WOVE Composition (FSSS)
3	Engl 150 Crit. Think. and Comm.(FSSS)		
1	Lib 160 Library Instruction (FSSS)		

**Second Year (30 cr.)**

Semester 3 (15 cr.)		Semester 4 (15 cr.)	
3	A B E 216 Fundamentals of AE (F)	2	A B E 218 Project Mgmt & Design (S)
3	EM 274 Statics of Engineering (FSSS)	1	A B E 201 Sophomore Seminar (FS)
3	Math 266 Differential Equations (FSSS)	3	EM 324 Mechanics of Materials (FSSS)
3	XXX Math/Science Elective	3	ME 231 Thermodynamics (FS)
3	→ U.S. Diversity Elective (FSSS)	3	Stat 305 Engr Statistics (FSSS)
		3	Biol 211 Principles of Biology I (FSSS)
		or	BIOL 251 Biological Processes in the Environment (S)

**Third Year (32 cr.)**

Semester 5 (16 cr.)		Semester 6 (16 cr.)	
3	A B E 316 Systems Modeling (FS)	3	A B E 478* Design of Ag Structures (S-odd#)
4	A B E 363 Electric Power and Electronics (FS)	3	CE 333 Structural Steel Design I (FS)
3	CE 332 Structural Analysis I (FS)	3	IE 305 Engineering Economic Analysis (FSSS)
1	EM 327 Mechanics of Materials Lab (FSSS)	1	→ Computer Graphic Elective (ABE 273 preferred)
3	EM 378 Mechanics of Fluids (FSSS)	3	→ Communications Elective (FSSS)
2	AN S 114 Survey of the Animal Industry (FS)	3	→ International Perspective Elective (FSSS)

**Fourth Year (34 cr.)**

Semester 7 (18 cr.)		Semester 8 (16 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 469 Grain Processing and Handling (S)
4	ME 436 Heat Transfer (FSSS)	3	A B E 472 Environmental Systems (S-even#)
3	→ ABE Elective (FS)	2	A B E 475 APSE Practicum (FS)
3	→ An Sci/Agron Elective (FS)	3	CE 334 Reinforced Concrete Design I (FS)
3	→ SS/H Elective (FSSS)	3	→ SS/H Elective (FSSS)
			*** <i>Highly recommended (not required):</i> ***
		1	A B E 418 Fundamentals of Engr Review

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

\* A B E 472 or A B E 478 can be taken spring semester, junior year.

Updated 4/9/19