

Undergraduate Curriculum in Agricultural Engineering  
Animal Production Systems Engineering Option

2017-2018 Catalog

Total Credits 128

**First Year (32 cr.)**

Semester 1 (16 cr.)		Semester 2 (16 cr.)	
R	Engr 101	Orientation (FS)	1
		1 A B E 110	Experiencing ABE (S)
3	A B E 170	Graphics and Design (FS)	3
		3 A B E 160	Engineering Problems (FS)
4	Chem 167	General Chemistry (FS)	4
		4 Math 166	Calculus II (FSSS)
1	Chem 167L	General Chemistry Lab (FS)	5
		5 Phys 221	Classical Physics I (FSSS)
4	Math 165	Calculus I (FSSS)	3
		3 Engl 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
		2 A B E 218	Project Mgmt & Design (S)
3	EM 274	Statics of Engineering (FSSS)	1
		1 A B E 201	Sophomore Seminar (FS)
3	Math 266	Differential Equations (FSSS)	3
		3 EM 324	Mechanics of Materials (FSSS)
3	XXX	Math/Science Elective	3
		3 ME 231	Thermodynamics (FS)
3	→	U.S. Diversity Elective (FSSS)	3
		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
		3 A B E 478*	Design of Ag Structures (S-odd#)
4	A B E 363	Electric Power and Electronics (FS)	3
		3 CE 333	Structural Steel Design I (FS)
3	CE 332	Structural Analysis I (FS)	3
		3 IE 305	Engineering Economic Analysis (FSSS)
1	EM 327	Mechanics of Materials Lab (FSSS)	1
		1 →	Computer Graphic Elective (ABE 273 preferred)
3	EM 378	Mechanics of Fluids (FSSS)	3
		3 →	Communications Elective (FSSS)
2	AN S 114	Survey of the Animal Industry (FS)	3
		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
		2 A B E 416	AE Design II (FS)
3	A B E 404	Instrumentation for Ag and Bio Engr (F)	3
		3 A B E 469	Grain Processing and Handling (S)
4	ME 436	Heat Transfer (FSSS)	3
		3 A B E 472	Environmental Systems (S-even#)
3	→	ABE Elective (FS)	2
		2 A B E 475	APSE Practicum (FS)
3	→	An Sci/Agron Elective (FS)	3
		3 CE 334	Reinforced Concrete Design I (FS)
3	→	SS&H Elective (FSSS)	3
		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.