

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

2023-2024 Catalog

Total Credits 128

**First Year (32 cr.)**

<b>Semester 1 (16 cr.)</b>			<b>Semester 2 (16 cr.)</b>		
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 (S)
4	Chem 167	General Chemistry (FS)	4	Math 166	Calculus II (FSSS)
1	Chem 167L	General Chemistry Lab (FS)	4	Phys 231	Classical Physics I (FSSS)
4	Math 165	Calculus I (FSSS)	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 (31 cr.)**

<b>Semester 3 (16 cr.)</b>			<b>Semester 4 (15 cr.)</b>		
3	A B E 216	Fundamentals of AE (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	Math 266	Differential Equations (FSSS)	3	EM 324	Mechanics of Materials (FSSS)
3	TSM 327	Animal Production Systems (F)	3	ME 231	Thermodynamics (FS)
1	A B E 327L	Animal Production Systems Design Lab (F)	3	Stat 305	Engr Statistics (FSSS)
3	→	U.S. Diversity Elective	3	Biol 211	Principles of Biology I (FS)
			<b>or</b>	BIOL 251	Biological Processes in the Environment (S)

**Third Year (33 cr.)**

<b>Semester 5 (17 cr.)</b>			<b>Semester 6 (16 cr.)</b>		
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	A B E 378	Mechanics of Fluids (FS)	3	IE 305	Engineering Economic Analysis (FSSS)
3	CE 332	Structural Analysis I (FS)	1	→	Computer Graphic Elective ( <i>ABE 273 preferred</i> )
1	→	Lab Elective ( <i>EM 327; req for C E 333 &amp; 334</i> )	3	→	Communication Elective
3	→	Math/Science Elective	3	→	International Perspective Elective

**Fourth Year (32 cr.)**

<b>Semester 7 (18 cr.)</b>			<b>Semester 8 (14 cr.)</b>		
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	→	APS Engineering Elective ( <i>plan for prereq.'s</i> )	3	A B E 472*	Environmental Systems (S-even#)
3	→	ABE Elective	3	CE 334	Reinforced Concrete Design I (FS)
3	→	An Sci/Hort Elective	3	→	SS/H Elective
3	→	SS/H Elective			

\*\*\*Highly recommended (not required) \*\*\*  
FE Exam See adviser for review materials

**\*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 2/24/23