

# IOWA STATE UNIVERSITY

Agricultural and Biosystems Engineering

## B.S. in Agricultural Engineering Agricultural & Environmental Systems Option

\* A typical 4-year program of study: 127.5 credits to graduate \*

First Year						
Engr 101 Orientation (R)	AE 170X Graphics/Design (3)	Math 165 Calculus I (4)	Chem 167 Chemistry (4)	Chem 167L Chemistry Lab (1)	Engl 150 Critical Think Communication (3)	Lib 160 Library (0.5)
AE 110 Experiencing ABE (1)	Engr 160 Engr Problems/ Computation (3)	Math 166 Calculus II (4)	Physics 221 Classical Physics I (5)	SSH Elective (3)		
Sophomore						
SSH Elective (3)	EM 274 Statics (3)	Math 266 Differential Equations (3)	Physics 222 Classical Physics II (5)	Biol 211 Princ of Biol I (3)		
AE 201 Sophomore Seminar (1)	AE 216 AE Fundamentals (3)	EM 324 Materials of Materials (3)	EM 327 Materials Lab (1)	ME 330 Thermodynamics (3)	Stat 305 Engr Statistics (3)	Engl 250 WOVE Comp (3)
Junior						
AE 340 Ag Field Machinery (3)	AE 363 Electric Power/ Electronics (4)	EM 378 Mechanics of Fluids (3)	CE 332 Structural Analysis I (3)	AE 316 Systems Modeling (3)		
Free Elective (1)	AE 271 or 272 Modeling (1)	CE 372 Hydrology/ Hydraulics (4)	Technical Elective (4)	Biological Elective (3)	Communication Elective (3)	
Senior						
Free Elective (1)	AE 415 AE Design I (2)	AE 431 Natural Resource (3)	AE 404 Instrumentation (3)	Technical Elective (3)	Diversity Elective (3)	
Technical Elective (3)	AE 416 AE Design II (2)	AE 472 Environmental Systems (4)	Technical Elective (3)	International Elective (3)		

<b>KEY</b>	<span style="background-color: yellow; border: 1px solid black; padding: 2px;"> </span> AE Program	<span style="background-color: magenta; border: 1px solid black; padding: 2px;"> </span> Technical Electives	<span style="background-color: lightgreen; border: 1px solid black; padding: 2px;"> </span> Math, Physical & Biological Sciences
	<span style="background-color: lightblue; border: 1px solid black; padding: 2px;"> </span> SSH Electives	<span style="background-color: orange; border: 1px solid black; padding: 2px;"> </span> Communication Skills	<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">3</span> Number of Credits