

Agricultural Engineering
 Agriculture Power and Machinery Engineering Option
 2013-2014 Catalog
 128 Total Credits

First Year

Semester 1

- 4 Chem 167 (Chemistry I)
- 1 Chem 167L (Chemistry I Lab)
- 3 Engl 150 (Critical Think & Comm)
- R Engr 101 (Engineering Orientation)
- 3 AE 170 (Engineering Graphics)
- 4 Math 165 (Calculus I)
- 1 Lib 160 (Library)

16 Total Credits

Semester 2

- 1 AE 110 (Experience AE)
- 3 Engr 160 (Engr Problem Solving)
- 4 Math 166 (Calculus II)
- 5 Phys 221 (Classical Physics I)
- 3 SSH Elective

16 Total Credits

Sophomore Year

Semester 3

- 3 EM 274 (Statics)
- 5 Physics 222 (Classical Physics II)
- 3 Agron 154 (Soil Science)
- 3 MatE 273 (Principles of Mat E)
- 3 AE 216 (Ag Engr Fundamentals)

17 Total Credits

Semester 4

- 1 AE 201 (Sophomore Seminar)
- 2 AE 218 (Project Mgmt and Design)
- 3 EM 324 (Mechanics of Materials)
- 1 EM 327 (Mech of Materials Lab)
- 3 Math 266 (Differential Equations)
- 3 Engl 250 (WOVE Comp)
- 3 Stat 305 (Engineering Statistics)

16 Total Credits

Junior Year

Semester 5

- 4 AE 363 (App of Electric Power)
- 3 AE 340 (Ag Field Machinery)
- 3 AE 316 (Systems Modeling)
- 3 ME 231 (Thermodynamics)
- 3 EM 345 (Dynamics)
- 1 AE 271 or 272 (Modeling)

17 Total Credits

Semester 6

- 3 Biol 211 (Principles of Biology)
- 3 Communication Elective
- 3 AE 342 (Tractor Power)
- 3 ME 324 (Manufacturing)
- 1 ME 324L (Manufacturing Lab)
- 3 EM 378 (Mechanics of Fluids)

16 Total Credits

Senior Year

Semester 7

- 3 SSH Elective
- 3 AE 404 (Instrumentation)
- 2 AE 415 (Ag Engr Design I)
- 3 AE 413 (Fluid Power Engr)
- 3 ME 325 (Machine Design)
- 3 SSH Elective (Intl Persp)

17 Total Credits

Semester 8

- 2 AE 416 (Ag Engr Design II)
- 3 AE Elective
- 3 SSH Elective (US Diversity)
- 5 Technical Elective

13 Total Credits

Agricultural Engineering
 Land and Water Resources Engineering Option
 2013-2014 Catalog
128 Total Credits

First Year

Semester 1

- 4 Chem 167 (Chemistry I)
- 1 Chem 167L (Chemistry Lab)
- 3 Engl 150 (Critical Think & Comm)
- R Engr 101 (Orientation)
- 3 AE 170 (Engineering Graphics)
- 4 Math 165 (Calculus I)
- 1 Lib 160 (Library)

16 Total Credits

Semester 2

- 1 AE 110 (Experience AE)
- 3 Engr 160 (Engr Problem Solving)
- 4 Math 166 (Calculus II)
- 5 Phys 221 (Classical Physics I)
- 3 Biol 211 (Principles of Biology)

16 Total Credits

Sophomore Year

Semester 3

- 3 AE 216 (Ag Engr Fundamentals)
- 3 EM 274 (Statics)
- 5 Physics 222 (Classical Physics II)
- 3 Math 266 (Differential Equations)
- 3 AGRON 154 (Soil Science)

17 Total Credits

Semester 4

- 1 AE 201 (Sophomore Seminar)
- 2 AE 218 (Project Mgmt and Design)
- 3 EM 324 (Mechanics of Materials)
- 1 EM 327 (Mech of Materials Lab)
- 3 Engl 250 (WOVE Comp)
- 3 Stat 305 (Engineering Statistics)
- 3 ME 231 (Thermodynamics)

16 Total Credits

Junior Year

Semester 5

- 4 AE 363 (App of Electric Power)
- 3 Diversity Elective
- 3 EM 378 (Mechanics of Fluids)
- 3 AE 408 (Nat Resources Mgmt)
- 3 AE 316 (Systems Modeling)

16 Total Credits

Semester 6

- 1 AE 271 or 272 (Modeling)
- 3 CE 372 (Hydrology/Hydraulics)
- 3 SSH Elective
- 3 CE 326 (Principles of Env E)
- 2 MICRO 201(Intro to Microbiology)
- 1 MIRCO 201L (Lab)
- 3 ABE Elective (or SSH Elective)

16 Total Credits

Senior Year

Semester 7

- 3 AE 404 (Instrumentation)
- 2 AE 415 (Ag Engr Design I)
- 3 AE 431 (Natural Resources)
- 3 GEOL 201 (Geo for Engineers)
- 3 SSH Elective (or ABE Elective)
- 3 Communication Elective

17 Total Credits

Semester 8

- 2 AE 416 (Ag Engr Design II)
- 3 International Perspective Elective
- 3 Water Quality Elective
- 3 Structures Elective
- 3 Subsurface Systems Elective

14 Total Credits

Agricultural Engineering
 Animal Production Systems Engineering Option
 2013-2014 Catalog
 128 Total Credits

First Year

Semester 1

- 4 Chem 167 (Chemistry I)
- 1 Chem 167L (Chemistry Lab)
- 3 Engl 150 (Critical Think & Comm)
- R Engr 101 (Orientation)
- 3 AE 170 (Engineering Graphics)
- 4 Math 165 (Calculus I)
- 1 Lib 160 (Library)

16 Total Credits

Semester 2

- 1 AE 110 (Experience AE)
- 3 Engr 160 (Engr Problem Solving)
- 4 Math 166 (Calculus II)
- 5 Phys 221 (Classical Physics I)
- 3 SSH Elective

16 Total Credits

Sophomore Year

Semester 3

- 3 AE 216 (Ag Engr Fundamentals)
- 3 EM 274 (Statics)
- 5 Physics 222 (Classical Physics II)
- 3 Math 266 (Differential Equations)
- 3 BIOL 211 (Principles of Biology I)

17 Total Credits

Semester 4

- 1 AE 201 (Sophomore Seminar)
- 2 AE 218 (Project Mgmt and Design)
- 3 EM 324 (Mechanics of Materials)
- 1 EM 327 (Mech of Materials Lab)
- 3 Engl 250 (WOVE Comp)
- 3 Stat 305 (Engineering Statistics)
- 3 ME 231 (Thermodynamics)

16 Total Credits

Junior Year

Semester 5

- 4 AE 363 (App of Electric Power)
- 3 C E 332 (Structural Analysis I)
- 3 EM 378 (Mechanics of Fluids)
- 3 Ag, Biol, Nat Res Elective
- 3 AE 316 (Systems Modeling)

16 Total Credits

Semester 6

- 1 AE 271 or 272 (Modeling)
- 3 A E 478 (Wood Frame Str Design)
- 3 CE 333 (Str Steel Design I)
- 3 Communications Elective
- 3 SSH Elective
- 3 International Perspective Elective

16 Total Credits

Senior Year

Semester 7

- 3 AE 404 (Instrumentation)
- 2 AE 415 (Ag Engr Design I)
- 3 M E 436 (Heat Transfer)
- 3 ABE Elective
- 3 Technical Elective
- 3 Diversity Elective

17 Total Credits

Semester 8

- 2 AE 416 (Ag Engr Design II)
- 3 A E 472 (Animal Housing Systems)
- 3 A E 469 (Grain Process/Handling)
- 1 A E 424A (Air Pollution)
- 1 A E 424B (Air Pollution)
- 1 A E 424E (Air Pollution)
- 3 C E 334 (Concrete Design I)

14 Total Credits