**Interpersonal and Public Communication Skills** (13 credits)

3cr ENGL 1500 (F.S.SS.) Critical Thinking and Communications

3cr ENGL 2500 (F.S.SS.) Written, Oral, Visual, and Electronic Composition

3cr ENGL 3020 (F.S.SS.) Business Communication, **or**

 ENGL 3090 (F.S.) Report and Proposal Writing, **or**

 ENGL 3140 (F.S.SS.) Technical Communication, **or**

AGEDS 3270 (F.S.) Advanced Communication for Agriculture and Life Sciences

3cr SP CM 2120 (F.S.SS.) Fundamentals of Public Speaking, **or**

 AGEDS 3110 (F.S.) Presentation and Sales Strategies for Agricultural Audiences, **or**

COMST 2140 (F.S.) Professional Communications

1cr LIB 1600 (F.S.SS.) Introduction to College-Level Research

**Mathematical, Physical, and Life Sciences** (25 credits)

3crMATH 1450 (F.S.) Applied Trigonometry

3cr MATH 1510 (F.S.SS.) Calculus for Business and Social Sciences

4cr PHYS 1310 (F.S.SS.) General Physics I

1cr PHYS 1310L (F.S.SS.) General Physics I Laboratory

3cr STAT 1040 (F.S.SS.) Introduction to Statistics

4cr CHEM 1630 (F.S.SS.) College Chemistry

1cr CHEM 1630L (F.S.SS.) Laboratory in College Chemistry

3cr BIOL 1010 (F.S.SS.) Introductory Biology **or**

 BIOL 2110 (F.S.) Principles of Biology I **or**

 BIOL 2120 (F.S.) Principles of Biology II **or**

 BIOL 2510 (S.) Biological Processes in the Environment

3cr Life Sciences Course (College of Agriculture and Life Sciences list)

 <http://www.cals.iastate.edu/student-services/life-science>

**Business, Humanities, Ethics and Social Sciences** (18 credits) Certain courses in this section may fulfill more than one academic requirement.

3cr ACCT 2840 (F.S.SS.) Financial Accounting
 ACCT 2150 (F.S.SS.) Legal Environment of Business

3cr ECON 1010 (F.S.SS.) Principles of Microeconomics

3cr TSM 3700 (F.S.) Occupational Safety (meets Ethics requirement)

3cr Humanities (College of Agriculture and Life Science list)

 <http://www.cals.iastate.edu/student-services/humanities>

3cr International Perspectives (**From approved lists**: University list)

 <http://www.registrar.iastate.edu/students/div-ip-guide/IntlPerspectives-current>

3cr U.S. Cultures and Communities (**From approved lists:** University list)

 <https://www.registrar.iastate.edu/students/div-ip-guide/uscultures-courses>

**Technical Core** (28 credits)

1cr TSM 1100 (F.) Introduction to Technology

1cr TSM 1110 (F.S.) Experiencing Technology

3cr TSM 1150 (F.S.) Solving Technology Problems

3cr TSM 1160 (F.S.) Introduction to Design in Technology

1cr TSM 2010 (F.S.) Preparing for Workplace Seminar

3cr TSM 2100 (F.S.) Fundamentals of Technology

1cr TSM 2140 (F.S.) Managing Technology Projects

3cr TSM 2700 (F.S.) Principles of Injury Prevention

3cr TSM 3100 (F.S.) Total Quality Improvement

4cr TSM 3630 (F.S.) Electrical Power and Control Systems for Agriculture and Industry

Rcr TSM 3970 (SS.) Summer Internship in Technology
TSM 3990 (F.S) Fall or Spring Internship in Technology

2cr TSM 4150 (F.S.) Applied Project Management in Technology

3cr TSM 4160 (F.S.) Technology Capstone

**Option Core** (25 credits)

2cr TSM 2160 (F.S.) Advanced Technical Graphics, Interpretation, and CAD

1cr ABE 2710 (F.S.) Engineering Applications of Parametric Solid Modeling **or**

 ABE 2720 (F.S.) Parametric Solid Models, Drawings, and Assemblies Using Creo Parametric **or**

 ABE 2730 (F.S.) CAD for Process Facilities and Land Use Planning

3cr TSM 2400 (F.S.) Introduction to Advanced Manufacturing and Metals Processing

3cr TSM 3300 (S.) Agricultural Machinery and Power Management

4cr TSM 3350 (F.) Tractor Power

3cr TSM 3370 (F.S.) Fluid Power Systems Technology

3cr TSM 4330 (F.) Precision Agriculture

3cr TSM 4430 (F.S.) Statics and Strength of Materials for Technology

3cr TSM 4650 (F.S.) Automation Systems

**Electives** (11 credits) Electives to strengthen degree