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

3 ENGL 150 (F.S.SS.) Critical Thinking and Communications

3 ENGL 250 (F.S.SS.) Written, Oral, Visual, and Electronic Composition

3 ENGL 302 (F.S.SS.) Business Communication, **or**

ENGL 309 (F.S.) Report and Proposal Writing, **or**

ENGL 314 (F.S.SS.) Technical Communication, **or**

AGEDS 327 (F.S.) Advanced Communication for Agriculture and Life Sciences

3 SP CM 212 (F.S.SS.) Fundamentals of Public Speaking, **or**

AGEDS 311 (F.S.) Presentation and Sales Strategies for Agricultural Audiences, **or**

COMST 214 (F.S.) Professional Communications

1 LIB 160 (F.S.SS.) Information Literacy

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

3MATH 145 (F.S.) Applied Trigonometry

3 MATH 151 (F.S.SS.) Calculus for Business and Social Sciences

5 PHYS 111 (F.S.) General Physics

3 STAT 104 (F.S.SS.) Introduction to Statistics

4 CHEM 163 (F.S.SS.) General Chemistry

1 CHEM 163L (F.S.SS.) Laboratory in General Chemistry

3 BIOL 101 (F.S.SS.) or Introductory Biology **or**

BIOL 211 (F.S.) Principles of Biology I

3 Life Science (College of Agriculture and Life Sciences list)

http://www.agstudent.iastate.edu/agriculturestudentservices/life\_science.htm

**Business, Humanities, Ethics and Social Sciences** (18 credits)

Certain courses in this section may be double counted to fulfill more than one academic requirement. Check with your advisor and this link for more details: <http://www.abe.iastate.edu/undergraduate-students/advising-for-ast-i-tech/>

3 ACCT 284 (F.S.SS.) Financial Accounting

3 ECON 101 (F.S.SS) Principles of Microeconomics

3 TSM 370 (S.) Occupational Safety [Ethics requirement]

**From approved lists:**

3 Humanities (College of Agriculture and Life Science list)

[www.agstudent.iastate.edu/agriculturestudentservices/humanities.htm](http://www.agstudent.iastate.edu/agriculturestudentservices/humanities.htm)

3 International Perspectives (University list)

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

3 U.S. Diversity (University list)

<http://www.registrar.iastate.edu/students/div-ip-guide/usdiversity-courses>

**Technology Core** (30 credits)

1 TSM 110 (F.) Introduction to Technology

1 TSM 111 (S.) Experiencing Technology

3 TSM 115 (F.S.) Solving Technological Problems

3 TSM 116 (F.S.) Introduction to Design in Technology

1 TSM 201 (F.S.) Preparing for Workplace Seminar

3 TSM 210 (F.S.) Fundamentals of Technology

1 TSM 214 (F.S.) Managing Technology Projects

3 TSM 270 (F.) Principles of Injury Prevention

3 TSM 310 (S.) Total Quality Improvement

4 TSM 363 (F.) Electric Power and Electronics for Agriculture and Industry

R TSM 397 (F.S.SS.) Internship in Technology

2 TSM 399 (F.S.SS.) Work Experience in Technology

2 TSM 415 (F.S.) Applied Project Management in Technology

3 TSM 416 (F.S.) Technology Capstone

**Option Core** (24 credits)

1 ABE 271 (F.S.) or Engineering Applications of Parametric Solid Modeling or

ABE 272 (F.S.) or Parametric Solid Models, Drawings, and Assemblies using Pro/ENGINEER or

ABE 273 (S.) CAD for Process Facilities and Land Use Planning

2 TSM 216 (F. S.) Advanced Technical Graphics, Interpretation, and CAD

3 TSM 240 (F.S.) Introduction to Manufacturing Processes

3 TSM 337 (F.S.) Fluid Power Systems Technology

3 TSM 340 (F.S.) Advanced Automated Manufacturing Processes

3 TSM 440 (F.S.) Cellular Lean Manufacturing Systems

3 TSM 443 (S.) Statics and Strength of Materials for Technology

3 TSM 444 (F.S.) Facility Planning

3 TSM 465 (S.) Automation Systems

**Electives** (10 credits) Electives to strengthen the degree