

**INDUSTRIAL TECHNOLOGY CURRICULUM**  
**Occupational Safety option 120 credits required for graduation (2014-2015 Catalog)**

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

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|---|--------------------|---|---|
| 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, <b>or</b>                                       |
|   |                    | ENGL 309 (F.S.)                                   | Report and Proposal Writing, <b>or</b>                                  |
|   |                    | ENGL 314 (F.S.SS.)                                | Technical Communication, <b>or</b>                                      |
|   |                    | AGEDS 327 (F.S.)                                  | Advanced Communication for Agriculture and Life Sciences                |
| 3 | {                  | SP CM 212 (F.S.SS.)                               | Fundamentals of Public Speaking, <b>or</b>                              |
|   |                    | AGEDS 311 (F.S.)                                  | Presentation and Sales Strategies for Agricultural Audiences, <b>or</b> |
|   |                    | COMST 214 (F.S.)                                  | Professional Communications   |
| 1 | LIB 160 (F.S.SS.)  | Information Literacy                              |   |

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

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|---|---------------------|---|--------------------------------|
| 3 | MATH 145X (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.)                        | Introductory Biology <b>or</b> |
|   |                     | BIOL 211 (F.S.)                           | Principles of Biology I        |
| 3 | BIOL 155 (F.S.)     | Human Biology                             |                                |

**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/>

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|---|--------------------|----------------------------------|
| 3 | ACCT 284 (F.S.SS.) | Financial Accounting             |
| 3 | ECON 101 (F.S.SS.) | Principles of Microeconomics     |
| 3 | Ethics Course      | TSM 370 (S.) Occupational Safety |

**From approved lists:**

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|---|----------------------------|--|
| 3 | Humanities                 | (College of Agriculture and Life Science list)<br><a href="http://www.agstudent.iastate.edu/agriculturestudentservices/humanities.htm">www.agstudent.iastate.edu/agriculturestudentservices/humanities.htm</a> |
| 3 | International Perspectives | (University list)<br><a href="http://www.registrar.iastate.edu/students/div-ip-guide/IntlPerspectives-current">http://www.registrar.iastate.edu/students/div-ip-guide/IntlPerspectives-current</a>             |
| 3 | U.S. Diversity             | (University list)<br><a href="http://www.registrar.iastate.edu/students/div-ip-guide/usdiversity-courses">http://www.registrar.iastate.edu/students/div-ip-guide/usdiversity-courses</a>                       |

**Technology Core (30 credits)**

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|---|-------------------|---|
| 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                                  |
| 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                               |
| 1 | TSM 415 (F.S.)    | Technology Capstone I                                       |
| 5 | TSM 416 (F.S.)    | Technology Capstone II                                      |

**Option Core (22 credits)**

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|---|-------------------|--|
| 3 | TSM 240 (F.S.)    | Introduction to Manufacturing Processes                        |
| 2 | TSM 371 (S.)      | Occupational Safety Management                                 |
| 2 | TSM 372 (odd F.)  | Legal Aspects of Occupational Safety and Health                |
| 3 | TSM 376 (even F.) | Fire Protection and Prevention                                 |
| 3 | TSM 470 (odd F.)  | Industrial Hygiene: Physical, Chemical, and Biological Hazards |
| 1 | TSM 471 (odd F.)  | Safety Laboratory  |
| 3 | TSM 477 (even F.) | Risk Analysis and Management                                   |
| 2 | H S 105 (F.S.)    | First Aid and Emergency Care                                   |
| 3 | PSYCH 250         | Psychology of the Workplace                                    |

**Electives (12 credits)**

Electives to strengthen degree