

INDUSTRIAL TECHNOLOGY CURRICULUM

Occupational Safety Option ~ 120 credits required for graduation (2021-2022 Catalog)

Interpersonal and Public Communication Skills (13 credits)

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| 3 | ENGL 150 (F.S.SS.) | Critical Thinking and Communication |
| 3 | ENGL 250 (F.S.SS.) | Written, Oral, Visual, and Electronic Composition |
| { | ENGL 302 (F.S.SS.) | Business Communication, or |
| | ENGL 309 (F.S.SS.) | Proposal and Report Writing, or |
| | ENGL 314 (F.S.SS.) | Technical Communication, or |
| | AGEDS 327 (F.S.SS.) | Advanced Communication for Agriculture and Life Sciences |
| { | SP CM 212 (F.S.SS.) | Fundamentals of Public Speaking, or |
| | AGEDS 311 (F.S.SS.) | Presentation and Sales Strategies for Agricultural Audiences, or |
| | COMST 214 (F.S.SS.) | Professional Communication |
| 1 | LIB 160 (F.S.SS.) | Information Literacy |

Mathematical, Physical, and Life Sciences (25 credits)

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| 3 | MATH 145 (F.S.) | Applied Trigonometry |
| 3 | MATH 151 (F.S.SS.) | Calculus for Business and Social Sciences |
| 5 | PHYS 131 (F.S.SS.) | General Physics |
| 3 | STAT 104 (F.S.SS.) | Introduction to Statistics |
| 4 | CHEM 163 (F.S.SS.) | College Chemistry |
| 1 | CHEM 163L (F.S.SS.) | Laboratory in College Chemistry |
| 3 | BIOL 101 (F.S.SS.) | Introductory Biology |
| 3 | BIOL 255 (F.S.SS.) | Fundamentals of Human Anatomy |

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

From approved lists:

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| 3 | Humanities | (College of Agriculture and Life Science list)
https://www.cals.iastate.edu/student-services/humanities |
| 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)

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|---|-------------------|---|
| 1 | TSM 110 (F.) | Introduction to Technology |
| 1 | TSM 111 (F.S.) | Experiencing Technology |
| 3 | TSM 115 (F.S.) | Solving Technology 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.S.) | Principles of Injury Prevention and Safety |
| 3 | TSM 310 (F.S.) | Total Quality Improvement |
| 4 | TSM 363 (F.S.) | 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 (22 credits)

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

Electives (12 credits)

Electives to strengthen degree