

AGRICULTURAL SYSTEMS & INDUSTRIAL TECHNOLOGY CURRICULUM
Occupational Safety
(2007-2009 Catalog)
128.5 credits required for graduation

Interpersonal and Public Communication Skills (12.5 credits)

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|-----|-------------------|--|
| 6 | Engl 150 (F.S.SS) | Critical Thinking and Communications and |
| | 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 |
| 3 | SpCm 212 (F.S.SS) | Fundamentals of Public Speaking, or |
| | AgEdS 311 (F.S) | Presentation and Sales Strategies for Agricultural Audiences |
| 0.5 | Lib 160 (F.S.SS) | Library Instruction |

Mathematical, Physical, and Life Sciences (26 credits)

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|---|----------------------|--------------------------------------|
| 3 | Math 142 (F.S.SS) | Trigonometry and Analytic and |
| 4 | Math 160 (F.S) | Survey of Calculus; or |
| 4 | Math 165 (F.S.SS) | Calculus I |
| 4 | Physics 111 (F.S.SS) | General Physics and |
| 4 | Physics 112 (F.S.SS) | General Physics |
| 3 | Stat 104 (F.S.SS) | Introduction to Statistics |
| 4 | Chem 163 (F.S.SS) | General Chemistry and |
| 1 | Chem 163L (F.S.SS) | Laboratory in General Chemistry |
| 3 | Life Sciences | See Departmental List |

Departmental List for Life Science

Biology

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|---|-------------------|------------------------------------|
| 3 | BIOL 155 (F.S) | Human Biology |
| 3 | BIOL 101 (F.S.SS) | Introductory Biology; or |
| 3 | BIOL 211 (F.S) | Principles of Biology I; or |
| 3 | BIOL 173 (F.S) | Environmental Biology; or |

Natural Resources Ecology and Management

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| 3 | NREM 120 (F.S) | Introduction to Renewable Resources; or |
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Biochemistry, Biophysics, and Molecular Biology

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| 3 | BBMB 221 (F) | Structure and Reactions in Biochemical Processes |
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Humanities, Ethics and Social Sciences (15 credits)

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| 3 | Econ 101 (F.S.SS) | Principles of Microeconomics |
| From approved lists: | | |
| 3 | Humanities | (College of Agriculture list)
www.agstudent.iastate.edu/agriculturestudentservices/humanities.htm |
| 3 | Ethics Course | (College of Agriculture list)
http://www.agstudent.iastate.edu/agriculturestudentservices/ethicslist.html |
| 3 | International Perspectives | (University list)
www.iastate.edu/~7eregistrar/courses/ip-list.html |
| 3 | U.S. Diversity | (University list)
www.iastate.edu/~registrar/courses/diversity-list.html |

Technology Core (30 credits)

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|---|----------------|---|
| 1 | TSM 110 (F) | Introduction to Technology |
| 1 | TSM 111 (S) | Experiencing Technology |
| 1 | TSM 201 (S) | Entrepreneurship and Internship Seminar |
| 1 | TSM 301 (S) | Ethics and Leadership Seminar |
| 1 | TSM 401 (F) | Senior Seminar |
| 3 | TSM 115 (F.S.) | Solving Technological Problems |
| 3 | TSM 210 (F) | Fundamentals of Technology |
| 3 | TSM 116 (F.S) | Introduction to Design in Technology |

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4	TSM 363 (F)	Electric Power and Electronics for Agriculture and Industry
3	TSM 270 (F)	Principles of Injury Prevention
3	TSM 310 (S)	Total Quality Improvement
2	TSM 399 (F.S.SS)	Work Experience in Technology
R	TSM 397 (F.S.SS)	Internship in Technology
2	TSM 415 (F.S.)	Technology Capstone I
2	TSM 416 (F.S.)	Technology Capstone II

Business Core (6 credits)

3	ACCT 284 (F.S.SS)	Financial Accounting
3	ECON 330 (F.S)	Farm Business Management or
3	ECON 336 (F)	Agricultural Selling or
3	ECON 355 (F.S)	International Trade and Finance or
3	MGMT 370 (F.S.SS)	Management and Organization or
3	MGMT 414 (F)	International Management

Option Core (33 credits)

3	TSM 240 (F)	Introduction to Manufacturing Processes
2	TSM 272 (F)	Introduction to Occupational Safety
2	TSM 372 (F)	Legal Aspects of Occupational Safety and Health
3	TSM 276 (F)	Fire Protection and Prevention
3	TSM 370 (S)	Occupational Safety
3	TSM 470 (S)	Industrial Hygiene: Physical, Chemical, and Biological Hazards
1	TSM 471 (S)	Safety Laboratory
3	TSM 477/577 (F)	System Safety Analysis
3	I E 271 (S)	Applied Ergonomics and Work Design
2	H S 105 (F.S)	First Aid and Emergency Care
8	Technical Electives	See Departmental List

Technical Elective List for Occupational Safety Option (IT):

Biology

3	BIOL 255	Fundamentals of Human Anatomy
1	BIOL 255L	Fundamentals of Human Anatomy Laboratory
3	BIOL 256	Fundamentals of Human Physiology
1	BIOL 256L	Fundamentals of Human Physiology Laboratory

Chemistry

3	CHEM 231	Elementary Organic Chemistry
1	CHEM 231L	Elementary Organic Chemistry - Laboratory

Environmental Studies

2	ENV S 201	Introduction to Environmental Issues
3	ENV S 260	Soils and Environmental Quality (Note: also cross-listed as Agron 260)
2	ENV S 324	Energy and the Environment
3	ENV S 482	Environmental Politics and Policies
3	ENV S 491	Environmental Law

Health Studies

3	HS 110	Personal and Consumer Health
3	HS 215	Drug Education
2	HS 305	Instructor's First Aid and Cardio-pulmonary Resuscitation
3	HS 310	Community and Public Health
3	HS 350	Human Diseases
3	HS 380	Worksite Health Problems

History

3	HIST 484	Science, Technology, Medicine, and Public Policy
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3 HIST 488

History of American Technology

3 HIST 489

History of American Science

Industrial Engineering

3 IE 576

Human Factors and Product Design

Management

3 MGMT 371

Organizational Behavior

Psychology

3 PSYCH 450

Industrial Psychology

Technology

Any 300 level or higher TSM and AE course not required in the technology or option cores.

Free Elective (3 credits)