

AGRICULTURAL SYSTEMS TECHNOLOGY CURRICULUM

Department of Agricultural and Biosystems Engineering, Iowa State University

Agricultural and Biosystems Management 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 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)

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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.) | General Physics and Lab |
| 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 or |
| | | BIOL 211 (F.S.) Principles of Biology I |
| | | BIOL 212 (F.S.) Principles of Biology II |
| | | BIOL 251 (S.) Biological Processes in the Environment |
| 3 | Life Sciences | (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 be double counted to fulfill more than one academic requirement.

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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 (F.S.) Occupational Safety |
| 3 | Humanities | (From approved lists: College of Agriculture and Life Science list)
http://www.cals.iastate.edu/student-services/humanities |
| 3 | International Perspectives | (From approved lists: University list)
http://www.registrar.iastate.edu/students/div-ip-guide/IntlPerspectives-current |
| 3 | U.S. Diversity | (From approved lists: University list)
http://www.registrar.iastate.edu/students/div-ip-guide/usdiversity-courses |

Technology Core (30

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| 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.S.) | Principles of Injury Prevention |
| 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 (24 credits)

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| 2 | TSM 322 (S.) | Preservation of Grain Quality |
| 1 | TSM 322L (S.) | Preservation of Grain Quality Laboratory |
| 3 | TSM 324 (S.) | Soil and Water Conservation Management |
| 3 | TSM 325 (F.) | Biorenewable Systems |
| 3 | TSM 327 (F.) | Animal Production Systems |
| 3 | TSM 330 (S.) | Agricultural Machinery and Power Management |
| 3 | TSM 433 (F.) | Precision Farming Systems |
| 3 | TSM 455 (F.) | Feed Processing and Technology |
| 3 | ECON 230 (F.S.) | Farm Business Management |

Electives (10 credits)

Electives to strengthen degree