

AGRICULTURAL SYSTEMS TECHNOLOGY CURRICULUM

Department of Agricultural and Biosystems Engineering, Iowa State University

Agricultural and Biosystems Management option - 120 credits required for graduation (2023-2024 Catalog)

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.) ENGL 309 (F.S.) ENGL 314 (F.S.SS.) AGEDS 327 (F.S.)	Business Communication, or Report and Proposal Writing, or Technical Communication, or Advanced Communication for Agriculture and Life Sciences	
3		SP CM 212 (F.S.SS.) AGEDS 311 (F.S.) COMST 214 (F.S.)	Fundamentals of Public Speaking, or Presentation and Sales Strategies for Agricultural Audiences, or Professional Communications
1		LIB 160 (F.S.SS.)	Introduction to College Level Research

Mathematical, Physical, and Life Sciences (25 credits)

3	MATH 145 (F.S.)	Applied Trigonometry
3	MATH 151 (F.S.SS.)	Calculus for Business and Social Sciences
4	PHYS 131 (F.S. SS)	General Physics I
1	PHYS 131L (F.S. SS)	General Physics I Laboratory
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 General Chemistry
3	BIOL 101 (F.S.SS.) BIOL 211 (F.S.) BIOL 212 (F.S.) BIOL 251 (S.)	Introductory Biology or Principles of Biology I or Principles of Biology II or 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 fulfill more than one academic requirement.

3	ACCT 284 (F.S.SS.)	Financial Accounting
3	ECON 101 (F.S.SS)	Principles of Microeconomics
3	TSM 370 (F.S.)	Occupational Safety (meets Ethics requirement)
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 credits)

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
3	TSM 310 (F.S.)	Total Quality Improvement
4	TSM 363 (F.S.)	Electrical Power and Control Systems for Agriculture and Industry
R	TSM 397 (F.S.SS.)	Internship in Technology
2	TSM 415 (F.S.)	Applied Project Management in Technology
3	TSM 416 (F.S.)	Technology Capstone

Option Core (25 credits)

3	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

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| 3 | TSM 433 (F.) | Precision Agriculture |
| 3 | TSM 455 (F.) | Feed Processing and Technology |
| 3 | ECON 230 (F.S.) | Farm Business Management |

Electives (11 credits) Electives to strengthen degree