

AGRICULTURAL SYSTEMS TECHNOLOGY CURRICULUM
Department of Agricultural and Biosystems Engineering, Iowa State University
Machine Systems option - 120 credits required for graduation (2018-2019 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.)	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)

3	MATH 145 (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 or
		BIOL 211 (F.S.)
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. Check with your advisor and this link for more details:

<http://www.abe.iastate.edu/undergraduate-students/advising-for-ast-i-tech/>

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
3	Humanities	(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 (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.)	Principles of Injury Prevention
3	TSM 310 (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 (25 credits)

2	TSM 216 (F.S.)	Advanced Technical Graphics, Interpretation, and CAD
1	ABE 271, 272, or 273 (F.S.)	Solid Modeling, Pro/ENGR, or CAD Process Facilities & Land Use Planning
3	TSM 240 (F.S.)	Introduction to Manufacturing Processes for Metals
3	TSM 330 (S.)	Agricultural Machinery and Power Management
4	TSM 335 (F.)	Tractor Power
3	TSM 337 (F.S.)	Fluid Power Systems Technology
3	TSM 433 (F.)	Precision Farming Systems
3	TSM 443 (F.S.)	Statics and Strength of Materials for Technology
3	TSM 465 (S.)	Automation Systems

Electives (9 credits)

Electives to strengthen degree