

Agricultural Systems Technology

Curriculum in Agricultural Systems Technology

Administered by the Department of Agricultural and Biosystems Engineering.
Students majoring in Agricultural Systems Technology choose between two options: Agricultural and Biosystems Management or Machine Systems.

Total Degree Requirement: 120 cr.

Only 65 cr. from a two-year institution may apply which may include up to 16 technical cr.; 9 P-NP cr. of free electives; 2.00 minimum GPA.

Communications Proficiency:

6 cr. of English composition with a C or better and 3 cr. of speech fundamentals with a C or better.

Communication/Library: 13 cr.

ENGL 150	Critical Thinking and Communication	3
ENGL 250	Written, Oral, Visual, and Electronic Composition	3
One of the following:		3
ENGL 302	Business Communication	
ENGL 309	Report and Proposal Writing	
ENGL 314	Technical Communication	
AGEDS 327	Advanced Communications for Agriculture and Life Sciences	
One of the following:		3
SP CM 212	Fundamentals of Public Speaking	
COMST 214	Professional Communication	
AGEDS 311	Presentation and Sales Strategies for Agricultural Audiences	
LIB 160	Information Literacy	1
Total Credits		13

Mathematical, Physical, and Life Sciences: 26 cr.

MATH 151	Calculus for Business and Social Sciences	3
MATH 145	Applied Trigonometry	3
STAT 104	Introduction to Statistics	3
PHYS 111	General Physics	5
CHEM 163	College Chemistry	4
CHEM 163L	Laboratory in College Chemistry	1
BIOL 101	Introductory Biology	3
or BIOL 211	Principles of Biology I	
Plus 3 life sciences credits from approved College of Agriculture and Life Sciences list		3
Total Credits		25

Business, Humanities, Ethics, and Social Sciences: 18 cr.

ACCT 284	Financial Accounting	3
ECON 101	Principles of Microeconomics	3
Ethics Course		3
TSM 370	Occupational Safety	
Humanities course from College of Agriculture and Life Sciences list		3
International Perspectives course from University list		3
U.S. Diversity course from University list		3
Total Credits		18

Technical Core: 30 cr.

TSM 110	Introduction to Technology	1
TSM 111	Experiencing Technology	1
TSM 115	Solving Technology Problems	3
TSM 116	Introduction to Design in Technology	3
TSM 201	Preparing for Workplace Seminar	1

TSM 210	Fundamentals of Technology	3
TSM 270	Principles of Injury Prevention	3
TSM 310	Total Quality Improvement	3
TSM 363	Electric Power and Electronics for Agriculture and Industry	4
TSM 397	Internship in Technology	R
TSM 399	Work Experience in Technology	2
TSM 415	Technology Capstone I	1
TSM 416	Technology Capstone II	5
Total Credits		30

No more than 4 cr. of TSM 397 may count toward graduation.

Agricultural and Biosystems Management Option: 33 cr.

TSM 322	Preservation of Grain Quality	2
TSM 322L	Preservation of Grain Quality Laboratory	1
TSM 324	Soil and Water Conservation Management	3
TSM 325	Biorenewable Systems	3
TSM 327	Animal Production Systems	3
TSM 330	Agricultural Machinery and Power Management	3
TSM 333	Precision Farming Systems	3
ECON 230	Farm Business Management	3
13 credits of free electives		13
Total Credits		34

Machine Systems option: 33 cr.

TSM 216	Advanced Technical Graphics, Interpretation, and CAD	3
TSM 240	Introduction to Manufacturing Processes	3
TSM 330	Agricultural Machinery and Power Management	3
TSM 333	Precision Farming Systems	3
TSM 335	Tractor Power	4
TSM 337	Fluid Power Systems Technology	3
TSM 443	Statics and Strength of Materials for Technology	3
TSM 465	Automation Systems	3
9 credits of free electives		9
Total Credits		34

Minor in agricultural systems technology

The Department of Agricultural and Biosystems Engineering offers a minor in agricultural systems technology which may be earned by completing a minimum of 15 credits of technology systems management courses, which includes:

TSM 115	Solving Technology Problems	3
TSM 210	Fundamentals of Technology	3
9 credits from:		9
TSM 310	Total Quality Improvement	
TSM 322	Preservation of Grain Quality	
TSM 322L	Preservation of Grain Quality Laboratory	
TSM 324	Soil and Water Conservation Management	
TSM 325	Biorenewable Systems	
TSM 327	Animal Production Systems	
TSM 330	Agricultural Machinery and Power Management	
TSM 333	Precision Farming Systems	
TSM 335	Tractor Power	
TSM 337	Fluid Power Systems Technology	
TSM 363	Electric Power and Electronics for Agriculture and Industry	
TSM 393E	Topics in Technology: Chemical Application Systems	
TSM 393F	Topics in Technology: Agricultural Safety and Health	

• At least six (6) credits of 300-level or higher TSM classes (from the classes listed above)

• At least nine (9) credits that are not used to meet any other department, college, or university requirement.

Total Credits		15
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