MAJOR IN TECHNICAL SYSTEMS MANAGEMENT

For the Degree of Bachelor of Science in Technical Systems Management

This major in Technical Systems Management is designed to prepare students as problem solvers for systems involving the application, management, and/or marketing of agricultural engineering technologies. Students are instructed in engineering and business principles in preparation as technically competent business persons for professional careers as entrepreneurs, marketing representatives, or plant managers working with service organizations, manufacturers, corporate farms, retail dealers, power suppliers, contractors, or management companies from production through processing and distribution.

Students can specialize in Construction Systems Management; Environmental Systems Management; Mechanization, Marketing, and Technology Management Systems; Production Systems; or Renewable Energy Systems.

Prescribed Courses including Campus General Education

Composition I and Speech
Select one of the following:   6-7
RHET 105 Writing and Research
& CMN 101 and Public Speaking (or equivalent (see college Composition I requirement))
CMN 111 Oral & Written Comm I
& CMN 112 and Oral & Written Comm II

Advanced Composition
Select from campus approved list.  3-4

Cultural Studies
Two courses; one Western culture and one non-Western/US minority culture course.  6

Foreign Language
Coursework at or above the third level is required for graduation.

Quantitative Reasoning I
MATH 234 Calculus for Business I (or equivalent)  4

Quantitative Reasoning II
Select one of the following:  3-4
ACE 261 Applied Statistical Methods
CPSC 241 Intro to Applied Statistics
ECON 202 Economic Statistics I
PSYC 235 Intro to Statistics
SOC 280 Intro to Social Statistics
STAT 100 Statistics

Natural Sciences and Technology
CHEM 102 General Chemistry I  4
CHEM 103 and General Chemistry Lab I
PHYS 101 College Physics: Mech & Heat  5
Select one of the following:  4-5
PHYS 102 College Physics: E&M & Modern

CHEM 104 General Chemistry II
& CHEM 105 and General Chemistry Lab II

Biological sciences (see campus approved list)  3-5

Humanities and the Arts
Select from campus approved list.  6

Social and Behavioral Sciences
ACE 100 Agr Cons and Resource Econ  4
ECON 103 Macroeconomic Principles  3

Social and behavioral sciences. Select from campus approved list.  3-4

ACES Prescribed
ACES 101 Contemporary Issues in ACES  2

TSM Required
ACE 161 Microcomputer Applications (or equivalent)  3

ECON 200 Fundamentals of Accounting
or ACCY 201 Accounting and Accountancy I
CPSC 112 Introduction to Crop Sciences  4

NRES 201 Introductory Soils  4
TSM 100 Technical Systems in Agr  3

TSM 430 Project Management  2

TSM elective courses. A total of 18 hours selected from the following courses. A minimum of six hours must be selected from TSM 295 or TSM 396, or at the 300- or 400-level.  18
TSM 199 Undergraduate Open Seminar
TSM 232 Materials and Construction Sys
TSM 233 Metallurgy & Welding Process
TSM 234 Wiring, Motors and Control Sys
TSM 262 Off-Road Equipment Management
TSM 295 Undergrad Research or Thesis
TSM 352 Land and Water Mgt Systems
TSM 363 Fluid Power Systems
TSM 371 Residential Housing Design
TSM 372 Environ Control & HVAC Systems
TSM 381 Grain Drying & Storage Systems
TSM 396 UG Honors Research or Thesis
TSM 435 Elec Computer Ctrl Sys
TSM 464 Engine and Tractor Power
TSM 465 Chemical Applications Systems
TSM 496 Independent Study
TSM 499 Seminar

Specialization Electives
Select 15 hours from the following:  15
ACE 210 Environmental Economics
ACE 222 Agricultural Marketing
ACE 231 Food and Agribusiness Mgt
ACE 232 Management of Farm Enterprises
ACE 240 Personal Financial Planning
ACE 301 Natural Resource Economics
ACE 345 Finan Decision Indiv Sm Bus
ACE 402 Agricultural Law
ACE 406 Environmental Law
ACE 428 Commodity Futures and Options
ACE 432 Farm Management

Information listed in this catalog is current as of 09/2017
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<tr>
<th>Course Code</th>
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<td>Rural Real Estate Appraisal</td>
</tr>
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<td>Agr and Food Policies</td>
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<td>CEE 421</td>
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<td>Env and Plant Ecosystems</td>
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<td>NRES 488</td>
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**Total Hours**: 126