



Mechanized Systems Management



When you study Mechanized Systems Management (MSYM), you'll prepare for a career associated with the management of people, systems, equipment, and natural resources used to produce and process food, feed, fuel, and fiber. Graduates understand and apply the principles of physical and biological sciences, mathematics, and management to increase effectiveness and efficiency of machines in the production, processing, handling, and utilization of agricultural, natural resource, food, and biological commodities.



The MSYM curriculum has the flexibility to permit students to select professional elective courses. Areas such as agronomy, animal science, agricultural economics, agricultural education, computer science, food science, mechanized systems management, engineering mechanics, management, marketing, natural resources, and biological sciences can be selected for in-depth study.

Possible Career Areas

Machine Testing	Equipment Dealership	Extension
Plant Operations Supervision	Education	Production Agriculture
Irrigation	Quality Control	Natural Resources Management

Professionals in Mechanized Systems Management are highly sought after by a wide variety of companies. Our graduates have found positions with such companies as John Deere, Cargill, Hormel, ADM, Irrigation and Natural Resources Districts, Orthman Manufacturing, Farmland Foods, and Altec Industries. Post-graduate study in MSYM is also available at the University of Nebraska-Lincoln.

Each student studies a core curriculum consisting of 24 credit hours of major requirements, 21 hours of science and math, and 9 credit hours of free electives. In addition, you may choose one of four options for specialization (see back of sheet). Graduation requires 125 semester hours of course work.

Students are expected to work hard, maintain a minimum cumulative gpa of 2.0 (4.0 scale), and have an interest in developing systems-based problem solving skills. Though not required, internships and co-operative work experiences are encouraged. There are several student clubs with professional affiliations for participation. An excellent faculty-to-student ratio, a faculty recognized for their teaching and advising skills, plus being awarded the 2002 University of Nebraska system Department Teaching Award, all combine for a quality education in the Department of Biological Systems Engineering.

To schedule a visit or receive more information about Mechanized Systems Management, please contact:

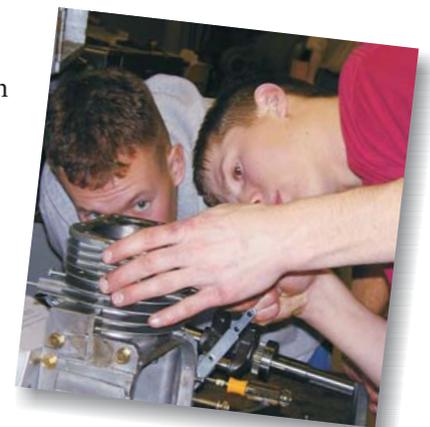
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Program Option Areas

Production

This unique combination of selected courses in animal, crop, soil, and physical sciences, as well as mechanized systems management, prepares you to be successful in production agriculture and related careers. This option is for the student interested in the integration of mechanization and natural resources for production agriculture. You will be prepared to apply principles of mechanization and management in farming and ranching, in service and consulting, or preparation for teaching.

Technical

If you like figuring out how machines work, making them efficient, and testing the results, this is the specialization for you. You'll be prepared for employment in the fields of equipment test technician, service manager or production supervisor of mechanized systems, regional service representative, or associate for agricultural research and extension. Students apply additional mathematics and physical sciences to resolve problems in engineered systems.

Processing Operations

There are many aspects and stages involved in taking a raw ingredient to a finished product: food, fiber, or fuel. This option combines the principles of engineered systems and management of those systems with a focus in business, agriculture, and mechanization.

Business

Gain a strong background in the principles of marketing engineered systems with emphasis on mechanization, management, marketing, law, and finance in agriculture-related fields. Career opportunities range from operations manager for grain elevators to agricultural representatives for financial institutions or sales/tech representatives for agricultural machinery manufacturers.



The University of Nebraska-Lincoln is an equal opportunity educator and employer with a comprehensive plan for diversity.

Core Curriculum

College Integrative Courses	6 credit hrs
AGRI/NRES 103 Intro to Food, Agriculture & Natural Resource Systems MSYM 462 Equipment Systems	
Mathematics & Statistics	5 credit hrs
MATH 102 Trigonometry STAT 218 Intro to Statistics or ECON 215 Statistics Communications 8-9	
Communication	8 credit hrs
BSEN or MECH 130 Computer Aided Design	
Written Communication elective (ACE 1) select from: JGEN 200; ENGL 150, 151	
Professional Communication elective (ACE 2): select from: JGEN 300, COMM 209, 210, or 286	
Natural Sciences	16 credit hrs
CHEM 109 General Chemistry I (ACE 4) MSYM 109 and 109L Physical Principles in Agriculture and Lab	
Life Sciences elective Natural Sciences elective: select from additional biochemistry, biology, chemistry, geography (excluding human and economic), geology, meteorology (excluding 140), or physics and astronomy (excluding 103)	
Economics, Humanities & Social Sciences	18 credit hrs
ECON 211 Principles of Macroeconomics ECON 212 Principles of Microeconomics or AECN 141 Introduction to Economics of Agriculture	
ACE electives	
Major Requirements	24 credit hrs
MSYM 162 Equipment Systems Management MSYM 245 Electrical Service Systems MSYM 312 Engine Power Systems MSYM 354 Soil Conservation & Watershed Management MSYM 364 Agricultural Products Processing & Handling MSYM 416 Sensors & Control Systems for Agri-Industries MSYM 462 Equipment Systems IMSE 206 Engineering Economy I SOIL 153 Soil Resources	
Option Requirements	39 credit hrs (see 4 options on left)
Personal Development Electives	9 credit hrs
125 Credit hours	
Degree awarded: B. S. in Mechanized Systems Management, College of Agricultural Sciences and Natural Resources	