**FACULTY AND STAFF**

Faculty members are internationally recognized experts.

- 15 tenure system faculty members
- 9 academic specialists and support staff

Many faculty members have Michigan State University Extension and Michigan Agricultural Experiment Station appointments.

**PROGRAM HIGHLIGHTS**

- **Anaerobic Digestion Research and Education Center (ANDRE)**
  The department received state and foundation grants exceeding $3 million to develop technology for smaller farms to turn animal waste into usable heat, electricity, and other valuable products.

- **Center for Biobased Renewable Energy**
  The department has received funding from the MSU Quality Fund to collaborate with the MSU Departments of Chemical Engineering and Materials Science and Forestry to create a multidisciplinary center to research the conversion of biomass into a renewable energy source. The program will also develop courses on the technical, economic, and environmental aspects of producing energy from agricultural and forestry biomass.

- **Biosafety Level-2, Pilot-Scale Food Processing Facility**
  This unique facility meets the research and technology transfer needs for research validation trials, testing with industry partners, and teaching/training that involves pathogenic bacteria subjected to pilot-scale processes. The multidisciplinary researchers involved in this endeavor are committed to improving the safety of processed food products through innovative research, outreach, and training.

- **BE students** continue to win prestigious awards, including one National Science Foundation Graduate Fellowship, one Department of Homeland Security Undergraduate Fellowship, and two Science, Mathematics, and Research for Transformation (SMART) grants from the Department of Defense.

- **A BE Senior** received the nationally recognized ASABE Foundation Scholarship.

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**FOR MORE INFORMATION**

Ajit K. Srivastava, Chairperson  
Department of Biosystems and Agricultural Engineering  
Michigan State University  
215 Farrall Hall • East Lansing, MI 48824-1323  
Phone: (517) 353-7268 • Fax: (517) 432-2892  
E-mail: srivasta@msu.edu  
Web site: www.egr.msu.edu/age/
Since 1906, the Department of Biosystems and Agricultural Engineering has responded to the changing needs of society by combining engineering principles with technology and biological sciences in a systems context. We have made significant contributions to Michigan, to the nation, and to the world through our teaching, research, and extension programs. Biosystems engineers at MSU are solving complex, rapidly changing problems related to food quality and safety, natural resource conservation, environmental protection, homeland security, and renewable energy development.

The department is affiliated with the College of Agriculture and Natural Resources (CANR) and the College of Engineering.

**UNDERGRADUATE PROGRAM**

The department offers a bachelor of science (BS) degree program through the College of Engineering, as well as a BS degree and a certificate program through the College of Agriculture and Natural Resources (CANR).

**Biosystems Engineering (BE), a College of Engineering BS degree program**

This ABET-accredited program prepares students to:

- identify and solve problems at the interface of biology and engineering, using modern engineering techniques and the systems approach
- analyze, design, and control components, systems, and processes that involve critical biological components

Students have many opportunities to engage in co- and extracurricular activities, including undergraduate research, corporate internships, and study abroad. BE graduates have a high placement rate and receive competitive salaries. Employers include environmental consulting firms, the U.S. Department of Agriculture, the State of Michigan, pharmaceutical companies, and the food industry. Scholarships are available to students on a competitive basis. During 2007-08, nearly $50,000 in scholarships was awarded to students.

**Technology Systems Management (TSM), a CANR BS degree program**

The TSM program prepares students to apply emerging technologies, such as Geographic Information Systems (GIS), Geospatial Positioning Systems (GPS), remote sensing, computers, and automation to managing food, agriculture, ecosystems, and bioenergy systems.

**Electrical Technology (ET) a CANR certificate program through the Institute of Agricultural Technology**

The ET certificate program prepares students to work as electrical technicians in agricultural as well as industrial settings. They are trained to solve problems related to electrical safety, and to deal with stray voltage.

**RESEARCH**

Faculty members are active in a wide range of research:

- Bioenergy
- Biobased products
- Animal waste management
- Nutrient transport and water quality
- Food quality and safety
- Biosensors and pathogen detection
- Nutraceutical processing

**RESEARCH PARTNERS**

- Consumers Energy
- Food Manufacturing Companies
- Michigan Commodity Groups
- Michigan Department of Environmental Quality
- Michigan Public Service Commission
- National Science Foundation
- U.S. Department of Agriculture
- U.S. Department of Homeland Security

**EXTENSION AND OUTREACH**

The department offers many short courses and two-day sessions across the state such as:

- Neutral-to-Earth Voltage Evaluator Training
- 2005 Michigan Electrical Code Update
- Agricultural Grounding and Wiring
- Soils Training
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**GRADUATE PROGRAMS**

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