Iowa State University

Department of Agricultural and Biosystems Engineering

2016-2021 Strategic Plan

Our Vision

ISU's Department of Agricultural and Biosystems Engineering is to through engineering and and living systems.

Our Mission

The mission of the Agricultural and Biosystems Engineering Department is to:

- promote undergraduate student learning in agricultural and biosystems engineering and industrial and agricultural technology,
- promote graduate student learning in agricultural engineering and industrial and agricultural technology,
- discover and improve new technologies for all stakeholders, and
- provide engineering and technology expertise in the fields of agriculture, industry and biosystems for the state, nation, and world.



Values and Guiding Principles

As the Agricultural and Biosystems Engineering Department works toward achieving our mission, all be the premier team serving society members of the department are expected to act in accordance with Iowa State University's core values and technology for agriculture, industry, the identified departmental values and guiding principles. The ABE departmental values and guiding principles are:

- Diversity of students, staff, faculty, stakeholders, and viewpoints
- Partnerships with stakeholders
- Excellence in scholarship
- A systems approach that increases sustainability
- Lifelong learning

Themes and Goals

The department has identified five focus areas that best describe our current and future learning, discovery, and engagement activities. These areas share three common goals that encompass our talents, strengths, and expertise. They also give us an efficient system for collaboration and communication within our department. The ABE focus areas are:

- Land and Water Resources Engineering
- **Animal Production Systems Engineering**
- Biological and Process Engineering and Technology
- Advanced Machinery Engineering and Manufacturing **Systems**
- Occupational Safety Engineering



Our Value Statements:

Teaching:

- Teaching faculty are highly engaged with our educational programs.
- Our programs educate hands-on problem solvers who can blend theory and practice.
- Our programs are rigorous.
- Students are supported in their educational and career goals.
- ABE is a welcoming learning atmosphere for all interested students.



Research:

- Faculty participate in active programs from diverse funding portfolios.
- Faculty are conducting world-class research to address societal issues.
- Faculty are highly engaged with graduate and postdoc advising, education, and professional preparation.
- Faculty can recruit from an excellent graduate applicant pool.

Extension/Outreach/Service:

- Extension and outreach programs resulting in proven benefits.
- Strengthening research and extension integration can enhance both activities.
- Faculty that are engaged in public leadership enhance the recognition and impact of the department.

Implementing Values and Guiding Principles

- Boost diversity in people and thought
- Improve engagement with stakeholders
- Advance learner-centered pedagogy and implement outcomes assessment
- Reinforce resources and departmental infrastructure

Dr. Steven Mickelson, Chair

Department of Agricultural and Biosystems Engineering 1340B Elings Hall

Ames, IA 50011

Phone: 515 294-1434

E-mail: estaben@iastate.edu www.abe.iastate.edu

lowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Office of Equal Opportunity and Diversity, 3280 Beardshear Hall, 515 294-7612.