BIOSYSTEMS AND AGRICULTURAL ENGINEERING

Graduate Programs

BAE Graduate Programs

The Department of Biosystems and Agricultural Engineering offers Master of Science and Doctor of Philosophy degrees in Biosystems Engineering. Specific research areas include Machine System Engineering, Bioprocessing and Biotechnology, Food Engineering, and Environment & Natural Resources.

BAE provides excellent laboratory and computer facilities for students to explore research and design in such areas as bioprocessing and food engineering, machine vision, sensor and control technology, waste management and utilization, hydrology, water quality, porous media flow, and intelligent systems for agricultural machine design and production.

Research projects are supported by the Oklahoma Agricultural Experiment Station and by state, federal and private grants and contracts. Well-trained faculty members, many of whom are registered professional engineers with research, consulting and design experience, guide the graduate students’ activities and plan programs to meet students’ needs.

Graduate students design experiments and special equipment to conduct their work. They are expected to demonstrate, by supporting research or by design, the ability to identify a problem, define alternatives, propose a solution, organize a design or an experimental investigation, manage the project to completion, analyze and interpret data, and report the results through peer-reviewed papers and professional presentations.

Graduate Admission Requirements

Admission is competitive based on GPA(s) from previous degree(s), TOEFL/IELTS (for international students), statement of interests, experience, and recommendations. The GRE is not required, but often considered for graduate assistantship.

Minimum BAE Program Requirements

- Previous Degree:
  - An undergraduate degree in Biosystems Engineering or other Engineering from an ABET accredited or equivalent program (ABET Accredited Programs).
  - Students with undergraduate degrees in other disciplines or closely related fields, such as chemistry, physics, mathematics, biological science, agricultural sciences, and environmental sciences are also invited to apply to the BAE graduate program. Such applications are evaluated on an individual basis. Completion of additional credit hours of undergraduate course (such as engineering sciences and advanced biology) may be required before a BAE graduate Plan of Study is developed.
  - Grade Point Average (GPA): GPA ≥ 3.0 (on a 4.0 scale). Equivalent grades are required from an international university.

Prior research and publication experience for a Ph.D. application are preferred.

Degree Requirements

Each graduate student follows an approved plan of study and is supervised by his/her advisory committee. The Plan of Study is designed