Welcome from the department head

Kansas State University has a rich heritage of excellence in preparing Ph.D. and M.S. graduate students to pursue an academic, government or industry career. The biological and agricultural engineering department (BAE) is research oriented and committed to helping young people reach their personal career goals through real-world and challenging research opportunities. BAE is expanding knowledge and innovation in environmental sustainability, advanced biological products, and terra-machine mechanism and mechatronics. Our heritage focusing on food and fiber production systems, while conserving our natural resources, remains vital in the 21st century.

Sincerely,
Joe Harner
Department head and professor

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Manhattan, Kansas and K-State campus

Our engineering graduate program is currently 59th in the U.S. News and World Report Public School rankings. K-State is recognized by the Princeton Review as one of America's best colleges.

Manhattan, nicknamed "The Little Apple," is a great environment to start a new chapter of your life. The city ranks among the best classic college towns in the country.

Aggieville
Aggieville, an entertainment district close to campus, features more than 100 restaurants, bars and shops, many of which are locally owned. It has been a popular attraction for more than 125 years.

Helpful websites
Cost-of-living and tuition information:
k-state.edu/sfa/costofattendance/gtc.html
Graduate student life information:
k-state.edu/grad/students/graduatemasterstudentlife/GraduateStudentLife.html
Engineering graduate programs information:
engg.ksu.edu/ergp/grad-program

Notice of Nondiscrimination
Kansas State University is committed to nondiscrimination in admissions, programs and employment. Inquiries and complaints: Contact Director of Institutional Equity, Kansas State University, 103 Edwards Hall, Manhattan, KS 66506-4801, (Phone) 785-532-6220, (TTY) 785-532-4807.

Manhattan, Kansas
and K-State campus

Biological and Agricultural Engineering Graduate Program
Kansas State University
A guide for interested students
### Research areas

#### Advanced biological products
This research focuses on utilization of bio-based materials from existing refinement processes and development of new valued-added products. Areas of emphasis include the following:
- Biobased materials
- Co-products utilization
- Alternative biobased fuels
- Specialty human food products
- Animal and human biotechnology

#### Environmental sustainability
This research focuses on conservation and preservation of natural resources to meet increasing global demands for biological products, and utilization of biological systems in sustainable food systems. Areas of emphasis include the following:
- Air quality
- Climate change
- Water resources
- Ecological systems
- Land-water interaction

#### Terra-machine mechanics and mechatrononics
This research focuses on utilization of new machinery systems, application of technologies, and the role of big data in sustainable food and fiber production systems. Areas of emphasis include the following:
- Mechatronics
- Human interaction
- Precision technologies
- Energy and power conversion
- Automated and robotic machines

### BAE degrees

#### M.S. degree
The Master of Science (M.S.) program is a broadly based curriculum designed to prepare students for advanced positions in the agricultural and biological engineering industry, consulting and government, as well as for further graduate studies. The M.S. degree requires a minimum of 30 credit hours of graduate-level course/research work.

#### Concurrent B.S./M.S.
The concurrent Bachelor of Science and Master of Science degree program allows a qualified junior or senior in the biological systems engineering (BSE) undergraduate program to apply. Up to nine credit hours taken for graduate credit can be applied towards the B.S. degree. The student will earn both B.S. and M.S. degrees upon graduation.

#### Ph.D. degree
The Doctor of Philosophy (Ph.D.) degree program is a research-oriented curriculum designed to prepare students for advanced research and university-level academic positions in biological and agricultural engineering. The Ph.D. program requires 60 credit hours beyond the master’s degree, including original research of sufficient quality and importance to merit publication in referred journals.

### Application process

#### Minimum admission
- B.S. degree in biological and agricultural engineering or similar discipline (full admission)
- B.S. degree in another engineering or non-engineering discipline (provisional admission)
- Cumulative GPA of at least 3.0 on a 4.0 scale
- GRE scores (no minimum)

#### International student requirements
- Internet-based TOEFL: 79 or higher, with no score below 20 on reading, listening and writing sections
- IELTS: 6.5 or higher on reading, listening and writing sections
- Pearson Test of English (PTE): 58 or higher with no section score below 58

#### Application deadlines
- January 8 for fall (August) enrollment
- August 1 for spring (January) enrollment
- December 1 for summer (June) enrollment

### Financial assistance
The BAE department offers competitive Graduate Research Assistantships (GRAs) and Graduate Teaching Assistantships (GTAs) providing stipend and tuition support. Competitive research grants and contracts support GRAs and the College of Engineering support GTAs. Graduate students are also eligible for philanthropic and nationally funded graduate fellowships.

### English language program
Kansas State University offers English language graduate support courses. ELP academic advisers help students who are admitted to study in a degree program make the transition from the ELP into their academic departments.

Visit k-state.edu/elp for more information.