Financial assistance
The Carl R. Ice College of Engineering 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 supports GTAs. Several graduate student scholarships are available through the college. Graduate students are also eligible for philanthropic and nationally funded graduate fellowships.

English language program (ELP)
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. For more information, visit k-state.edu/elp.

International student requirements

<table>
<thead>
<tr>
<th>Test</th>
<th>Minimum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBT TOEFL (interest-based)</td>
<td>79</td>
</tr>
<tr>
<td>TOEFL (PBT)</td>
<td>550</td>
</tr>
<tr>
<td>IELTS</td>
<td>6.5</td>
</tr>
<tr>
<td>Pearson Test of English (PTE)</td>
<td>58</td>
</tr>
</tbody>
</table>

Helpful websites

Engineering Research and Graduate Programs
engg.k-state.edu/ergp

Graduate catalog
catalog.k-state.edu/index.php?catoid=2

Cost-of-living and tuition information
k-state.edu/sfa/costofattendance

Graduate student life information
k-state.edu/grad/students

Application Process

Minimum admission requirements
- Bachelor’s degree in engineering, mathematics or statistics with a strong background in applied math
- GPA of 3.0 or above on last 60 hours of courses
- Official GRE scores, unless applicant will have graduated from an ABET-accredited program
- International students must meet university English proficiency requirements
- All application materials can be submitted online at k-state.edu/grad/application
Welcome

Thank you for considering graduate studies in the department of industrial and manufacturing systems engineering (IMSE) at Kansas State University. Each IMSE faculty member is dedicated to helping you succeed. At K-State, you will have regular interaction with your major professor and the rest of the IMSE faculty. Our family atmosphere facilitates development of lifelong friendships and professional networks.

IMSE faculty members publish, on average, three journal papers and two papers in refereed conference proceedings each year. They will challenge you to publish your work and will help you to travel to professional conferences to present your work.

Feel free to contact us at imse@k-state.edu. We will be happy to answer your questions and discuss how our program can help you attain your career goals.

Sincerely,

Bradley A. Kramer
Professor and department head
Ike and Letty Evans Engineering Chair

Research Areas

Advanced manufacturing
IMSE researchers work to develop and improve advanced manufacturing processes and systems. Key manufacturing research topics focus on processing difficult-to-machine materials, additive manufacturing and energy manufacturing. Research strengths are in laser micromachining, ultrasonic machining, machining of semiconductor wafers and 3D printing of advanced materials. Key manufacturing systems research focuses on multivariate statistical process control.

Operations research
Research teams work to develop both theoretical foundations and modern applications of operations research. Key fundamental research is conducted in discrete optimization, mathematical programming, dynamic systems modeling and optimization. Key applications are health systems modeling, humanitarian logistics, pattern recognition and scheduling.

Systems engineering
IMSE researchers are working to optimize a variety of complex systems, which are generally defined as regularly interacting, interrelated or interdependent groups of items or elements that form a complex whole. K-State has concentrated systems engineering efforts in humanitarian logistics, healthcare operations, transportation engineering, quality production systems, and product and technology development.

Degrees

Master of Science in Industrial Engineering
This program teaches students the mathematical, scientific and analytical skills to solve complex business problems in manufacturing, healthcare, transportation, financial organizations, communications, government, military and many other organizations.

Master of Science in Operations Research
The operations research program teaches students to model problems mathematically and develop analytical solutions using methods derived from mathematical programming, statistics, probability theory, simulation, computer science and graph theory. The MSOR program is offered both on campus and via distance education.

Professional Master of Engineering Management
The MEM degree will equip practicing engineers with the knowledge and skills necessary to effectively manage engineers and other technical resources to accomplish complex technical tasks. This online program is designed to be part-time and typically requires two to four years to complete.

Doctor of Philosophy
The doctorate program in industrial engineering is a research-oriented curriculum designed to prepare students for advanced industrial research and university positions in industrial and manufacturing systems engineering. Graduates of our program are leading major industrial and academic institutions around the world.