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>

Application deadlines

<table>
<thead>
<tr>
<th></th>
<th>U.S. citizens/ permanent residents</th>
<th>International applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer admission</td>
<td>April 1</td>
<td>Dec. 1</td>
</tr>
<tr>
<td>Fall admission</td>
<td>June 1</td>
<td>Dec. 1</td>
</tr>
<tr>
<td>Spring admission</td>
<td>Nov. 1</td>
<td>Aug. 1</td>
</tr>
</tbody>
</table>

Helpful websites
Engineering graduate programs
ingg.k-state.edu/academics/graduate
Graduate catalog
catalog.k-state.edu/index.php
Tuition and fee information
k-state.edu/finsvcs/cashiers/costs
Graduate student life information
k-state.edu/grad/students

Notice of Nondiscrimination
Kansas State University is committed to nondiscrimination in admissions, programs and employment. Inquiries and complaints may be directed to the Director of Institutional Equity, Kansas State University, 110 Edwards Hall, Manhattan, KS 66506-4801, Phone (785) 532-4620.
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.