Application Process

Financial assistance
Students accepted as doctoral candidates receive stipends of $29,500 per year, plus tuition and health insurance in the form of graduate research assistantships (GRAs) and graduate teaching assistantships (GTAs). Exceptional students are also eligible for scholarships of up to $5,000 per year.

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>

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) 785-532-6205.

Helpful websites

Engineering graduate programs  
engg.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
Dear Prospective Student,

Our graduate program offers an excellent professional experience that combines classes focused on chemical engineering theory with research and practical implementation.

Students study transport phenomena, reaction engineering and thermodynamics in depth. Classes are taught by experienced, award-winning faculty with a wealth of professional experience.

Students also create new knowledge and technology through cutting-edge research on sustainable energy and advanced materials. They learn skills by working with state-of-the-art instruments for materials synthesis and characterization, and molecular modeling tools supported by high-performance computing clusters. Our research is multi-disciplinary and involves collaborations with many other universities and national laboratories.

I encourage you to consider joining our graduate program, and its students and faculty who share your dedication and enthusiasm for professional advancement.

Jennifer Anthony
Interim department head and associate professor

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**Research Areas**

**Sustainable energy**
- Solar thermal ammonia synthesis
- Fuels and specialty chemical production from biomass
- Single-molecule spectroscopy
- Catalytic membrane reactors
- Liquid and gas separations
- Fischer-Tropsch process: conversion of CO and H₂ to liquid hydrocarbons
- Heterogeneous catalysis
- Analysis of catalysis by first-principles density functional theory (DFT) and molecular simulation

**Advanced materials**
- Nanocarbons for high-energy-density lithium ion batteries
- Chemical, biological and radiation sensors
- Wide bandgap semiconductor crystal growth
- Ionic liquids
- Biological interfaces
- Emulsions for pharmaceutical applications
- Polymeric nanomaterials for drug and bioactive gas delivery

Research trains students to think creatively as they develop innovative processes and technologies to solve major societal problems. They learn to critically analyze challenges and potential solutions, to find the most viable and practical paths forward.

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**Degrees**

**Master of Science (Global Campus)**
The Master of Science in chemical engineering program is designed for working professionals who have already obtained a bachelor's degree in chemical engineering. All graduate courses leading to the degree are available online to students residing both in and out of the United States. For more information, visit global.k-state.edu/engineering/chemical/.

**Doctor of Philosophy**
Students learn advanced knowledge in areas of specialization, an ability to independently plan and conduct scholarly research, and effective communication. The program prepares graduates for advanced chemical engineering research in industry, academia and government laboratories.