PH.D. IN CHEMICAL ENGINEERING

In the Ph. D. program in Chemical Engineering, students will work side-by-side with world-renowned experts to make novel and significant contributions to addressing global challenges using chemical engineering principles. Our program equips students with a diverse skill set essential for the next generation of chemical engineering leaders in academia and industry. Our students are involved in a wide range of innovative research areas, including advanced polymeric materials, bioanalytical devices, biomedical science and engineering, systems biology, synthetic biology, and biomanufacturing.

Opportunities for collaboration with many other departments across the University are abundant, including departments in the Colleges of Engineering, Natural Sciences, and Veterinary Medicine and Biomedical Sciences and beyond.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (http://catalog.colostate.edu/general-catalog/graduate-bulletin/).

Learning Objectives

Upon successful completion, students will be able to:

1. Demonstrate technical mastery of the core chemical engineering disciplines of thermodynamics, transport phenomena, and chemical reaction engineering.
2. Advance the theory and practice of chemical engineering by making original research contributions that are both novel and significant.
3. Maintain high standards of scholarly excellence and responsible research conduct.
4. Demonstrate competency at assimilating information from other related fields of science and engineering to inform their intellectual pursuits and to expand the areas of application of their chemical engineering expertise.
5. Effectively and professionally disseminate their research in the primary peer-reviewed and patent literature, and through technical conferences and symposia.