Chemical Engineering (CHE)

Top reasons to choose chemical engineering as your major

Chemical engineers are uniquely positioned to help find solutions to these pressing societal problems:

- Global climate change
- Transition from a hydrocarbon-based economy
- Waste minimization and pollution control
- Development of green sources of energy
- Production of food for a hungry world
- Improved medical care, including targeted drug delivery and artificial organ development
Opportunities

- Chemical engineers are versatile and flexible, excelling in all types of problem solving.

- Chemical engineers are highly employable and well-paid. Their jobs are exciting, interesting, and full of challenges and opportunities.
The program emphasizes chemical engineering fundamentals, but students can choose electives to support their particular career objectives. Possibilities include the following:

- **Petrochemicals** — production of motor fuels and bulk chemicals
- **Bioengineering** — processing of biologically originated materials to yield consumer products and fuels
- **Pharmaceutics** — scale-up and optimization of processes for manufacture of pharmacologically active agents
- **Food** — improving production, processing and nutritional value of food
- **Microelectronics materials** — developing new materials and processes to enhance efficiency and capacity of integrated circuits, light-emitting diodes and photovoltaics
Program overview

The K-State CHE program provides a solid education in chemistry, physics, advanced mathematics, and chemical engineering theory and practice. Teamwork, effective communications and safety are also important aspects of the program. Graduates know the importance of life-long learning. Classes are augmented by professional development through the student chapter of the American Institute for Chemical Engineers and other student organizations. The Bachelor of Science in Chemical Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Student experience

- Courses cover a broad range of topics including mathematics, physics, chemistry, communications, teamwork and chemical engineering.
- Students learn essential chemical engineering theory and experience chemical engineering practice through courses that are a mixture of lecture and laboratory.
- The student chapter of the American Institute of Chemical Engineers is highly active in promoting professional development, community service and building friendships.