

Chemical Engineering

The work of chemical engineers is actually all around. Chemical engineers take raw materials and turn them into everyday products such as medicines, foods, paper, plastics, fertilizers and semiconductors – to name but a few. But that's not all. Chemical engineers also help protect the environment by determining the lifespan of chemicals, inventing substitutes for scarce resources and creating new products from recycled materials.



Chemical Engineering Studies

The coursework for chemical engineering students includes a focus on the fundamental science principles in chemistry, mathematics and physics, with a further emphasis on the chemical engineering fundamentals of material and energy balances, thermodynamics, transport phenomena, and kinetics. Chemical engineering teachers also stress the importance of design and creative problem-solving methods using modern engineering tools such as spreadsheets, symbolic equation processors and process simulators.

Students also carry out hands-on application of theory and concepts in laboratories, learn the importance of teamwork and develop oral and written communication skills. By participating in cooperative education programs and internships, students gain work experience, job knowledge and valuable career contacts in their field.

Research Highlight

Chemical engineers from NMSU are developing new technologies to make vehicles powered by hydrogen fuel cells a reality. By finding ways to remove substances damaging to expensive components used in fuel-cell technology, their research will result in less-costly technology, making it more economically feasible for automakers to produce and offer hydrogen fuel-cell powered vehicles to consumers.

DID YOU KNOW?

NMSU has been ranked one of America's 100 Best College Buys® for 10 consecutive years.