



STUDENT ACTIVATION



Chemical Engineer



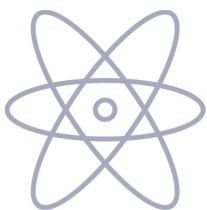
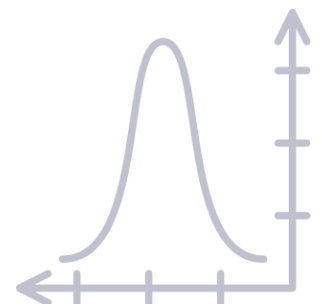
OVERVIEW

Chemical Engineers figure out how to transform chemicals and raw materials into products that humans can use. They also create and improve upon the processes that develop these products. Chemical Engineers could, to name a few, work in food production and develop strategies to improve the quality of food, address environmental challenges as they develop systems that reduce pollution, work to improve the efficiency of energy sources like oil and gas, or develop fibers that make clothes more durable. No matter what, this career helps transform ideas that begin in science labs into products and processes that will benefit the world.



EVALUATE YOUR INTEREST

- I like collaborating with others.
- I enjoy analyzing and solving problems.
- I am interested in a variety of STEM subjects, including math, physics, engineering, chemistry, and biology.
- I like being creative and thinking outside the box.





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STUDENT ACTIVATION (CONTINUED)



CAREER CONNECTION

How does this career affect me?	What are some other similar careers?	How does this career affect the world?
<p>Chemical Engineers touch virtually every product that is produced on a large, industrial scale. While you may not often think about how the products that you use on a daily basis are produced, Chemical Engineers do! From the soap you use, to medicine you take, to the transportation you rely on, chances are high that Chemical Engineers played a role in developing the materials or the processes that made the product accessible to you!</p> 	<p>Chemists research and perform experiments with chemical substances in order to develop new materials and processes. They then share their findings with Chemical Engineers who help transform their discovery into something the public can use on a larger scale.</p> <p>Analytical Chemists investigate the chemical composition of substances. They perform experiments to understand what substances are made of and how they react in different conditions.</p> <p>Product Development Scientists work in a wide range of industries to enhance current products, analyze product concepts, and develop new products. Like Chemical Engineers, they use many different skills in this field.</p>	<p>Chemical Engineers positively impact life around the world in countless ways. For instance, their work in medicine and technology contributes to important healthcare advances. Their roles in fields like waste systems and the energy industry also means that Chemical Engineers play an important role in designing new innovations to keep our environment clean, while still producing needed resources. With all of the fields that Chemical Engineers touch, it's no surprise that Chemical Engineers are sometimes called Universal Engineers!</p> 

TAKE ACTION

- Perform an energy audit in your home, in which you assess how energy is currently used. Use your results to develop a checklist to make your home more energy efficient, and work with your family to implement these changes!
- Develop clear and realistic suggestions for how to improve a common process in your home, school, or community, whether it's how to keep your home more organized, how to help students switch between classes more efficiently, or how to change your community bus routes to reduce air pollution!

