chemical engineer

job profile



education

B.S./M.S./Ph.D.
in chemical engineering

skills needed

- results oriented with leadership and strong team oriented interpersonal skills
- strong technical and mathematics background
- creativity and ability to solve problems
- ability to handle multiple projects simultaneously
- ability to self manage
- strong verbal and written communication skills
- knowledge in software applications including Excel, Word, Access, PowerPoint

salary range

$70,000 - $180,000

what does a chemical engineer do?

chemical engineers apply the principles of chemistry, biology, physics, and math to solve problems that involve the production or use of chemicals, fuel, drugs, food, personal care, and many other products. They conduct research to design new processes and equipment and evaluate technical and economic feasibility for large scale manufacturing. They plan and test production methods and ways to minimize or eliminate waste, and direct facility operations.

responsibilities of the job

- apply and interpret scientific or engineering principles and theories; develop creative solutions to problems
- lead new process development projects; direct technicians in lab and pilot plant; oversee pilot and commercial trials to demonstrate and commercialize new products and processes; facilitate transfer of new process technology to manufacturing; manage production and troubleshoot production problems
- understand needs of customers and able to develop cost effective solutions to customer problems; understand impacts of different process options on overall production cost
- establish working relationships with customers, suppliers, and vendors to support program objectives; prepare technical reports and other communications with independent interpretation of data and recommendations for future work
- works independently to drive projects to completion