

# Chemical Engineer Job Description

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- Design and develop plant equipment, operations, and processes
- Analyze and interpret data from chemical production tests
- Inspect plant operations, spot issues, and troubleshoot them
- Optimize existing manufacturing processes to improve efficiency
- Run research to discover new or improved production methods
- Come up with quality control testing procedures and protocols
- Make sure manufacturing processes and plants run in line with regulations
- Advise on equipment requirements and operating conditions for new plants
- Evaluate environmental effects of different chemicals
- Offer technical guidance to chemists, technicians, and other staff
- Calculate production costs and economic viability of new processes
- Collaborate with engineering teams on process hazard analysis studies
- Analyze process stimulation and experimental data
- Execute continuous improvement initiatives to enhance productivity
- Come up with waste management strategies for sustainable operations
- Carry out feasibility studies for adopting new processing technologies
- Troubleshoot equipment malfunctions and recommend maintenance
- Supervise commissioning and start-up of new production facilities
- Offer training to operators on proper equipment operation
- Develop safety protocols and procedures for chemical handling.