

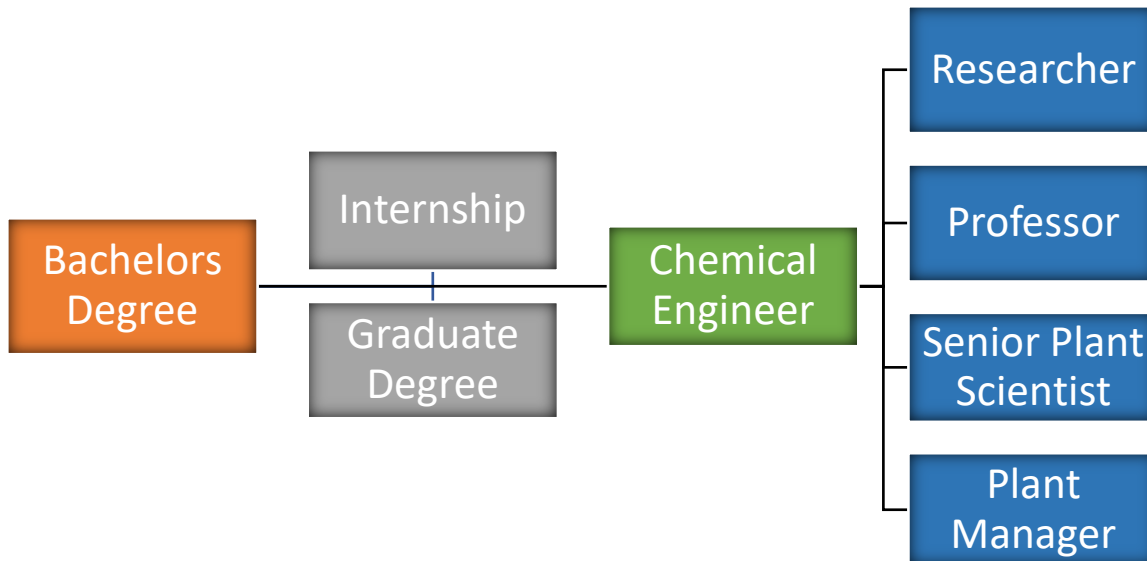
Chemical Engineer

Also known as: Development Engineer, Engineering Scientist, Refinery Process Engineer, Process Engineer, Research Chemical Engineer, Scientist

Chemical Engineers are often involved in the design of chemical plant equipment and in the processes for manufacturing chemicals and products such as: gasoline, synthetic rubber, plastics, detergents, cement, paper, pulp, and batteries. In energy production, they are focused on renewable fuels such as biomass feedstocks, solar power, wind, hydrogen, and batteries for storage of energy.

Pay Scale	Education	Projected Opportunities
\$104,740 in 2021 in WA \$105,550 in 2021 in U.S.	Bachelor's, Master's, Doctorate	50 through 2030 in WA 2,000 through 2031 in U.S.

Career Path



Training & Requirements

Training	Required Skills	Responsibilities
<p>Most employers require a BS in Chemical Engineering and 1-3 years of related technical experience. Many research positions or post-secondary teaching positions will require an MS or DS though. Chemical Engineering programs are heavy in math, physics, and chemistry.</p>	<ul style="list-style-type: none">• Use of analytical, scientific, and data base software• Analyze data as a whole and able to break it down into separate parts• Understanding of physics, mathematics, and chemical processes• Experience in the chemical engineering field and research• Use of science and mathematics to solve problems	<ul style="list-style-type: none">• Monitor and analyze data from processes and experiments• Develop safety procedures to be employed by workers in close proximity to chemical reactions• Develop controlled chemical processes to separate components of liquids, gases or generate electrical currents• Evaluate chemical equipment and processes to identify ways to optimize performance and ensure safety compliance

Additional Information:

- [O*NET Occupational Data](#)
- [U.S. Bureau of Labor Statistics](#)
- [College Programs](#)
- [Apprenticeships](#)