

## Chemical Engineers

17-2041.00



**Description:** Design chemical plant equipment and devise processes for manufacturing chemicals and products, such as gasoline, synthetic rubber, plastics, detergents, cement, paper, and pulp.

**Other Resources:**

[ONET Link](#)  
[MyNextMove Link](#)

**Sample of Reported Job Titles:** Chemical Engineer, Development Engineer, Engineer

### Job Zone

**Title:** 4 - Considerable Preparation Needed

**Education:** Require a four-year bachelor's degree.

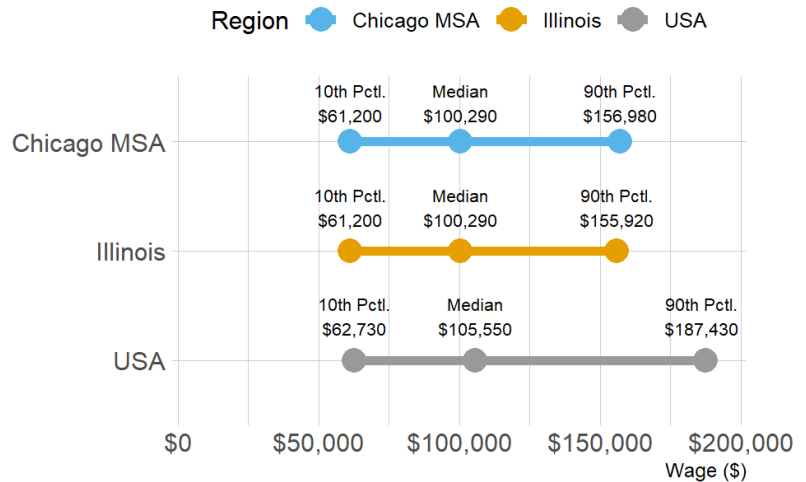
**Experience:** A considerable amount of work-related skill, knowledge, or experience is needed.

**Training:** Several years of work-related experience, on-the-job training, and/or vocational training needed.

**Core Certifications:** Level II Laboratory Lubricant Analyst

**Hot Technologies:** Autodesk AutoCAD, C++, CD-adapco STAR-CAD, Computer aided design and drafting CADD software, Computer aided design CAD software

Region	Employment	Location Quotient	Median Wage
Chicago MSA	220	0.30	\$100,290
Illinois	300	0.31	\$100,290
USA	24,180	–	\$105,550



Top 5 Core Tasks According to Current Job Holders	Frequency	Importance (out of 100)
Monitor and analyze data from processes and experiments.	Daily	91
Develop safety procedures to be employed by workers operating equipment or working in close proximity to ongoing chemical reactions.	More than yearly	90
Develop processes to separate components of liquids or gases or generate electrical currents, using controlled chemical processes.	More than monthly	88
Troubleshoot problems with chemical manufacturing processes.	Daily	84
Evaluate chemical equipment and processes to identify ways to optimize performance or to ensure compliance with safety and environmental regulations.	More than monthly	83