

CHEMICAL LABORATORY TECHNOLOGY, ASSOCIATE IN APPLIED SCIENCE



College(s): TR

Program Code: 0137

The Associate in Applied Science degree program for Chemical Laboratory Technology focuses on the study of the development, production and utilization of industrial chemicals, and methods used in modern chemical laboratories. The program can lead to employment as a chemical lab technician (working under supervision of senior technicians), engineer, or scientist in production or testing, as well as in commercial utilization of chemicals and chemical products.

Program Requirements

Code	Title	Hours
General Education Coursework		
ENGLISH 101	Composition	3
MATH 140	College Algebra	4
Fine Arts & Humanities course		3
Social and Behavioral Sciences course		3
General Education Human Diversity course		3
Required Program Core		
CHEM 201	General Chemistry I	5
CHEM 203	General Chemistry II	5
CHEM 205	Organic Chemistry I	6
CHEM 207	Organic Chemistry II	6
CHEM 217	Intro Instrumental Analysis	4

MATH 207 Calculus & Analytic Geometry I 5

Program Electives

Select a minimum of 16 credit hours of the following: 16

CIS 120	Introduction to Computer Applications
MATH 141	Plane Trigonometry
MATH 208	Calculus & Analytic Geometry II
PHYSICS 235	Engineering Physics I: Mechanics & Wave Motion
PHYSICS 236	Engineering Physics II: Electricity & Magnetism

Total Hours **63**

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (<https://www.ccc.edu/departments/Pages/Career-Services.aspx>).

Chemical Technicians

Job Description

Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10 th Percentile	\$42,923
Median 50 th Percentile	\$63,590
Senior-Level 90 th Percentile	\$106,144

Hourly Wages

Entry-Level 10 th Percentile	\$21
Median 50 th Percentile	\$31
Senior-Level 90 th Percentile	\$51

Annual Job Openings

52 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	33.34%
A certificate	0.00%
Some college	22.42%
An Associate degree	0.50%
A Bachelor's degree	43.74%
A Master's or Professional degree	0.00%
A Doctoral degree or more	0.00%

43.74% continue their education beyond an associate degree

Chemical Equipment Operators and Tenders

Job Description

Operate or tend equipment to control chemical changes or reactions in the processing of industrial or consumer products. Equipment used includes devulcanizers, steam-jacketed kettles, and reactor vessels.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10 th Percentile	\$38,088
Median 50 th Percentile	\$58,139
Senior-Level 90 th Percentile	\$74,435

Hourly Wages

Entry-Level 10 th Percentile	\$18
Median 50 th Percentile	\$28
Senior-Level 90 th Percentile	\$36

Annual Job Openings

69 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	50.59%
A certificate	13.50%
Some college	20.64%
An Associate degree	13.50%
A Bachelor's degree	1.77%
A Master's or Professional degree	0.00%
A Doctoral degree or more	0.00%

1.77% continue their education beyond an associate degree

Chemical Plant and System Operators

Job Description

Control or operate entire chemical processes or system of machines.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10 th Percentile	\$55,460
Median 50 th Percentile	\$59,048
Senior-Level 90 th Percentile	\$67,546

Hourly Wages

Entry-Level 10 th Percentile	\$27
Median 50 th Percentile	\$28
Senior-Level 90 th Percentile	\$32

Annual Job Openings

6 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	61.53%
A certificate	0.97%
Some college	0.51%
An Associate degree	0.21%
A Bachelor's degree	36.27%
A Master's or Professional degree	0.30%
A Doctoral degree or more	0.21%

36.78% continue their education beyond an associate degree