



BERKELEY CITY COLLEGE
1955
TRANSFORMING LIVES

ANALYTICAL CHEMISTRY

DISCOVER THE SCIENCE OF CHANGE



..... Are you

Inquisitive | Focused | Determined

.....

berkeleycitycollege.edu/chemistry



Math, Science,
and Technology

Discover your community at BCC



Math, Science,
and Technology

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Are you fascinated by the world around you? Are you inspired by understanding how things work? If you feel at home in a lab or are passionate about the possibilities of chemistry or chemical engineering, then the Analytical Chemistry program at BCC was built for you. In our advanced facilities you'll learn lab skills that will empower you as a lab technician, in a four year degree path, or as you prepare for graduate school. **Discover the science of change at BCC.**

GET STARTED

Feed your inquisitive nature with a variety of learning opportunities as a Chemistry student at BCC:

- Find inspiration in the science community with lunchtime STEM career seminars
- Preview student life as a university Chemistry student with field trips to UC Berkeley College of Chemistry
- Learn from the pros with faculty-supported career guidance

If you are a science student in a different discipline ask a counselor about also completing a certificate or degree in Analytical Chemistry. Many of the courses overlap, creating an opportunity to work towards completing an additional certificate or degree.

PREPARE TO TRANSFER

Build your resume, gain practical work experience, and get paid, while you fulfill requirements for a degree AND career in Analytical Chemistry as a **Student Assistant in the Chemistry Laboratories** at BCC (please note that select students are eligible). This is a great opportunity to cultivate valuable skills, discover your area of expertise, and gain the hands-on experience often required for entry to careers in the Chemistry field.

Undergraduate Transfer Prep

BCC's two-year Analytical Chemistry program is designed to equip you with the analytical skills needed for transfer to a 4-year academic institution or an entry-level career as a laboratory technician. Learn about our transfer agreement with 6 different UC campuses by talking to a counselor today! You can also visit the Career and Transfer Center at berkeleycitycollege.edu/transfer/

Graduate School Prep

Using our best-in-class facilities, you can complete chemistry course or lab hour requirements you need for graduate school preparation. Many of BCC's chemistry students are post-graduates who choose BCC to fulfill additional prerequisites for nursing, medical, or pharmaceutical school, along with other fields of graduate study.



HIGH SCHOOL STUDENTS

Twice as Strong with DE at BCC

As a Dual Enrolled student, you can earn college credit while you finish high school. So don't wait—ask your guidance counselor, today!

Scan QR code to learn more:



ANALYTICAL CHEMISTRY CERTIFICATES & DEGREES

Looking to advance your career or launch a new career path with an affordable college degree? Our programs can get you where you need to be.

CREDIT



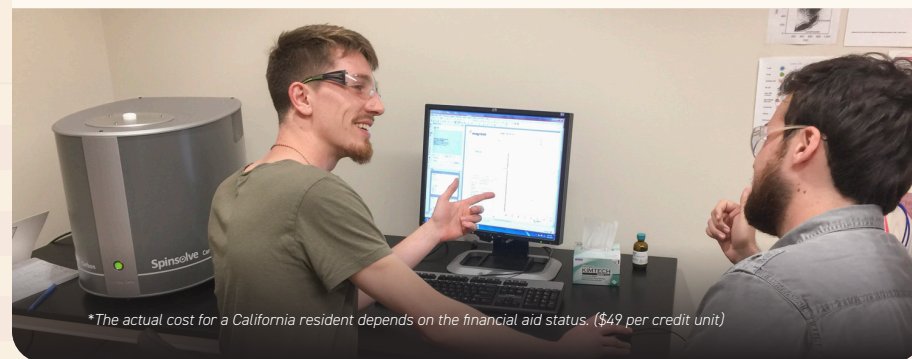
ANALYTICAL CHEMISTRY
Associate in Science (60 units)

Full-time status: 4 semesters or 2 calendar years
Cost: \$0-2,940*



ANALYTICAL CHEMISTRY
Certificate of Achievement (36-37 units)

Full-time status: 2 semesters
Cost: \$0-1,813*



*The actual cost for a California resident depends on the financial aid status. (\$49 per credit unit)

Analytical Chemistry



DISCOVER THE SCIENCE OF CHANGE

Schedule an appointment with a BCC Counselor to learn more!
www.berkeleycitycollege.edu/counseling

ASSOCIATE DEGREES



ANALYTICAL CHEMISTRY Associate in Science

(60 units)

- Major requirements (36-37 units)
- GE and major electives (23-24 units)

CERTIFICATES



ANALYTICAL CHEMISTRY Certificate of Achievement (36-37 units)

4th Semester

- CHEM 18 Analytical Instrumentation (3 units)
- CHEM 12B Organic Chemistry (5 units)

3rd Semester

- CHEM 12A Organic Chemistry (5 units) (Prerequisite for CHEM 12B)
- Major elective course (4-5 units)

2nd Semester

- CHEM 1B General Chemistry (5 units) (Prerequisite for CHEM 12A and CHEM 18)
- Major elective course (4-5 units)

1st Semester

- CIS 1 Introduction to Computer Information Systems (4 units)
- CHEM 1A General Chemistry (5 units) (Prerequisite for CHEM 1B)
- CHEM 30A Introductory General Chemistry (4 units)
(Option to satisfy CHEM 1A pre)

Options to satisfy CHEM 1A prerequisite requirement:

AP Chemistry score

ALEKS: allows students
to test out of CHEM 30A

CHEM 30A

This map represents one possible pathway at BCC and is based on the 2023-2024 catalog.



Transfer Opportunities

- UC System (transfer agreement with 6 UC campuses)
- College of Chemistry - UC Berkeley
- California State University System

CHEM 12A and CHEM 12B meet the chemistry requirements for:

- Nursing School
- Medical School
- Pharmacy School

GRADUATE SCHOOL

Major Electives

Select 9-10 units from the list below to complete the elective requirements for the Certificate of Achievement and the Associate in Science.

- BIOL 1A General Biology (5 units)
- BIOL 1B General Biology (5 units)
- MATH 3A Calculus I (5 units)
- MATH 3B Calculus II (5 units)
- MATH 13 Introduction to Statistics (4 units)
- PHYS 3A General Physics (5 units)
- PHYS 3B General Physics (5 units)
- PHYS 4A General Physics with Calculus (5 units)
- PHYS 4B General Physics with Calculus (5 units)



Without the considerate chemistry teachers, dedicated lab workers, and resources available at BCC, my passion for chemistry and lab environments would not be the same.

BCC STUDENT



START HERE TO BUILD YOUR ACADEMIC & CAREER PATHWAY!

OCCUPATION OUTLOOK IN THE ANALYTICAL CHEMISTRY FIELD



FIND YOUR CAREER IN ANALYTICAL CHEMISTRY

What Analytical Chemists Do

Analytical chemists use their knowledge of chemistry, instrumentation, computers, and statistics to solve problems across many industries. Some of the job functions they may perform include:

- Testing the quality and safety of food, pharmaceuticals, and water
- Ensuring industry compliance with environmental regulations
- Helping physicians diagnose diseases
- Supporting the legal process in criminal investigations with analysis of forensic samples as evidence
- Providing measurements and documentation essential to trade and commerce

Industries of Employment for Chemical Technicians

- Agriculture & Food
- Water Chemistry
- Medicinal Chemistry
- Pharmaceuticals
- Biotechnology
- Oil & Petroleum
- Allied Health Fields
- Environmental Chemistry



CAREER OPPORTUNITIES

Entry-level technicians in State and Federal laboratories, academic research laboratories, industrial, pharmaceutical, and environmental health laboratories:

Job Title	Median Annual Salary		Projected Employment Growth	
	California	U.S.	California	U.S.
Chemical Technician*	\$48,130	\$48,990	13%	15%
Clinical Laboratory Technician**	\$61,650	\$57,800	15%	7%
Forensic Science Technician***	\$81,980	\$61,930	15%	11%
Industrial Engineering Technician****	\$61,780	\$60,220	10%	3%
Quality Control Analyst*****	\$56,210	\$49,030	20%	7%

* <https://www.onetonline.org/link/summary/19-4031.00>
 ** <https://www.onetonline.org/link/summary/29-2012.00>
 *** <https://www.onetonline.org/link/summary/19-4092.00>
 **** <https://www.onetonline.org/link/summary/17-3026.00>
 ***** <https://www.onetonline.org/link/summary/19-4099.01>



Quick Guide to Community College Terminology

apprenticeship A work-based learning model where apprentices have supervised on-the-job training, along with job-related education, all while earning a wage that increases during the progression of the program.

Associate in Arts (AA)/Associate in Science (AS) An undergraduate degree requiring at least two years of full-time study and completion of 60-semester units, including major and GE courses.

Associate Degree for Transfer (AD-T) A specific set of courses required to transfer into an upper-division program at the CSU system as part of the junior class with guaranteed priority admission.

Certificate of Achievement (CA) A qualified credential noted on your official transcript upon completion of a series of courses of a specific subject or skill set. At minimum, 16 units, often connected to an Associate degree.

Certificate of Proficiency (CP) Smaller unit certificate related to a specific skill set or subject. Often part of a pathway to update a professional skill set or launch a new career.

co-requisite Courses required to be taken in tandem during the same term.

dual enrollment A program that allows students to take college courses while in high school and earn both high school and college credits simultaneously.

full-time status Enrollment in 12 units or more in a given term.

internship When a student works in an organization in order to gain work experience or satisfy requirements for a qualification. Internships can be paid or unpaid and help students make connections in professional fields they are considering for career paths.

lecture/lab hours Number of contact hours a lecture or laboratory course meets during a term

non-credit courses Intended for personal enrichment or to acquire a skill set, but not applicable toward a degree. No units are earned upon completion, but non-credit vocational certificates may be awarded upon completion of a series of classes in this category.

part-time status Enrollment in 11 or fewer units in a given term.

prerequisite Previous experience or course completions required for entry into another course.

Student Education Plan (SEP) Specific courses to enroll in each semester over a period of time, in order to meet the requirements of an educational goal, Associate Degree Transfer program (AD-T), or completion of Associate Degree (AA/AS).

unit Used synonymously with "credit", the value earned in a course.

APPLY ONLINE NOW!

Learn the steps to apply and enroll at BCC on our website at berkeleycitycollege.edu/menu-links/getting-started-at-bcc/



Scan QR code to learn more



berkeleycitycollege.edu



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