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# **PROGRAM BENEFITS**

The Certificate of Achievement program in Chemistry focuses on teaching students practical analytical chemistry skills. These can be applied directly to get a job as a chemistry technician at a local laboratory or used to improve practical laboratory skill for future classes and/or undergraduate research. The program includes an internship at a local laboratory to help improve students' "real world" chemistry skills and see what it would be like to work in the field of chemistry.



## Fresno City College

Math, Science, and Engineering Division Division Office: S-51 1101 East University Ave. Fresno, CA 93741 559-442-8215 www.fresnocitycollege.edu

This institution does not discriminate on the basis of race, color, national origin, sex, handicap, age or sexual orientation.

State Center Community College District





Chemistry is often called the "central science" since it draws from mathematics and physics and forms a necessary background for quality control programs in industry ad agriculture, and criminal evidence analysis in forensics. To earn the Certificate in Chemistry, students must complete 47-53 units of program required classes. Students must maintain a minimum 2.0 GPA, including grades of B or higher in General Chemistry and a C or higher on the other courses taken to fulfill the certificate. After earning a chemistry certificate, students will have the knowledge and skills required to enter the workforce as a chemical technician. These will include laboratory skills, computational skills, and communication skills.



#### **PROGRAM REQUIREMENTS**

#### **REQUIRED CORE (38–42)**

CHEM 1A	General Chemistry
ENGL 1A	Reading and Composition
MATH 11	Elementary Statistics
PHYS 2A	General Physics I
CHEM 1B	General Chemistry and Qualitative Analysis
CHEM 8A	Elementary Organic Chemistry
CHEM 18L	Elementary Organic Chemistry Lab
PHYS 2B	General Physics II
CHEM 100I	Chemical Laboratory Internship
CHEM 20	Practical Quantitative Analysis

### **THREE ELECTIVES (9–11 UNITS)**

COMM 2	Interpersonal Communication
BT 5	Workplace Communication
GEOL 4	Geology of California
BIOL 7	Field Biology
BA 18	Business and the Legal Environment
CRIM 3	Legal Aspects of Evidence