

Santa Monica College
Chemical Technician Skills Certificate of Achievement

Effective Fall 2026

The Certificate of Achievement in Chemical Technician Skills prepares students for entry-level employment as chemical technicians in pharmaceutical, chemical manufacturing, regulatory, or academic laboratories. The program provides a foundation in chemical principles and emphasizes hands-on experience with chemical instrumentation and fundamental laboratory techniques. The pathway introduces students to techniques commonly used in chemical analysis, manufacturing, quality assurance, and research. Students will develop practical skills in data collection and interpretation, industry-standard notebook documentation, handling chemical materials, laboratory safety, and the operation of instruments. This certificate requires successful completion of two semesters of general chemistry and an introductory course in chemical instrumentation.

Program Learning Outcomes:

Demonstrate proficiency in general chemistry concepts and laboratory procedures.

Operate and interpret data from common analytical instruments, including HPLC, GC-MS, IR, and UV-vis.

Apply safety and regulatory practices in a laboratory setting.

Analyze, interpret, and communicate scientific data effectively.

Required Courses	Units: 12.0
CHEM 11 General Chemistry I	5.0
CHEM 12 General Chemistry II	5.0
CHEM 55 Introduction to Chemical Instrumentation	2.0
	Total: 12.0