



Chemical Technology

Associate in Applied Science Degree, Career program

Division of Health & Sciences, Associate Dean: Rachel Hofstetter

Department Chair: Penelope Wilson

Chemical technicians work in research, process improvement, product development, measurement documentation, environmental testing, and quality control. They help design, set up, and analyze experiments in research, product/process development and quality control. They select and order materials and equipment, operate sophisticated instruments, and perform physical and chemical analyses on raw materials and products. Chemical technicians do experiments to obtain reliable data and use computers to analyze data and communicate information. They often work with other professionals to solve problems.

The Chemical Technology program is flexible. It emphasizes fundamentals and practical applications in order to train students for immediate employment and also prepares them to continue to work towards an advanced degree.

Graduates will be able to operate sophisticated instrumentation; make reliable measurements; understand chemical concepts and technical language; and apply their skills in experimental design, sample preparation, analytical measurement, documentation, data analysis, quality control, computer applications and technical writing.

Opportunities for employment are excellent and feedback from those who have transferred to institutions such as Syracuse, RIT, University of Rochester, Penn State, Cornell, and Alfred indicates CCC students are well prepared academically.

For program assistance, see Don Nyberg or Penelope Wilson.

High school or equivalent preparation required: Chemistry and mathematics are preferred. Students who don't have this preparation will be able to get it here, but it may take longer to complete the program.

Program Requirements

English (ENGL 1010 and 1020 or 1030. By placement)*	6	Scientific Computer and Communication Skills (SCIN 1060) ...	3
Social Sciences electives	6	Program electives (3 courses from list below)	9
Mathematics (MATH 1215-1225 or higher)*	6	Free electives (if needed)	3
Chemistry (CHEM 1510-1520 ¹ or 1010-1020 and		Wellness	2
CHEM 2010, 2020, 2031, 2032, 2041, 2042)	28	Total hours	63

*Based on placement, students may be required to take ENGL 0950 before taking ENGL 1010, and MATH 0960 before taking a math credit course. MATH 1230-1240 is recommended.

Sample Sequence: intended as a guide for academic planning. It need not be followed exactly or completed in four semesters.

First Semester

English	3
Mathematics (MATH 1215 or higher)	3
Chemistry (CHEM 1510 or 1010) ¹	4
Scientific Computer and Communication Skills (SCIN 1060)	3
Program elective	3
Wellness (Awareness/Instructional Component)	1

Third Semester

Organic Chemistry I (CHEM 2010)	5
Quantitative Analysis (CHEM 2031-2032)	5
Social Sciences elective	3
Wellness (Activity Component)	0.5

Second Semester

English	3
Mathematics (MATH 1220)	3
Chemistry (CHEM 1520 or 1020)	4
Program elective	3
Social Sciences elective	3
Wellness (Activity Component)	0.5

Fourth Semester

Instrumental Analysis (CHEM 2041-2042)	5
Program elective (CHTK 2960 recommended)	3
Organic Chemistry II (CHEM 2020)	5
Free electives	3

¹For those who have recently successfully completed high school chemistry, CHEM 1510-1520 should be selected.

Program electives: Select three courses from the following list: BIOL 2010, 2040, 2060; CHTK 2960; ENGR 2150 or MECH 2210; ELEC 1010 or higher; GEOL 1510 or 1530; MATH 1310, 1610; MECH 1050; MFGT 2010, 2020; PHYS 1010 or higher. (Depending on the courses chosen, program electives may total more than 9 credit hours.)