

## Chemical Technology

Students in the Chemical Technology curriculum receive a balanced program of practical laboratory training and theoretical concepts in inorganic, organic and analytical chemistry for the Associate in Applied Science (A.A.S.) degree. Graduates of the curriculum will have laboratory skills that will enable them to adjust quickly to industrial laboratory work. They will also have the basic foundation for further professional growth.

Students have an opportunity to use a variety of analytical instruments such as infrared, visible and ultraviolet spectrographs, vapor and liquid phase chromatography and polarography. Most of the instruments are computer interfaced. Exercises in routine instrumental analyses, as well as more challenging problems in such topics as structure determinations, are given.

### PROGRAM ENTRY REQUIREMENTS:

This program is open to interested students, assuming space is available. The curriculum is well aligned with the courses required of students who are planning on a bachelor's degree in chemistry. Students are required to take the College's placement tests at their time of entry.

Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

### PROGRAM OF STUDY AND GRADUATION REQUIREMENTS:

A minimum of 63 credits and a grade point average of 2.0 ("C" average) are required for graduation.

Recommended Course Sequence	Course Number and Name	Prerequisite or Corequisite	Credits
<b>Program Core Courses - Chemical Technology</b>			
3	CHEM 121 - College Chemistry	CHEM 110 (or permission of Dept. Head) and MATH 118	4
7	CHEM 122 - College Chemistry	CHEM 121	4
10	CHEM 213 - Analytical Chemistry	CHEM 122	4
12	CHEM 221 - Organic Chemistry	CHEM 122	5
13	CIS 103 - PC Applications or higher level CIS course		4
14	CHEM 207 - Environmental Chemistry	CHEM 122	4
16	CHEM 214 - Instrumental Analysis	CHEM 122	4
17	CHEM 222 - Organic Chemistry	CHEM 221	5
<b>General Education Courses</b> (See page 36 for information on disciplines which meet these requirements.)			
1	ENGL 101 - English Composition I		3
2	MATH 118 - Intermediate Algebra <sup>2</sup>		3
4	Social Science Elective <sup>1</sup>		3
5	Natural Science with Lab Elective <sup>3</sup>		4
6	ENGL 112 - Report and Technical Writing or ENGL 102 - English Composition II	ENGL 101	3
8	Natural Science with Lab Elective <sup>3</sup>		4
9	MATH 251 - Statistics for Science <sup>2</sup>	MATH 118	4
15	Social Science Elective <sup>1</sup>		3
<b>Directed Elective</b>			
11	CHEM 217 - Chemical Literature Seminar <sup>4</sup>		2

**Total to Graduate:** 63 credits minimum

<sup>1</sup> One of these electives must fulfill the American Diversity Requirement.

<sup>2</sup> Students who qualify are encouraged to take MATH 161 or higher courses in a calculus related sequence in place of MATH 118 and MATH 251.

<sup>3</sup> CHEM 110, 101 or 102 may not be used to meet the Lab Science Elective.

<sup>4</sup> Experienced students may replace CHEM 217 with an elective to be selected with the approval of the Department Chair.

For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone 215-751-8431; or the College Information Center, 215-751-8010.