



Chemical Technology A.A.S.

Curriculum Code: 0163

Effective: Fall 2020 – Summer 2025

Description

Graduates with associate degrees in Chemical Technology are in great demand by the chemical industry. This program prepares students to work with chemists and chemical engineers in many settings. Research, development, and production of pharmaceuticals, agricultural chemicals, and plastics as well as related functions such as sales and technical writing are some of the opportunities that are available to persons with this type of training. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Contact Information

Contact the Science Department in the Arts and Sciences Building, Room 3203, telephone number 517-483-1092, or the Academic Advising Department, Gannon Building - StarZone, telephone number 517-483-1904.

General Education – Applied Degrees, Recommended Choices

(For the full list of options, see [General Education](#))

- English Composition – *Select one*
ENGL 121, Composition I, 4 credits / 4 billing hours
ENGL 131, Honors Composition I, 4 credits / 4 billing hours
- English Composition (second course)/Communications or Applied Communications – *Select one*
COMM 120, Dynamics of Communication, 3 credits / 3 billing hours
COMM 130, Fundamentals Public Speaking, 3 credits / 3 billing hours
ENGL 122, Composition II, 4 credits / 4 billing hours
ENGL 132, Honors Composition II, 4 credits / 4 billing hours
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*
ECON 120, Power, Authority and Exchange, 4 credits / 4 billing hours
GEOG 200, World Regional Geography, 4 credits / 4 billing hours
HUMS 213, World Civilizations to 1600, 4 credits / 4 billing hours
PHIL 211, Philosophy: Ancient & Medieval, 4 credits / 4 billing hours
POLS 260, Comparative Political Systems, 3 credits / 3 billing hours
SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours
- Mathematics or Applied Mathematics
Program of Study Required Courses will meet this requirement

- Natural Sciences Lab or Applied Science and Technology Lab
Program of Study Required Courses will meet this requirement

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
BIOL 127	Cell Biology	4 / 6
CHEM 151	General Chemistry Lecture I	4 / 4
CHEM 152	General Chemistry Lecture II	3 / 3
CHEM 161	General Chemistry Lab I	1 / 3
CHEM 162	General Chemistry Lab II	1 / 3
CHEM 251	Organic Chemistry Lecture I	4 / 4
CHEM 252	Organic Chemistry Lecture II	4 / 4
CHEM 262	Quantitative Analysis	3 / 6
CHEM 272	Organic Chemistry Laboratory	2 / 6
ISCI 245	S.T.E.M. Workplace Practices	4 / 6
MATH 121	Precalculus I	4 / 4
MATH 122	Precalculus II	4 / 4
PHYS 221	Introductory Physics I	4 / 6
STAT 215	Intro to Probability and Stats	4 / 4

Program of Study Required Courses, Limited Choice– *Select one or two courses, minimum of 4 credits*

Course Code	Course Title	Credit / Billing Hours
BIOL 203	Microbiology	3 / 3
BIOL 204	Microbiology Laboratory	1 / 3
ENVR 121	Environmental Rules and Regs	3 / 3
ENVR 122	Enviro Sampl & Instrumentation	4 / 6
ENVR 131	Industrial Process Safety	3 / 3
MUSC 108	Concert Choir	1 / 3
MUSC 122	Rock Band	1 / 3
MUSC 123	Jazz Ensemble	1 / 3
MUSC 124	Multi-Instrumental Music Ensem	1 / 3
PHYS 222	Introductory Physics II	4 / 6
SCIN 287	Science Technology Internship	2-4 / 2-4

Total Credit Hours

60-64 credits / 79-81 billing hours

Recommended Course Sequence

Semester I	Semester II
Gen Ed - English Composition BIOL 127 CHEM 151 CHEM 161 MATH 121	CHEM 152 CHEM 162 ISCI 245 MATH 122 Limited Choice

Semester III	Semester IV
Gen Ed – English Comp (second course) or Communications or Applied Communications Gen Ed - Humanities and Fine Arts or Social Sciences or Applied Social Sciences CHEM 251 CHEM 262 STAT 215	CHEM 252 CHEM 272 PHYS 221 Limited Choice, if needed