

LANSING COMMUNITY COLLEGE

Liberal Arts

Curriculum Code: 0163
(Effective Fall 2018 –
Summer 2023)

Chemical Technology A.A.S. Pathway

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.

For More 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.

Semester I	Course Title	Prerequisites	Credit/Billing Hours
Writing Core Area - <i>Select 1</i>			
ENGL 121	Composition I	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	4 / 4
ENGL 131	Honors Composition I	Reading Level 5 and Writing Level 7	4 / 4
ENGL 122	Composition II	Minimum 2.0 in ENGL 121 or ENGL 131 or (Reading Level 5 and Writing Level 8)	4 / 4
ENGL 132	Honors Composition II	Minimum 3.5 in ENGL 121 or ENGL 131 or (Reading Level 5 and Writing Level 8)	4 / 4
Math Core Area - <i>Select 1</i>			
MATH 121	Precalculus I	(Minimum 2.5 in (MATH 109 or MATH 112) within 2 years OR (SAT Math 550 or ACT Math 22 or CPT College Level Math 55) within 2 years) and Reading Level 5 and Writing Level 4	4 / 4

Program of Study Requirements			
<i>These courses also fulfill the Science Core requirement.</i>			
BIOL 127	Cell Biology	(Minimum 2.0 in CHEM 120) or (Minimum 2.0 in CHEM 151 or concurrently) and Reading Level 5 and Writing Level 6 and Math Level 4	4 / 6
CHEM 151	General Chemistry Lecture I	Reading Level 5 and Writing Level 6 and ((Math Level 6 or (MATH 109 concurrently or MATH 112 concurrently))	4 / 4
CHEM 161	General Chemistry Lab I	Minimum 2.0 in CHEM 151 or concurrently and Reading Level 5 and Writing Level 6 and ((Math Level 6 or (MATH 109 or MATH 112 concurrently))	1 / 3
Credits			17 / 21
Semester II	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
CHEM 152	General Chemistry Lecture II	Minimum 2.0 in CHEM 151 and (Math Level 7 or MATH 121 or MATH 126 or concurrently) and Reading Level 5 and Writing Level 6	3 / 3
CHEM 162	General Chemistry Lab II	Minimum 2.0 in (CHEM 152 or concurrently) and CHEM 161 and Reading Level 5 and Writing Level 6 and Math Level 7 or (Math 121 or Math 126 or concurrently)	1 / 3
ISCI 245	S.T.E.M. Workplace Practices	Reading Level 5 and Writing Level 6 and (Math Level 5 or MATH109 concurrently or MATH 112 concurrently)	4 / 6
MATH 122	Precalculus II	(Minimum 2.0 in MATH 121 within 2 years or Math Level 7 within 2 years) and Reading Level 5 and Writing Level 4	4 / 4

Electives - <i>Select 1-2 courses for a minimum of 3 credits</i> <i>Courses may not be duplicated</i>			
BIOL 203	Microbiology	Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 3
BIOL 204	Microbiology Laboratory	Minimum 2.0 in BIOL 203 or concurrently and Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	1 / 3
ENVR 121	Environmental Rules and Regs	Reading Level 5 and Writing Level 6 and Math Level 5	3 / 3
ENVR 122	Enviro Sampl & Instrumentation	Reading Level 5 and Writing Level 6 and Math Level 5	4 / 6
ENVR 131	Industrial Process Safety	Reading Level 5 and Writing Level 6 and Math Level 5	3 / 3
PHYS 222	Introductory Physics II	Minimum 2.0 in (PHYS 221 or Department Approval) and Reading Level 5 and Writing Level 6	4 / 6
SCIN 287	Science Technology Internship	Department Approval	2-4 / 2-4
Credits			15-16 / 19-22
Semester III	Course Title	Prerequisites	Credit/Billing Hours
Communication Core Area - <i>Select 1</i>			
COMM 120	Dynamics of Communication	Reading Level 5 and Writing Level 6	3 / 3
COMM 130	Fund of Public Speaking	Reading Level 5 and Writing Level 6	3 / 3

Global Perspectives and Diversity Core Area - <i>Select 1</i>			
ECON 120	Power, Authority and Exchange	Reading Level 5	4 / 4
GEOG 200	World Regional Geography	Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 4
HUMS 213	World Civilizations to 1600	Reading Level 5 and Writing Level 6	4 / 4
PHIL 211	Philosophy: Ancient & Medieval	Reading Level 5 and Writing Level 6	4 / 4
POLS 260	Comparative Political Systems	Reading Level 5 and Writing Level 6	3 / 3
SOCL 120	Introduction to Sociology	Reading Level 5 or (Reading Level 4 and ENGL 099 concurrently)	4 / 4
Program of Study Requirements			
CHEM 251	Organic Chemistry Lecture I	Minimum 2.0 in CHEM 151 and Reading Level 5 and Writing Level 6	4 / 4
CHEM 262	Quantitative Analysis	Minimum 2.0 in (CHEM 152 and CHEM 162) and Reading Level 5 and Writing Level 6 and Math Level 7	3 / 6
STAT 215	Intro to Probability and Stats	(Minimum 2.0 in MATH 120 or above or Math Level 7) and Reading Level 5 and Writing Level 4	4 / 4
Credits			17-18 / 20-21

Semester IV	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
CHEM 252	Organic Chemistry Lecture II	Minimum 2.0 in CHEM 251 and Reading Level 5 and Writing Level 6	4 / 4
CHEM 272	Organic Chemistry Laboratory	Minimum 2.0 in CHEM 251 and Reading Level 5 and Writing Level 6	2 / 6
PHYS 221	Introductory Physics I	Reading Level 5 and Writing Level 6 and (Math Level 9 or minimum 2.0 in MATH 122 or Math 126 or MATH 141)	4 / 6
Electives - <i>Select 1-2 courses for a minimum of 3 credits</i> <i>Courses may not be duplicated</i>			
BIOL 203	Microbiology	Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 3
BIOL 204	Microbiology Laboratory	Minimum 2.0 in BIOL 203 or concurrently and Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	1 / 3
ENVR 121	Environmental Rules and Regs	Reading Level 5 and Writing Level 6 and Math Level 5	3 / 3
ENVR 122	Enviro Sampl & Instrumentation	Reading Level 5 and Writing Level 6 and Math Level 5	4 / 6
ENVR 131	Industrial Process Safety	Reading Level 5 and Writing Level 6 and Math Level 5	3 / 3
PHYS 222	Introductory Physics II	Minimum 2.0 in (PHYS 221 or Department Approval) and Reading Level 5 and Writing Level 6	4 / 6
SCIN 287	Science Technology Internship	Department Approval	2-4 / 2-4
Credits			13-14 / 19-22
Total Credits			62-65 / 79-86