

Chemical Technology (CMT)

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Chemical technicians use sophisticated chemical/biochemical methods and cutting-edge instrumentation to analyze chemical and pharmaceutical substances and evaluate their properties.

The Chemical Technology degree program prepares students to become laboratory technicians or research associates in high-tech research and development or quality control laboratories, academic institutions, and government facilities. Graduates often are employed in chemical manufacturing, polymer/plastic labs, or food/beverage, pharmaceutical, or environmental industries and organizations.

Graduates of the Chemical Technology program earn an Associate of Applied Science degree, and many continue their education in a bachelor's degree program in chemistry, biology/biotechnology, chemical engineering, or a pre-professional degree such as pre-pharmacy, pre-medicine, pre-dental, or pre-veterinary medicine.

For more information, please contact the Center for Innovative Technologies at (513) 569-1743.

To apply for this program at Cincinnati State, visit our Admissions Page (<http://www.cincinnati-state.edu/academics/admission>)

Chemical Technology (CMT)

Semester 1		Lec	Lab	Credits
CMT 111	Chemical Technology 1 (T)	0	3	1
CHE 121 & CHE 131	General Chemistry 1 and General Chemistry 1 Lab (G)	4	3	5
ENG 101	English Composition 1 (G)	3	0	3
FYE 1XX	First Year Experience Elective (B)	1	0	1
MAT XXX	Mathematics Elective 1 (G)	3	2	4
XXX XXX	Arts/ Humanities or Social/ Behavioral Sciences Elective (G)	3	0	3
Semester 2				
CMT 112	Chemical Technology 2 (T)	0	3	1
CHE 111	Bio-Organic Chemistry (B)	3	3	4
CHE 122 & CHE 132	General Chemistry 2 and General Chemistry 2 Lab (B)	4	3	5

MAT XXX	Mathematics Elective 2 (B)	3	2	4
Semester 3				
CMT 291	Full-Time Cooperative Education 1: Chemical Technology (T)	1	40	2
Semester 4				
CMT 220	Analytical Chemistry (T)	3	3	4
COMM 110	Public Speaking (B)	3	0	3
ENG 10X	English Composition Elective (G)	3	0	3
XXX XXX	Technical Elective 1 (T)	2	3	3
XXX XXX	Science Elective 1 (T)	3	3	4
Semester 5				
CMT 230	Chemical Instrumental Analysis (T)	3	3	4
CMT 285	Chemical Research (T)	1	0	1
XXX XXX	Science Elective 2 (T)	3	3	4
XXX XXX	Technical Elective 2 (T)	1	2	2
XXX XXX	Technical Elective 3 (T)	1	2	2
Semester 6				
CMT 292	Full-Time Cooperative Education 2: Chemical Technology (T)	1	40	2
Total Credits:		49	118	65

Electives

First Year Experience Elective

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

Mathematics Electives

Take one of the following series:

MAT 125 Algebra and Trigonometry
& MAT 126 and Functions and Calculus *

Or

MAT 151 College Algebra
& MAT 152 and Trigonometry

Or

MAT 251 Calculus 1
& MAT 252 and Calculus 2

Arts/Humanities Elective or Social/Behavioral Science Elective

Any ART, CULT, FRN, LIT, MUS, PHI, REL, SPN, THE 3

or, Any CRJ, ECO, GEO, HST, POL, PSY, SOC 3

English Composition Elective

ENG 102 English Composition 2: Contemporary Issues 3

ENG 103 English Composition 2: Writing about Literature 3

ENG 104 English Composition 2: Technical
Communication 3

ENG 105 English Composition 2: Business Communication 3

Technical Electives

CHE 201 Organic Chemistry 1 5
& CHE 211 and Organic Chemistry 1 Lab

CHE 202 Organic Chemistry 2 5
& CHE 212 and Organic Chemistry 2 Lab

MAT 131 Statistics 1 3

MAT 132 Statistics 2 3

MAT 253 Calculus 3 5

or, Any of the following courses, if not used as Mathematics
elective:

MAT 251 Calculus 1 5

MAT 252 Calculus 2 5

or, Any BIO or PHY listed in Science Electives, if not used as
Science Elective

or, Any EVT, CET, EET, EMET, MET, PSET, SET

Science Electives 8

Select one of the following series:

BIO 131 Biology 1
& BIO 132 and Biology 2

PHY 151 Physics 1: Algebra and Trigonometry-Based
& PHY 152 and Physics 2: Algebra and Trigonometry-
Based

PHY 201 Physics 1: Calculus-Based
& PHY 202 and Physics 2: Calculus-Based

or, Any two of the following courses:

EVS 110 Environmental Science: Conservation and
Cleanup

EVS 120 Environmental Geology

EVS 130 Environmental Science: Ecology and
Ecosystems

* Students choosing this series must take MAT 126 prior to or
concurrently with CHE 122.

The letters G, B, and T (displayed after course titles or elective
descriptions) identify types of courses required by the Ohio
Department of Higher Education as part of an associate's degree
curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

Faculty

Program Chair/Advisor

Professor Ann Fallon, MS
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Co-op Coordinator

Sue Dolan, MEd
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