## **Chemical Technology (CMT)**

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The Chemical Technology 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, food/beverage, pharmaceutical, environmental, and polymer/plastic labs.

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

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All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 12 credit hours taken at Cincinnati State.

Semester 1		Credits
ENG 101	English Composition	3
CMT 111	Chemical Technology 1	1
& CHE 131	and General Chemistry 1 Lab	
CHE 121	General Chemistry 1	4
MAT 125	Algebra and Trigonometry	4
CHE 131	General Chemistry 1 Lab	1
XXX XXX Humanities	/	3
Social Sciences		
Elective 1		
Semester 2		
CHE 111	Bio-Organic Chemistry	4
CMT 112	Chemical Technology 2	1
CHE 122	General Chemistry 2	4
MAT 126	Functions and Calculus	4
CHE 132	General Chemistry 2 Lab	1
XXX XXX Technical		3
Elective 1		
Semester 3		
CMT 291	Full-Time Cooperative Education 1: Chemical Technology	2
Semester 4		
ENG 10X English Composition Elective		3
COMM 110	Public Speaking	3
CMT 220	Analytical Chemistry	4
XXX XXX Technical Elective 2		3
XXX XXX Science Elective 1		4
Semester 5		
CMT 230	Chemical Instrumental Analysis	4
CMT 290	Chemical Technology Capstone	3
XXX XXX Humanities	1	3
Social Sciences		
Elective 2		
XXX XXX Science		4
Elective 2		
XXX XXX Technical		3
Elective 3		

Semester 6			
CMT 292	Full-Time Cooperative Education 2: Chemical Technology	2	
Total Credits:		71	
Electives			
English Composition	on Elective		
ENG 102	Composition and Argument	3	
ENG 103	Composition and Literature	3	
ENG 104	Composition and Technical Communication	3	
ENG 105	Composition and Business Communication	3	
Humanities/Social	Sciences Electives		
Any ART, CRJ, CUL	T, ECO, FRN, GEO, HST, LIT, MUS, PHI, POL, PSY, REL, SOC, SPN, THE		
Science Electives			
Select one of the foll	owing:		
BIO 131 & BIO 132	Biology 1 and Biology 2		
PHY 151 & PHY 152	Physics 1: Algebra and Trigonometry-Based and Physics 2: Algebra and Trigonometry-Based		
PHY 201 & PHY 202	Physics 1: Calculus-Based and Physics 2: Calculus-Based		
Technical Electives	3		
CHE 201 & CHE 211	Organic Chemistry 1 and Organic Chemistry 1 Lab	5	
CHE 202 & CHE 212	Organic Chemistry 2 and Organic Chemistry 2 Lab	5	
any EVT			
MAT 131	Statistics 1	3	
MAT 132	Statistics 2	3	
MAT 151	College Algebra	4	
MAT 152	Trigonometry	4	
MAT 153	Pre-Calculus	6	
any MET			
any BIO or PHY liste	ed in Science Elective, if not taken as Science Elective		