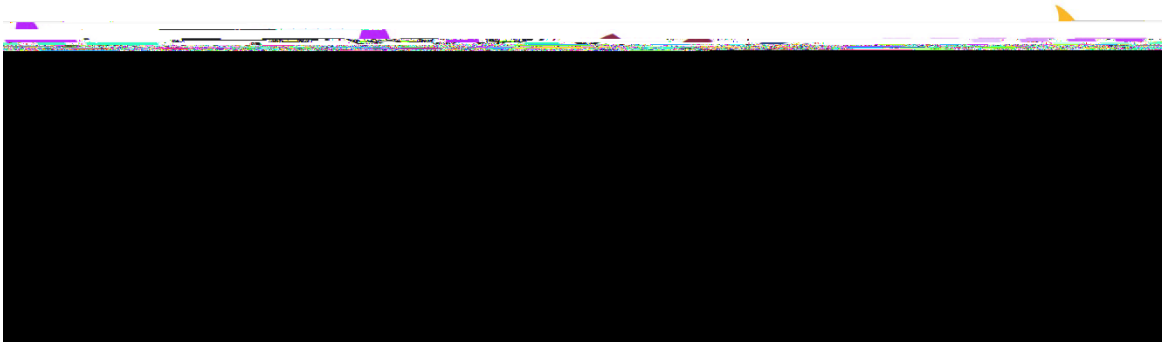

Associate of Science to Bachelor of Science in Chemistry

Completion of the following curriculum will satisfy the requirements for the Associate of Science (AS) degree at Cincinnati State (CState) and leads to the Bachelor of
Cincinnati State.

1) Completion of minimum 62 credit hours, 36 of which from approved Ohio Transfer 36 courses, 2) minimum cumulative GPA 2.0, 3) completion of an FYE course as part of the first 12 credit hours taken at Cincinnati State, and 4) completion of Cooperative Education.

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into

Students must complete a minimum of 120 credit hours and have a cumulative GPA of 2.0 and meet all prerequisites for courses and requirements for the major.
Students who aspire to careers as professional chemists should seek to obtain the Bachelor of Science.
Students must complete the core courses listed below plus one of the four tracks:

General Chemistry Track (ACS Certified)
Biochemistry Track
Forensics Track
Pharmaceutical Sciences Track

Students majoring in chemistry are urged to participate in independent research (CHE 292 or CHE 492) and are also encouraged to take at least one year of a foreign language and additional mathematics coursework beyond the required Calculus II. A student completing the Bachelor of Science in chemistry is not required to complete a minor or a focus.

The general chemistry track is approved by the American Chemical Society, as it meets certain requirements prescribed by that organization. Students may also receive ACS approval in the Bachelor of

CHE 300	Careers in Chemistry	1		
CHE 320/320L	Inorganic Chemistry with Lab	5		
CHE 350/350L	Instrumental Analysis with Lab	5		
CHE 361	Physical Chemistry II	3		
CHE 362L	Physical Chemistry Lab	2		
CHE 400	Chemistry Seminar	1		
Select 3 credit hours: CHE 410 CHE 440 CHE 450 CHE 460/460L CHE 483 CHE 511 CHE 512 CHE 560	Select 3 credits hours from the following advanced content coursework: Spectrometric Identification of Compounds (3) Environmental Chemistry (3) Advanced Chemical Analysis (3) Molecular Spectroscopy with Lab (4) Biochemistry II Natural and Medicinal Product Synthesis (3) Physical Organic Chemistry (3) Quantum Mechanics (3)	3		
Select 3 credit hours: CHE 392 CHE 482L CHE 483L CHE 492 CHE 505	Select at least 3 credit hours from the following advanced research methods coursework: Advanced Laboratory Projects (1-3) Biochemistry I Laboratory (1) Biochemistry II Laboratory (1) Research: Chemistry (1-3) The History of Chemistry (2-3)	3		

BIO 436 CHE 320/320L CHE 350/350L	Advanced Biology of the Cell Inorganic Chemistry with Lab Instrumental Analysis with Lab	3 5 5		

Note: To receive American Chemistry Society (ACS) approval, CHE 320 and CHE 320L must be taken as one course in this track

CHE 300	Careers in Chemistry	1		
CHE 361	Physical Chemistry II	3		
CHE 362L	Physical Chemistry Lab	2		
CHE 400	Chemistry Seminar	1		
CHE 482L	Biochemistry I Laboratory	1		
BIO 150/150L	Introduction to Biology I with lab	4	BIO 131	
BIO 151/151L	Introduction to Biology II with lab	4	BIO 132	
BIO 349/349L	Genetics with lab	4		
BIO 400/400L	Advanced Molecular Biology with lab	4		
STA 205	Statistical Methods	3	MAT 131 + MAT 132	
JUS 101	Introduction to Criminal Justice	3	CRJ 105	
JUS 204	Criminal Investigation	3	CRJ 130	
Select at least one course: BIO 455 CHE 350/350L	Select at least one course from the following: Scanning Electron Microscopy Instrumental Analysis with lab	 3 5		

BIO 150/150L	Introduction to Biology I with Lab	4	BIO 131	
BIO 151/151L	Introduction to Biology II with Lab	4	BIO 132	
BIO 208/208L	Human Anatomy and Physiology I with Lab	4	BIO 151	