



CHICAGO STATE UNIVERSITY

City Colleges of Chicago Transfer Guide

BS in Chemistry (CHEM)

Chicago State University has a longstanding mission to provide a diverse group of students with access to quality higher education. This access prepares students to meet their educational goals and make meaningful contributions to their communities. Chicago State University's current mission documents reaffirm this distinctive goal, underscoring the institution's dedication to social justice and leadership, and declaring a new focus on community development through entrepreneurship.

Program Overview

The Department of Chemistry, Physics, and Engineering Studies offers a Bachelor of Science degree in Chemistry. The general goal of the chemistry program is to prepare students for scientific careers in industry, government, and education, as well as for advanced study in chemistry or a related discipline, such as biochemistry, medicine, forensic science, dentistry, patent law, or pharmacy. The chemistry program aids students in developing the following:

- A broad foundation in the theory, principles, and history of chemistry
- Skills in analytical reasoning and problem solving
- Necessary laboratory, safety, and literature skills
- Effective oral and written communication skills, including notebook keeping, graphing, writing laboratory reports, using computers for data analysis, and conducting research presentations
- An understanding of the impact of chemistry on industry, society, and the environment, and an appreciation of the roles and responsibilities of chemists in today's world

The Chemistry Option (CHEM) prepares students for research, industrial, and governmental careers, or for graduate study in chemistry or related fields. Students completing this option will receive a degree certified by the American Chemical Society.

Highlights

- High quality teaching, a family environment, faculty engagement, and support from peer mentoring programs.
- Engagement in hands-on, minds-on, STEM Research.
- Opportunities to attend, present, and communicate science at local and national conferences – CSU students have given presentations all over the world – from Chicago to Switzerland!
- Local, national, and global internship opportunities.

Advisor Contact Information

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Articulation Crosswalk for BS in Chemistry: ACS Option (CHEM)

Chicago City Colleges Associate in Science (0211) AS			Chicago State University BS in Chemistry: ACS Option (CHEM)		
Course #	Title	Credit Hours	Course #	Title	Credit Hours
ENG 101	Composition I	3	ENG 1270	Composition I	3
ENG 102	Composition II	3	ENG 1280	Composition II	3
SPEECH 101	Fundamentals of Speech Communication	3	CMAT 2030	Basic Speech Communications	3
Fine Arts	IAI Fine Arts*	3	Fine Arts	IAI Fine Arts	3
Humanities	IAI Humanities*	3	Humanities	IAI Humanities	3
Social/Behavioral Science	IAI Social/Behavioral Science* **	3	Social/Behavioral Science	IAI Social/Behavioral Science	3
Social/Behavioral Science	IAI Social/Behavioral Science* **	3	Social/Behavioral Science	IAI Social/Behavioral Science	3
Recommended Mathematics Courses:					
MATH 140	College Algebra	4***	MATH 1200	College Algebra	3 (4)
MATH 141	Plane Trigonometry	3	MATH 1210	Trigonometry	3
Recommended Program Core:					
BIOL 121	Biology I	5***	BIOL 1710	Introduction to Biology	4 (5)
CHEM 201	General Chemistry I	5***	CHEM 1400/1410	General Chemistry I Lecture and Lab	4 (5)
CHEM 203	General Chemistry II	5***	CHEM 1450/1460	General Chemistry II Lecture and Lab	4 (5)
CHEM 204****	Quantitative Analysis	5***	CHEM 2800/2810	Analytic Chemistry I	4 (5)
MATH 207	Calculus & Analytic Geometry I	5***	MATH 1410	Calculus I	4 (5)
PHYSICS 235	Engineering Physics I: Mechanics & Wave Motion I	5***	PHYS 2110	Physics I with Calculus	4 (5)
	World Language	4		Foreign Language I	3 (4)
Total Credit Hours Taken at CCC		62	Total Credit Hours Transferred to CSU		62

*One course must satisfy the CCC Human Diversity (HD) requirement.

**Must include two disciplines

***Math courses and science lab courses that equal 4 or 5 credit hours at City Colleges transfer as such to CSU.

****Other options for electives include CHEM 205, MATH 208, or PHYS 236.

Courses required at CSU for BS in Chemistry: ACS Accredited Option (CHEM)	
CSU Courses	Credit Hours
Chemistry Courses:	
CHEM 2400/2410 Organic Chemistry I Lecture and Lab	4
CHEM 2450/2460 Organic Chemistry II Lecture and Lab	4
CHEM 2600 Introduction to Chemical Laboratory Practices	1
CHEM 3240 Inorganic Chemistry	3
CHEM 3600 Scientific Communications	2
CHEM 4100 Advanced Inorganic Chemistry	3
CHEM 4200 Microphysical Chemistry Lecture	3
CHEM 4210 Microphysical Chemistry Lab	1
CHEM 4250 Macrophysical Chemistry Lecture	3
CHEM 4270 Advanced Laboratory	1
CHEM 4303 Biochemistry I Lecture	3
CHEM 4304 Biochemistry I Lab	1
CHEM 4355 Senior Thesis	3
CHEM 4600 Analytic Chemistry II Lecture	1
CHEM 4610 Analytic Chemistry II Lab	3
Supportive Math Course:	
MATH 1420 Calculus II	4
Supportive Physics Course:	
PHYS 2220 Physics II with Calculus	4
Electives	14
CSU Completion Credit Hours	58

CCC Transferred Credit Hours	62
CSU Completion Credit Hours	58
Total Degree Credit Hours	120