

## City Colleges of Chicago

### **Transfer Guide**

BS in Chemistry: Industrial Option

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 Industrial Chemistry Option serves students preparing for positions in industry or in technical sales.

#### **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: Industrial Option

Chicago City Colleges Associate in Arts (0210) AA			Chicago State University BS in Chemistry: Industrial Option (CHMI)		
Course #	Title	Credi t Hours	Course #	Title	Credi t 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 Communication	3
Fine Arts	IAI Fine Arts*	3	Fine Arts	IAI Fine Arts	3
Humanities	IAI Humanities*	3	Humanities	IAI Humanities	3
Fine Arts/ Humanities	IAI Fine Arts or Humanities*	3	Fine Arts/ Humanities	IAI Fine Arts or 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	
Social/Behavioral Science	IAI Social/Behavioral Science* **	3	Social/ Behavioral Science	IAI Social/Behavioral Science	3
Recommend	ded General Education Course	es:			
MATH 140	College Algebra	4***	Math 1200	College Algebra 3	
Life Science	IAI Life Science	3	Life Science	IAI Life Science	
PHYSICS 231	General Physics I	4***	PHYS 2110	General Physics I	4
Recommended Program Core:					•
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 205	Organic Chemistry I	6***	CHEM 2400/2410	Organic Chemistry I Lecture and Lab	4 (6)
MATH 141	Plane Trigonometry	3	MATH 1210	Trigonometry	3
Elective	Foreign Language	4	FL	CSU CAS Requirement	3 (4)
Total Credit Hours Taken at CCC		61	Total Credit Hours Transferred to CSU		61

<sup>\*</sup>One course must fulfill the CCC Human Diversity (HD) requirement.

<sup>\*\*\*</sup>Math courses and science lab courses that equal 4, 5, or 6 credit hours at City Colleges transfer as such to CSU.

Courses required at CSU for BS in Chemistry: Industrial Option (CHMI)	
CSU Courses	Credit Hours
Chemistry Courses:	
CHEM 2450/2560 Organic Chemistry II Lecture and Lab	4
CHEM 2600 Introduction to Chemical Laboratory Practices	1
CHEM 2640 Chemistry Internship	3
CHEM 2700 Industrial Chemistry	3
CHEM 2800/2810 Analytic Chemistry Lecture and Lab	4
CHEM 3240 Inorganic Chemistry	3
CHEM 3600 Scientific Communications	2
CHEM 4250 Macrophysical Physical Chemistry	3
CHEM 4270 Advanced Laboratory	3
CHEM 4355 Senior Thesis	3
CHEM 4600 /4610 Analytic Chemistry: Lecture and Lab	4
Supportive Physics Course:	
PHYS 2220 General Physics II	4
Supportive Math Courses:	
MATH 1410 Calculus I	4
MATH 1600 Basic Probability and Statistics	3
Supportive English Course:	
ENG 2090 Introduction to Technical Writing	3
Chemistry/Physics/Mathematics/Biological Sciences Electives	9
Electives	3
CSU Completion Credit Hours	59

CCC Transferred Credit Hours	61
CSU Completion Credit Hours	59
Total Degree Credit Hours	120

<sup>\*\*</sup>Must include two disciplines