CHICAGO STATE UNIVERSITY

## Chicago State University

College of Arts and Science
Bachelor of Science
Catalog year 2022-2023

## CHMI

## Industrial Chemistry

*refer to the catalog at csu.edu for updates to program requirements

| Credit Hours | 120 credit hours. Students starting a 120 credit hour program in Fall 2018 must complete a minimum of <br> 15 credit hours per semester or 30 credit hours per academic year to earn a Bachelor's Degree on time in <br> 4 years. |  |
| :--- | :--- | :--- |
| Graph Point Average (GPA) | 2.0 GPA (only 1 D in chemistry courses allowed) |  |
| Residency Rule | Complete last 30 hours at Chicago State University. No more than 66 credit hours may be transferred in <br> from a 2 year school |  |
| Examinations | Transfer students who transfer in general education courses that meet their general education <br> requirements in English Composition or Mathematics with a C or better do not have to take the <br> corresponding placement examination. |  |
| General Education Core | Chicago State University requires a minimum of 39 credit hours in the following General Education <br> competencies: |  |
|  | English Composition (6 credits); <br> Oral Communication (3 credits); <br> Mathematics (3 credits); <br> Foreign Language (3 credits) | Social Science (9 credits); <br> Humanities (3 credits); Fine Arts (3 credits); Humanity or Fine <br> Arts (3) <br> Biological Sciences (3 credits); ; <br> Natural Sciences (3 credits) |
|  | Only approved courses will satisfy Gen Ed Requirements. Transfer students with an AA or AS degree have <br> met all General Education Requirements. |  |
| College Requirements | All students must complete 1 semester (3 credits) of a foreign language and 1 of the gen ed courses listed <br> above must be on the college's list of approved diversity courses. |  |


|  | Subject Code/ Course Number | Term Offered (if specific) | Credit Hours | $\begin{aligned} & \text { Gen } \\ & \text { Ed } \\ & \hline \end{aligned}$ | Also <br> Allowed | Pre/Co-requisite Courses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SEMESTER 1 |  |  |  |  |  |  |
| College Algebra | Math 1200 |  | 3 | Yes | Math 1250 | Math placement test |
| Composition I | Eng 1270 |  | 3 | Yes | Eng 1230 |  |
| General Chemistry I | Chem 1400 |  | 3 | Yes |  | Math 1200 and Chem 1410 |
| General Chemistry I Lab | Chem 1410 |  | 1 | Yes |  | Chem 1400 |
| Chemical Calculations | Chem 1000 |  | 1 |  |  | Placement in Math 1195 |
| Foreign Language | $\begin{aligned} & \text { Span/Fren/Chin/AFL } \\ & 1010 \end{aligned}$ |  | 3 | Yes |  | Other languages allowed |
| SEMESTER 2 |  |  |  |  |  |  |
| Trigonometry | Math 1210 |  | 3 |  | Math 1250 | Math 1200 |
| Composition II | Eng 1280 |  | 3 | Yes | Eng 1240 | Eng 1270 |
| General Chemistry II | Chem 1450 |  | 3 |  |  | Math 1210 and Chem 1460 |
| General Chemistry II Lab | Chem 1460 |  | 1 |  |  | Chem 1450 |
| Social Science | Psyc/Soc/AFAM/Hist /PolSci/Anth |  | 3 | Yes |  |  |
| Oral Communication | CMAT 2030 |  | 3 | Yes | Eng 2011 |  |

SEMESTER 3

| Calculus I | Math 1410 |  | 4 |  | Math 1415 | Math 1210 or Math 1250 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Physics I | Phys 2110 or Phys 1510 |  | 4 | Yes |  | Math 1410 |
| Analytic Chemistry I Lecture | Chem 2800 | F | 3 |  |  | Chem 1450/1460 |
| Analytic Chemistry I Lab | Chem 2810 | F | 1 |  |  | Chem 1460 |
| Safety | Chem 2600 | F | 1 |  |  |  |
| Humanity Elective |  |  | 3 | yes |  |  |
| SEMESTER 4 |  |  |  |  |  |  |
| Physics II | Phys 1520 |  | 4 |  | Phys 2220 | Math 1210 |
| Organic Chemistry I | Chem 2400 |  | 3 |  |  | Chem 1450/1460 |
| Organic Chemistry I Lab | Chem 2410 |  | 1 |  |  | Chem 2400 |
| Social Science Elective |  |  | 3 | Yes |  |  |
| Biology Gen Ed | Biol 1070 |  | 3 | yes | Biol 1080 or Biol 1701 |  |

SEMESTER 5

| Organic Chemistry II | Chem 2450 |  | 3 |  |  | Chem 2400/2460 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Organic Chemistry II Lab | Chem 2460 |  | 1 |  |  | Chem 2450 |
| Elementary Inorganic | Chem 3240 | F | 3 |  |  |  |
| Technical Writing | Eng 2090 | F | 3 |  |  |  |
| Thesis Research I | Chem 2630 |  | 1 |  |  | Permission of research mentor |
| Social Science Elective |  |  | 3 | yes |  |  |
| SEMESTER 6 |  |  |  |  |  |  |
| Industrial Chem | Chem 2700 |  | 3 |  |  |  |
| Internship | Chem 2640 |  | 3 |  |  |  |
| Supporting Elective | Chem/Phys/Math/ Biol/CS |  | 3 |  |  |  |
| Macrophysical Chemistry | Chem 4250 | S | 3 |  | $\begin{aligned} & \hline \text { Chem } \\ & 4200 \\ & \hline \end{aligned}$ |  |
| Advanced Lab | Chem 4270 | S | 1 |  |  | Chem 2800/2810 |
| Thesis Research II | Chem 4350 |  | 2 |  |  |  |


| SEMESTER 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Statistics | Math 1600 |  | 3 |  | Math 1200 |
| Chemical Communication | Chem 3600 | F | 2 |  | Eng 1280 |
| Humanity or Fine Arts |  |  | 3 | Yes |  |
| Supporting Elective | Chem/Phys/Math/ Biol/CS |  | 3 |  |  |
| Free Elective |  |  | 4 |  |  |
| SEMESTER 8 |  |  |  |  |  |
| Analytic Chemistry II | Chem 4600/4610 | S | 4 |  | Chem 2800/2810 |
| Fine Arts Elective |  |  | 3 | Yes |  |
| Senior Thesis | Chem 4355 |  | 3 |  | Permission of research mentor and 180 hours of research |
| Supporting Elective | Chem/Phys/Math/ Biol/CS |  | 3 |  |  |
| Free Elective |  |  | 3 |  |  |

Notes: Students doing summer research or research for pay are not required to take Chem 2630 for a total of 3 credits. If you do a summer REU or do research for pay, these 3 credits become a free elective. However, 180 hours of research must be completed before you can take Chem 4355.

