

B.A. in Chemistry

Academic Program Guide for **New First-Year Students** (Effective Fall 2022) Department of Chemistry and Biochemistry

Students who entered Rowan University prior to Fall 2022 should follow the guide for their program and start year in consultation with their advisor.

Rowan University Graduation Requirements for all Majors / Degrees

- Students must complete at least 120 semester hours (sh) of coursework that apply to their Rowan University degree.
- Students must have a cumulative GPA of at least 2.0 in Rowan University coursework. (Transfer courses/credit do not count toward the RU GPA.)
- A minimum of 30 sh of coursework must be completed at/through Rowan University.
- Only grades of "D-" or above may apply to graduation/degree requirements. (Some programs may set higher minimums.)
- Students must meet the Rowan Core and Rowan Experience Requirements.
 - An individual course can potentially satisfy one Rowan Core literacy and/or multiple Rowan Experience attributes.
 - Rowan Core and Rowan Experience designations are listed in course details in Section Tally (www.rowan.edu/registrar) and may also be searched on that site under "Attributes." A list of Rowan Core courses is here: <https://confluence.rowan.edu/display/AS/Rowan+Core+Course+List>
- Students must apply for graduation and should do so for the term in which they will complete all program requirements.

Rowan Core Requirements¹

Students must satisfy all **six** Rowan Core Literacies. A minimum total of 3 sh of coursework is required to satisfy each Literacy.

With the exception of the 9 sh counted here for Communicative Literacy, credits attached to the courses in this section will apply elsewhere.

- (COML) Communicative Literacy: *Must be met by the following three courses or their official equivalents:*

COMP 01111 College Composition I (3 sh) COMP 01112 College Composition II (3 sh) CMS 04205 Public Speaking (3 sh)

(ARTL) Artistic Literacy *Recommendation from major:*

(GLBL) Global Literacy *Recommendation from major:*

(HUML) Humanistic Literacy *Recommendation from major:*

(QNTL) Quantitative Literacy *Recommendation from major:* MATH 01130 (4 sh counts under non-program)

(SCIL) Scientific Literacy *Recommendation from major:* PHYS 02200 or CHEM 06100 (4 sh counts under non-program or major)

Subtotal of credits counted in this section: 9 sh

Rowan Experience Requirements

Students must satisfy all three Rowan Experience attributes. Credits attached to the courses in this section will apply elsewhere.

(LIT) Broad-Based Literature Attribute *Recommendation from major:*

(WI) Writing Intensive Attribute *Recommendation from major:* INTR 06202 Introduction to Nature of Science – WI
(Counts under Non-Program courses)

(RS) Rowan Seminar Attribute² *Recommendation from major:* CHEM 06100 Chemistry I-RS (3 sh counts under Major Requirements)

Non-Program Courses (19 sh)

Courses in this section cannot be in the major department.

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
MATH 01130	Calculus I	Satisfies Quantitative Literacy			4
MATH 01131	Calculus II	Pre-req. for Calc III			4
INTR 06202 OR PHIL 09261	Introduction to Nature of Science - WI OR Philosophical Perspectives on Science – WI	Satisfies WI			3
PHYS 02200	Introductory Mechanics	Satisfies Scientific Literacy			4
PHYS 02201	Intro to Electricity and Magnetism	Pre-req. for PChem			4
					Subtotal: 19 sh

¹ The Rowan Core requirements are waived for transfer students with an earned A.A. or A.S. degree from a NJ community/county college.

² The Rowan Seminar requirement is waived for all students transferring 24 or more approved credits into Rowan University at the time of initial entry.

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Major Requirements (36-37 sh)

SUMMARY OF MAJOR REQUIREMENTS

- 23 sh of Foundational Courses
 - 13-14 sh of Upper-Level Courses
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- 36-37 sh total

FOUNDATIONAL COURSES

Course #	Course Name	Course Designations / Notes	Sem/Yr	Grade	Credits
CHEM 06100	Chemistry I-RS	Satisfies Scientific Literacy & Rowan Seminar			4
CHEM 06101	Chemistry II				4
CHEM 07200	Organic Chemistry I				4
CHEM 07201	Organic Chemistry II				4
CHEM 09250	Quantitative Analysis				4
CHEM 05440	Research I				3
Subtotal:					23 sh

UPPER-LEVEL COURSES

Course #	Course Name	Course Designations / Notes	Sem/Yr	Grade	Credits
CHEM 08402	Physical Chemistry I				4
CHEM 05450	Senior Seminar				1
Pick any two of the following three courses					
CHEM 06300 & CHEM 06401	Inorganic Chemistry and Advanced Inorganic Chemistry Lab or				5
CHEM 07348	Biochemistry or				4
CHEM 09410	Instrumental Methods				4
Subtotal:					13-14 sh

Free Electives for this Major/Degree (55-56 sh)

Students should choose Free Electives that satisfy any Rowan Core or Rowan Experience requirements that are not fulfilled by Major or Non-Program courses.

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
Subtotal:					55-56 sh

Total Program Credits Required for this Major / Degree: 120 SH