

# B.A. in Physics

## Academic Program Guide for New First-Year Students (Effective Fall 2022)

Department of Physics & Astronomy ([physics@rowan.edu](mailto:physics@rowan.edu))

Students who entered Rowan University prior to Fall 2018 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](http://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 Requirements<sup>1</sup>

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 01 111 College Composition I (3 sh)
  - COMP 01 112 College Composition II (3 sh)
  - CMS 04 205 Public Speaking (3 sh)
- (ARTL) Artistic Literacy *Recommendation from major:*
- (GLBL) Global Literacy *Recommendation from major:*
- (HUML) Humanistic Literacy *Recommendation from major:* PHIL 09 261 (3 sh counted under non-program)
- (QNTL) Quantitative Literacy *Recommendation from major:* MATH 01 130 (4 sh counted under non-program)
- (SCIL) Scientific Literacy *Recommendation from major:* PHYS 00 220 (4 sh counted under 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:* PHIL 09 261 (3 sh counted under non-program)
- (RS) Rowan Seminar Attribute<sup>2</sup> *Recommendation from major:* PHYS 00 130 (1 sh counted under major requirements)

### Non-Program Courses (minimum 18 sh)

Courses in this section cannot be in the major department.

Course #	Course Name	Course Attributes/Notes	Sem/Yr	Grade	Credits
CS 04 103 or 01 104	Computer Science & Programming or Intro to Scientific Programming	CS&P preferred <sup>3</sup>			4
PHIL 09 261	Philosophical Perspectives on Science-WI	Satisfies Humanistic & WI			3
MATH 01130	Calculus I	Satisfies Quantitative			4

Then choose one of the following course sequences:

Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
○ Biology sequence (take the following two courses):					
MCB 01 101	Foundations in Biology for Biomedical Sciences I				4
MCB 01 102	Foundations in Biology for Biomedical Sciences II				4
○ Chemistry sequence (take the following two courses): <sup>4</sup>					
CHEM 06 100	Chemistry I				4
CHEM 06 101	Chemistry II				4
○ Computer Science sequence (take 8 credits of courses to fulfill CS Minor or CUGS):					
CS					4
CS					4
○ Other sequence (proposed by student and approved by advisor):					
					4
					4
					Subtotal: 19 sh

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

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

<sup>3</sup> Students in a CS minor or CUGS may apply CS 04 113 (or other required course) here instead and using additional courses for the CS sequence below

<sup>4</sup> Chemistry sequence recommended for those considering teaching, along with two more CHEM courses for Physical Science certification.

