

Central Connecticut State University
School of Engineering, Science, and Technology

Degree: Bachelor of Science
Program: Physics
Concentration: Biology
Effective Term: Fall 2025

Name: _____

ID#: _____

General Education: Ways of Understanding:

Arts & Humanities (9 credits)

	Credits	Grade
English Literature	3	

Social & Behavioral Sciences (12 credits)

	Credits	Grade
History	3	

Math & Natural Sciences (9-10 credits)

CHEM 161 & 162	X	
MATH 152	X	
MATH 221	X	

General Education: Essential Skills:

Written & Oral Communication (6 credits)

WRT 105 or WRT 110	3	

World Language (0-6 credits) or Gen Ed Free Elective (3 credits)

World Language course numbered 112 or 118* or Gen Ed Free Elective	3	
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Thriving in College (2-3 credits)

CCSU 102, 103, or FYE course**	2-3	
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A maximum of 16 credits(4 courses) applied towards Ways of Understanding and Essential Skills requirements may be used to fulfill a major and/or minor requirement.

International & Equity, Justice, & Inclusion (EJI) Requirements:

International	3	
International	3	
Equity, Justice, & Inclusion***	3	

Coursework applied toward International & EJI requirements may be used in any other area of general education or program requirements.

Honors Program: HON courses can be used to fulfill certain general education requirements. Consult the Honors Program curriculum for details.

Residency Requirements: A minimum of 30 credits overall must be completed in residence, with at least 15 credits in the major (at least 12 of which must be at the 300 level or above) and 9 credits in a minor at Central. In residence means attending classes conducted on campus or under supervision of Central.

Major Requirements (37 credits)

Requires grade of C- or higher, unless otherwise specified.

	Credits	Grade
PHYS 125 University Physics I	4	
PHYS 126 University Physics II	4	
PHYS 220 Mechanics I	3	
PHYS 250 Intermediate Lab I	1	
PHYS 305 Found of Electricity and Magnetism	3	
PHYS 320 Heat and Thermodynamics	3	
PHYS 325 Optics	4	
PHYS 331 Electronics I	3	
PHYS 350 Intermediate Lab II	1	
PHYS 425 Modern Physics	3	
PHYS 450 Advanced Laboratory Techniques	1	
PHYS 460 Seminar in Physics	1	
PHYS 470 Quantum Mechanics	3	
PHYS 471 Quantum Mechanics II	3	

Related Requirements (28 credits)

CHEM 161 General Chemistry	3	
CHEM 162 General Chemistry Laboratory	1	
CHEM 260 Foundations of Inorganic Chemistry	3	
CHEM 201 Found of Analytical Chemistry Laboratory	1	
CHEM 210 Foundations of Organic Chemistry	3	
CHEM 211 Foundations of Organic Chem Laboratory	1	
CHEM 212 Organic Synthesis	3	
CHEM 213 Organic Synthesis Laboratory	1	
MATH 152 Calculus I	4	
MATH 221 Calculus II	4	
MATH 222 Calculus III	4	

Biology Concentration (21 credits)

BIO 121 General Biology I	4	
BIO 122 General Biology II	4	
BIO 200 Integrative Biology	3	
BIO 331 Neurobiology	4	
6 credits in BIO or BMS Electives (200 level or higher)	6	

Coursework applied toward Related or Additional requirements may be used in any other area of general education or program requirements.

Is a Minor Required with this Major?

Yes No

Free Electives may be used, as needed, to reach the total credits required for the degree when all other degree requirements have been met.

Total Credits Required for Degree: 120

* Students with 3 years, or more, of one world language at the high school level, a passing score on a world language placement exam, or native proficiency in a language other than English will have the World Language requirement waived and can satisfy this requirement with any general education free elective course (3cr).

** Transfer students with 24 or more transfer credits at the time of admission can satisfy this requirement with any general education free elective (3cr).

*** Waived for transfer students with 50 or more transfer credits at the time of admission.