

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

Degree: Bachelor of Science
Program: Biochemistry, Certified Track
Effective Term: Fall 2025

Name: _____

ID#: _____

General Education: Ways of Understanding:

Arts & Humanities (9 credits)

	Credits	Grade
Literature	3	

Social & Behavioral Sciences (12 credits)

	Credits	Grade
History	3	

Math & Natural Sciences (9-10 credits)

	Credits	Grade
MATH 152	X	
PHYS 125	X	
PHYS 126	X	

General Education: Essential Skills:

Written & Oral Communication (6 credits)

	Credits	Grade
WRT 105 or 110	3	

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

	Credits	Grade
World Language course numbered 112 or 118* or Gen Ed Free Elective	3	

Thriving in College (2-3 credits)

	Credits	Grade
CCSU 102, 103, or FYE course**	2-3	

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:

	Credits	Grade
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.

* 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.

Major Requirements (41-43 credits)

Requires grade of C or higher, unless otherwise specified.

	Credits	Grade
BMS 102 and 103 Intro to Biomolecular Sciences and Lab or BIO 121	4	
BMS 190 Introduction to Research I	0.5	
BMS 201 Principals of Cells & Molecular Bio	4	
BMS 290 Introduction to Research II	0.5	
CHEM 161 and 162 General Chemistry and Lab	4	
CHEM 200 and 201 Foundations of Analytical Chemistry and Lab	4	
CHEM 210 and 211 Foundations of Organic Chemistry and Lab	4	
CHEM 212 and 213 Organic Synthesis and Lab	4	
CHEM 260 Foundations of Inorganic Chemistry	3	
CHEM 316 Spectrometric Identification of Organic Compounds	3	
CHEM 320 Biophysical Chemistry	3	
CHEM 332 Chemical Literature	1	
CHEM 432 Chemistry Seminar	1	
BMS 390 or 491 or CHEM 238 or 438 Research	2	
Directed Elective: BMS 306 or 307 or 311 or 316	3	

Concentration in Biochemistry – Certified (15 credits)

CHEM 322 Physical Chemistry of Quantum and Statistical Mechanics	3	
CHEM 323 Physical Chemistry Lab	1	
CHEM 402 Instructional Methods in Analytical Chemistry	4	
CHEM 354 Foundations of Biochemistry	3	
CHEM 458 Advanced Biochemistry	3	
CHEM 455 Biochemistry Laboratory	1	

Related/Additional Requirements (16 credits)

MATH 152 Calculus I	4	
MATH 221 Calculus II	4	
PHYS 125 University Physics I	4	
PHYS 126 University Physics II	4	

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