

Central Connecticut State University	Address:	Name:
1615 Stanley Street New Britain, Connecticut 06053-4010		ID.#
		email

Effective Spring 2016

BS in Biochemistry

American Chemical Society certified track.

Departments of Chemistry & Biochemistry and Biomolecular Science

General Education		Major Requirements (57 cr)			Graduation Requirements	
Study Area I - Arts and Humanities (9)		Core Requirements (38 cr)			Six credit designated "international"	
	Literature	3	BMS 102 & 103	Intro to BMS w/Lab	4	met:
		3	BMS 201	Principles of Cell & Mol Biol	4	First Year Experience requirement
		3	BMS 190 & 290	Intro to Research I & II	1	met:
Study Area II - Social Sciences (9)			CHEM 238 (or BMS 390)	Independent Research	1	
	HIST	3	CHEM 438 (or BMS 491)	Advanced Ind Research	1	
		3	CHEM 161/162	General Chemistry	4	Electives (to complete the required 122)
		3	CHEM 200/201	Foundations of Analytical Chem	4	
Study Area III - Behavioral Sciences (6)			CHEM 210/211	Organic Chemistry I	4	
		3	CHEM 212/213	Organic Chemistry II	4	
		3	CHEM 260	Foundations of Inorganic Chem.	3	
Study Area IV - Natural Sciences(6-7)			CHEM 316	Spec. I.D.	3	
X	PHYS 125	4	CHEM 320	Biophysical Chemistry	3	
X	PHYS 126	4	CHEM 332	Chemical Literature	1	
Skill Area I - Communication Skills (6)			CHEM 432	Chemistry Seminar	1	
	ENG 110	3				
		3	Additional CHEM (8 cr.)			
Skill Area II - Mathematical (6)			CHEM 322	Quantum Chemistry	3	
X	MATH 152	4	CHEM 323	Physical Chemistry Lab	1	
X	MATH 221	4	CHEM 402	Instrumental Analysis	4	
Skill Area III - Foreign Language			Directed Electives* (4 cr)			4
	3 sequential years of one foreign language at the high school level		BMS 306, 307, 311, or 316			
	passed the foreign language exam.		Biochemistry Capstone (7 cr.)			3
	completed 112 or 114 foreign language courses		CHEM 354	Biochemistry	1	
	completed above 112 or 114 foreign language course		CHEM 455	Biochemistry Lab	3	
	demonstration of native proficiency in a language other than English		CHEM 458	Advanced Biochemistry		
Skill Area IV - Univ. Requirements (2-3)			Portfolio Requirement			
	PE 144 Fitness/ Wellness	2				met:
			Related Requirements			
			MATH 152	Calc I	4	
			MATH 221	Calc II	4	
			PHYS 125	University PHYS I	4	
			PHYS 126	University PHYS II	4	

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	Fall		Spring	
Year One ^a	CHEM 161/ 162	4	CHEM 200/ 201	4
	BMS 102/ 103	4	BMS 201	4
	BMS 190	0.5	BMS 290	0.5
	ENG 110	3	MATH 152	4
	GEN ED or MATH 119 ^a	3	GEN ED	3
			PE 144	2
		14.5		17.5
Year Two	CHEM 210/ 211	4	CHEM 212/ 213	4
	PHYS 125	4	PHYS 126	4
	MATH 221	4	BMS Elective	4
	GEN ED	3	CHEM 260	3
		15		15
Year Three ^b	CHEM 316	3	CHEM 332 ^c	1
	CHEM 354	3	BMS 390 or CHEM 238	1
	CHEM 320	3	CHEM 455	1
	GEN ED	3	CHEM 458	3
	GEN ED	3	GEN ED	3
			GEN ED	3
		15	Electives	3
				15
Year Four ^b	CHEM 322 ^b	3	CHEM 402 ^b	4
	CHEM 323 ^b	1	CHEM 432 ^b	3
	CHEM 438	1	GEN ED	1
	GEN ED	3	Electives	6
	Electives	8		
		16		14

a Students who do not place into MATH 152 should take MATH 119 in the Fall of their first year in order to have the prerequisite for MATH 152 in the Spring, requiring an adjustment to the Gen. Ed. schedule.

b Class is cycled, meaning it is offered once every four semesters. Consult with your advisor to ensure you get classes in the proper cycle.

c Students must be enrolled in or have taken BMS390 or CHEM 238 by Spring of junior year in order to meet the pre/co-requisite for CHEM 332.