

**Temple University College of Science & Technology**  
**Associate of Science in Chemistry <sup>Notes 1</sup> at Bucks County Community College**  
**to the Bachelor of Science in Biochemistry at Temple University**  
**(Effective Fall 2019)**

Bucks County CC Recommended Course			Temple University Equivalent	
First Semester			Credits	First Semester
CHEM 121	Chemistry I	4	CHEM 1031 AND CHEM 1033	General Chemistry I  General Chemistry I Laboratory
COLL 101	College Success Seminar	1		<i>NT, 0 TR, No Equivalency</i>
COMP 110	English Composition	3	ENG 0802	Analytic Reading And Writing
MATH 125	Precalculus	4	MATH 1022	Precalculus
	Social Sciences <sup>Note 2</sup>	3		Dependent upon course selection <sup>Note 6</sup>
<b>Semester Total:</b>		<b>15</b>		
Second Semester			Credits	Second Semester
CHEM 122	Chemistry II	4	CHEM 1032 AND CHEM 1034	General Chemistry II  General Chemistry II Laboratory
COMP 111	English Composition II	3	ENG L***	English Lower Level Elective
MATH 140	Calculus I	4	MATH L***	Lower Level Elective <sup>Note 3</sup>
COMM 110	Effective Speaking	3	CSI 1111	Public Speaking
<b>Semester Total:</b>		<b>14</b>		
Third Semester			Credits	Third Semester
CHEM 221	Organic Chemistry I	5	CHEM 2201 AND CHEM 2203	Organic Chemistry I  Organic Chemistry I Laboratory
PHYS 121	Physics I	4	PHYS 1061	Elementary Classical Physics I
	Electives <sup>Note 3</sup> <b>Recommend MATH 141: Calculus II</b>	4	MATH L***	Lower Level Elective <sup>Note 3</sup>
	Chemistry Elective <sup>Note 4</sup> <b>Recommend BIOL 121: Biological Principles I</b>	4	BIOL 2112	Introduction to Cellular and Molecular Biology
<b>Semester Total:</b>		<b>17</b>		
Fourth Semester			Credits	Fourth Semester
CHEM 222	Organic Chemistry II	5	CHEM 2202 AND CHEM 2204	Organic Chemistry II  Organic Chemistry II Laboratory
PHYS 122	Physics II	4	PHYS 1062	Elementary Classical Physics II
	Chemistry Elective <sup>Note 5</sup> <b>Recommend BIOL 122: Biological Principles II</b>	4	BIOL 1111	Introduction to Organismal Biology
	Diversity/Arts/Humanities	3		Dependent upon course selection <sup>Note 6</sup>
<b>Semester Total:</b>		<b>16</b>		
<b>Total Credits Taken:</b>		<b>62</b>		

**Notes:** Students following this plan are under the GenEd-to-GenEd General Education program.

- 1) Students who transfer to Temple with an A.S. in Chemistry have satisfied the terms of the Temple-Bucks GenEd-to-GenEd transfer agreement and have completed the General Education requirements necessary to graduate from Temple University.
- 2) Students should NOT select COMM 111, MGMT 100, and MUSC 103 as these courses would not count toward the 90 total CST/CLA credits required to graduate with a BS in Biochemistry at Temple.
- 3) Students should select MATH 141: Calculus II as their elective. MATH 141 transfers to Temple as MATH L\*\*\*. Completion of MATH 140 and MATH 141 in transfer will satisfy MATH 1041 Calculus I and MATH 1042 Calculus II requirements in the BS in Biochemistry major at Temple University via DARS exception. Students who do not complete this course sequence at Bucks will have additional course requirements remaining at Temple and may need additional time to complete the remaining BS in Biochemistry requirements.
- 4) Students should select BIOL 121: Biological Principles I. BIOL 121 transfers to Temple as BIOL 2112: Introduction to Cellular and Molecular Biology. Students transferring without this course may require additional time to degree completion.
- 5) Students should select BIOL 122: Biological Principles II. BIOL 122 transfers to Temple as BIOL 111: Introduction to Organismal Biology and satisfies a major requirement. Students transferring without this course may require additional time to degree completion.
- 6) To see how courses might transfer, consult Temple's Transfer Equivalency Tool:  
<https://tuportal5.temple.edu/apps/tup/Public/TransferRules/> Courses not included in the transfer tool may transfer.

If the suggested classes are successfully completed at Bucks County Community College and an Associate in Science in Chemistry degree is awarded, the remaining four semesters for the **Bachelor of Science in Biochemistry** are as follows:

Remaining Requirements at Temple University		
<b>Fifth Semester</b>		<b>Credits</b>
BIOL 3096 (F)	Cell Structure and Function (WI)	4
CHEM 3103	Techniques of Chemical Measurement I	3
CHEM 3105	Introduction to Chemical Research Techniques	1
MATH 2043	Calculus III	4
SCTC 2001	CST Transfer Seminar	1
FREE ELECTIVE	Free Elective	3
<b>Semester Total:</b>		<b>16</b>
<b>Sixth Semester</b>		
BIOL 2296 (S)	Genetics (WI)	4
CHEM 3405 (S)	Physical Chemistry of Biomolecules	3
CHEM 4401	Biochemistry I	3
FREE ELECTIVE	Free Elective	6
<b>Semester Total:</b>		<b>16</b>
<b>Seventh Semester</b>		
BIOL 3324 (F)	Molecular Biology	3
BIOL 4376 (F)	General Biochemistry II	3
BIOCHEMISTRY ELECTIVE	Chemistry Department Biochemistry Elective ( <i>Residency</i> ) <sup>Note c</sup>	3-5
FREE ELECTIVE	Free Elective	6-4
<b>Semester Total:</b>		<b>15</b>
<b>Eighth Semester</b>		
BIOL 4344 (S)	Research Techniques in Biochemistry	4
BIOCHEMISTRY ELECTIVE	Biochemistry Elective Course from Approved List	3-4
FREE ELECTIVE	Free Elective	8-7
<b>Semester Total:</b>		<b>15</b>
<i>Credits transferred from the A.S. in Chemistry at Bucks:</i>		<b>61</b>
<i>Remaining credits to complete B.S. in Biochemistry at Temple:</i>		<b>62</b>
<b>Total Credits Completed to Satisfy the Requirements for B.S. in Biochemistry:</b>		<b>123</b>

**Notes:** Students following this plan are under the GenEd-to-GenEd General Education program.

- a) To earn a CST baccalaureate degree, a student must complete a minimum of 123 credits, including: 90 credits in CST/CLA courses, 45 credits of which must be at the upper level (numbered 2000-4999).
- a) Per the CST Residency Requirement, students must complete at least half of the major requirements at Temple: 10 courses for the major, of which 4 must be in Chemistry and 4 in Biology.
- b) To meet the CST Residency Requirement, one Biochemistry Elective must be selected from the Chemistry department.
- c) Temple University requires that all undergraduate degree candidates complete 45 hours of the last 60 hours of the degree or program as matriculated students at Temple University. If a matriculated student previously took Temple courses on a non-matriculated basis, those courses are counted towards this requirement.
- d) Per Temple's Transfer Policy for [Permission to Complete a Course at Another Institution after Matriculation](#), students who transfer 60 credits or more cannot receive permissions to transfer additional course work.

Inquiries about the undergraduate program and application are handled through the Office of Admissions (Phone: 215-204-4900; E-mail: [admissions@temple.edu](mailto:admissions@temple.edu))

Inquiries about the B.S. in *Biochemistry* or specific course requirements can be directed to The College of Science & Technology Center for Academic Advising & Professional Development at [cstadv@temple.edu](mailto:cstadv@temple.edu)