

**Associate of Science in Physical Science <sup>Note 1</sup>**  
**at Montgomery County Community College**  
**to Bachelor of Arts in Chemistry**  
**at Temple University College of Science & Technology**  
**(Effective Fall 2021)**

Montgomery County Community College Recommended Course			Temple University Equivalent	
First Semester			Credits First Semester	
ENG 101	English Composition I	3	ENG 0802	Analytic Reading & Writing
MAT 190	Calculus And Analytical Geometry I	4	MATH 1041	Calculus I
CHE 151	Principles Of Chemistry I	4	CHEM 1031 AND CHEM 1033	General Chemistry I General Chemistry Laboratory I
	Any Technological Fluency Elective	3		Dependent upon course selection <sup>Note 4</sup>
<b>Semester Total:</b>		<b>14</b>		
Second Semester			Second Semester	
ENG 102	English Composition II	3	ENG LL ELEC	English Lower Level Elective
MAT 201	Calculus And Analytical Geometry II	4	MATH 1042	Calculus II
CHE 152	Principles Of Chemistry II	4	CHEM 1032 AND CHEM 1034	General Chemistry II General Chemistry Laboratory II
	Ethical Perspectives	3		Dependent upon course selection <sup>Note 4</sup>
	Any Cultural Awareness/Diversity Elective	3		Dependent upon course selection <sup>Note 4</sup>
<b>Semester Total:</b>		<b>17</b>		
Third Semester			Third Semester	
	Any Aesthetic Sensibility Elective	3		Dependent upon course selection <sup>Note 4</sup>
PHY 151	Principles Of Physics I	4	PHYS 1061	Elementary Classical Physics I
CHE 261	Organic Chemistry I	4	CHEM 2201 AND CHEM 2203	Organic Chemistry I/ Organic Chemistry Lab I
ELECTIVE	<b>Recommended:</b> <b>MAT 202 Calculus III</b> <sup>Note 3</sup>	4		Dependent upon course selection
<b>Semester Total:</b>		<b>15</b>		
Fourth Semester			Fourth Semester	
PHY 152	Principles Of Physics II	4	PHYS 1062	Elementary Classical Physics II
CHE 262	Organic Chemistry II	4	CHEM 2202 AND CHEM 2204	Organic Chemistry II Organic Chemistry Laboratory II
	Any Oral Communication Elective	3		Dependent upon course selection <sup>Note 4</sup>
	Free Elective Credit <sup>Note 2</sup>	3		Dependent upon course selection <sup>Note 4</sup>
<b>Semester Total:</b>		<b>14</b>		
<b>Total Credits Taken:</b>		<b>60</b>		

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

- 1) Students who transfer to Temple with an Associate of Science in Physical Science have satisfied the terms of the Temple-MCCC GenEd-to-GenEd transfer agreement and have completed the General Education requirements necessary to graduate from Temple University.
- 2) Students should use Temple's Transfer Equivalency Tool to select a free elective course in a subject that transfers as equivalent to a course within any CST/CLA department
- 3) It is strongly recommended that students select MCCC MAT 202: Calculus III to satisfy an Elective at MCCC. MAT 202: Calculus III will be accepted as equivalent to Temple's MATH 2043: Calculus III which satisfies a requirement at Temple. Students transferring without MAT 202 may need additional time to degree completion.
- 4) To see how courses might transfer, consult Temple's Transfer Equivalency Tool: <http://admissions.temple.edu/transfer-equivalency-tool>. Courses not included in the transfer tool may transfer.



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

Remaining Requirements at Temple University		
Fifth Semester		Credits
CHEM 3301	Physical Chemistry Lecture I	3
CLA 2000+	Upper Level (2000+) College Of Liberal Arts Course	3
FL 1001	Foreign Language 1001 <i>Note c</i>	4
SCTC 2001	CST Transfer Seminar	1
FREE ELECTIVE	Free Elective	3
FREE ELECTIVE	Free Elective	2
<b>Semester Total:</b>		<b>16</b>
Sixth Semester		Credits
CHEM 3302	Physical Chemistry Lecture II	3
CHEM 3103	Techniques Of Chemical Measurement I	3
CHEM 3105	Introduction To Chemical Research Techniques	1
FL 1002	Foreign Language 1002 <i>Note c</i>	4
FREE ELECTIVE	Free Elective <i>Note d</i>	4
<b>Semester Total:</b>		<b>15</b>
Seventh Semester		Credits
CHEM 4196	Techniques Of Chemical Measurement II (WI)	5
CLA 2000+	Upper Level (2000+) College Of Liberal Arts Course	3
CST/CLA 2000+	Upper Level (2000+) CST/CLA Credits <i>Note e</i>	3
FREE ELECTIVE	Free Elective <i>Note d</i>	3
FREE ELECTIVE	Free Elective <i>Note d</i>	2
<b>Semester Total:</b>		<b>16</b>
Eighth Semester		Credits
CHEM 3397 OR 3398	Physical Chemistry Lab I Or Physical Chemistry Lab II (WI)	2
CST/CLA 2000+	Upper Level (2000+) CST/CLA Credits <i>Note e</i>	3
CST/CLA 2000+	Upper Level (2000+) CST/CLA Credits <i>Note e</i>	3
FREE ELECTIVE	Free Elective <i>Note e</i>	4
FREE ELECTIVE	Free Elective <i>Note d</i>	4
<b>Semester Total:</b>		<b>16</b>
<i>Credits transferred from the A.S. in Physical Science at Montgomery County Community College:</i>		<b>60</b>
<i>Remaining credits to complete B.A. in Chemistry at Temple:</i>		<b>63</b>
<b>Total Credits Completed to Satisfy the Requirements for B.A. in Chemistry:</b>		<b>123</b>

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

- 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).
- Per the Residency Requirement, students must complete at least half of the major requirements at Temple; 9 major courses and at least 7 major courses in the Chemistry department must be completed at Temple. 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.
- All BA candidates are required to demonstrate proficiency through the second level of a foreign language. If foreign language coursework completed at a previous institution transfers to satisfy the foreign language requirement or a placement assessment is completed to demonstrate proficiency beyond the 2<sup>nd</sup> level of a foreign language, foreign language coursework will be replaced by elective credit. Students should consult with CST advising in these situations to determine elective selection.
- Students who completed Core coursework at MCCC outside of CST/CLA department/subject areas may have additional CLA/CST credits to complete in lieu of free elective credits during their time at Temple University to reach 90 total CST/CLA credits required to graduate with a BA in Chemistry. Consult with academic advisor to confirm credits earned/remaining.
- Additional upper level CST/CLA credits required must total to 45 upper level CST/CLA credits to graduate. This total may vary depending on course selection at MCCC. Consult with advisor to confirm upper level CST/CLA credits remaining.
- 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.A. in Chemistry 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)