

Gloucester County College  
**CHEMISTRY**  
**Associate in Science (A.S.) – Transfer**  
**Program Requirements**

This curriculum provides two years of concentrated study in science for those who plan to pursue a baccalaureate degree in chemistry. Humanities and social science electives are incorporated to provide a broad educational experience. Students are advised to plan their course selection based on the requirements of the vocation or curriculum of the four-year college of their choice. Students who have completed the program will be able to:

- Successfully transfer to four-year institutions to continue pursuit of a scientific degree in the chemical sciences or related disciplines.
- Understand and apply basic chemical principles to the study of science overall including the health sciences.
- Develop and demonstrate the basic skill set, techniques and procedures required to do laboratory work in the chemical sciences.

**Required Core and Elective Courses**

<u>Communications</u>	<u>Credits</u>
COM 101      English Composition I	3
COM 102      English Composition II	3
<u>Humanities</u>	
____      Humanities Elective	3
____      Humanities Elective	3
<u>Social Science</u>	
____      Social Science Elective	3
____      Social Science Elective	3
<b><u>HPE</u></b> ____      Health and Physical Education Elective	1-3
<u>Mathematics</u>	
MAT 107      Pre-Calculus and Math Analysis	4
MAT 108      Calculus I	4
<u>Computer Science</u>	
CSC 101      Introduction to Programming	4
CSC 111      Intermediate Programming	4
	or
<u>Science</u>	
BIO 101      General Biology I	4
BIO 102      General Biology II	4
CHM 111      General Chemistry I	4
CHM 112      General Chemistry II	4
CHM 201      Organic Chemistry I	4
CHM 202      Organic Chemistry II	4
PHY 103      General Physics I	4
PHY 201      Physics with Calculus	4
PHY 104      General Physics II	4
PHY 202      Physics with Calculus II	4
	or
	or
<u>General Education Elective</u>	3-4
<b><u>TOTAL MINIMUM CREDITS:</u>    66</b>	

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**Four Semester Sequence of Courses**

<u><b>FIRST YEAR - Fall Semester</b></u>			<u><b>Credits</b></u>	
_____	COM 101	English Composition I	3	
_____	BIO 101	General Biology I	4	
_____	CHM 111	General Chemistry I	4	
_____	MAT 107	Pre-Calculus and Math Analysis *	4	4
			<b>15</b>	
<u><b>Spring Semester</b></u>				
_____	COM 102	English Composition II	3	
_____	BIO 102	General Biology II	4	
_____	CHM 112	General Chemistry II	4	
_____	MAT 108	Calculus I *	4	
_____	HPE _____	Health and Physical Education Elective	1-3	
			<b>16-18</b>	
<u><b>SECOND YEAR - Fall Semester</b></u>				
_____	CHM 201	Organic Chemistry I	4	
_____	PHY 103	General Physics I	4	<b>or</b>
_____	PHY 201	Physics with Calculus I	4	
_____	_____	Social Science Elective	3	
_____	_____	Humanities Elective	3	
_____	CSC 101	Introduction to Programming	4	<b>or</b>
_____	CSC 111	Intermediate Programming	4	
			<b>18</b>	
<u><b>Spring Semester</b></u>				
_____	CHM 202	Organic Chemistry II	4	
_____	PHY 104	General Physics II	4	<b>or</b>
_____	PHY 202	Physics with Calculus II	4	
_____	_____	Social Science Elective	3	
_____	_____	Humanities Elective	3	
_____	_____	General Education Elective	3-4	
			<b>17-18</b>	
<u><b>TOTAL MINIMUM CREDITS:</b></u>			<b>66</b>	

\* MAT 108 and MAT 122 or MAT 122 and MAT 221 may be substituted.