

Gloucester County College  
**ARTS AND SCIENCES – MATHEMATICS Option**  
**Associate in Science (A.S.) – Transfer**  
**Program Requirements**

This program is designed for students who have chosen mathematics as a major field of concentration and it will prepare students to transfer into a Bachelor of Science or Bachelor of Arts degree program. Students who have completed the program will be able to:

- Demonstrate theoretical knowledge in advanced mathematics.
- Perform abstract mathematical reasoning.
- Read, interpret and analyze quantitative information.
- Apply mathematical concepts and solve problems.

**Required Core and Elective Courses**

	<u><b>Credits</b></u>
<b><u>Communications</u></b>	
COM 101      English Composition I	3
COM 102      English Composition II	3
<b><u>Humanities</u></b>	
SPE 101      Oral Communication	3
____ ____      Humanities Elective	3
<b><u>Social Science</u></b>	
____ ____      Social Science Elective	3
____ ____      Social Science Elective	3
<b><u>HPE</u></b> ____      Health and Physical Education Elective	1-3
<b><u>Mathematics</u></b>	
MAT 108      Calculus I	4
MAT 113      Discrete Mathematics	3
MAT 122      Calculus II	4
MAT 205      Differential Equations	4
MAT 221      Calculus III	4
MAT 202      Linear Algebra	3
MAT ____      Mathematics Elective	3-4
<b><u>Computer Science</u></b>	
CSC 101      Introduction to Programming	4
<b><u>Science</u></b>	
____ ____      Science Elective	4
____ ____      Science Elective	4
<b><u>General Education</u></b>	
____ ____      General Education Elective	3-4
____ ____      General Education Elective	3-4
____ ____      General Education Elective	3-4
<b><u>TOTAL MINIMUM CREDITS:</u></b>	<b>65</b>

**ARTS AND SCIENCES – MATHEMATICS Option  
Associate in Science (A.S.) – Transfer  
Program Requirements**

**Four Semester Sequence of Courses**

<u>FIRST YEAR - Fall Semester</u>	<u>Credits</u>
____ COM 101      English Composition I	3
____ MAT 108      Calculus I *	4
____ CSC 101      Introduction to Programming	4
____ _____      Social Science Elective **	3
____ SPE 101      Oral Communication	3
	<b>17</b>
 <u>Spring Semester</u>	
____ COM 102      English Composition II	3
____ MAT 122      Calculus II	4
____ MAT 113      Discrete Mathematics	3
____ _____      Social Science Elective **	3
____ _____      Humanities Elective **	3
	<b>16</b>
 <u>SECOND YEAR - Fall Semester</u>	
____ MAT 202      Linear Algebra	3
____ MAT 221      Calculus III	4
____ _____      Science Elective ***	4
____ _____      General Education Elective	3-4
____ HPE _____      Health and Physical Education Elective	1-3
	<b>15-18</b>
 <u>Spring Semester</u>	
____ MAT 205      Differential Equations	4
____ _____      General Education Elective	3-4
____ _____      General Education Elective	3-4
____ MAT _____      Mathematics Elective	3-4
____ _____      Science Elective ***	4
	<b>17-20</b>
<b><u>TOTAL MINIMUM CREDITS:</u></b>	<b>65</b>

\* Students who need pre-requisite mathematics courses before beginning Calculus I will need more than 4 semesters to complete the degree.

\*\* Students should consult the institutions to which they wish to transfer when selecting elective courses. Economics is recommended for social science elective.

\*\*\* A minimum of 8 credits in a two-semester laboratory science sequence is required. PHY 201 and 202 are recommended for most transfer institutions.