

Fourth Semester	Credits
Elective(s) <sup>(7)</sup>	3-4
MAT 226 Elementary Linear Algebra	4
MAT 234 Elementary Differential Equations	3
PHY 152 Physics for Science and Math II	4
<b>Total Semester Credits</b>	<b>14-15</b>
<b>Total Credits</b>	<b>64-66</b>
<p>1. Depending on placement.</p> <p>2. Students who do not qualify for MAT 122 Calculus I must seek advisement for math placement and should note that placement into any course below MAT 122 Calculus I implies that more than four semesters will be required to complete the degree program.</p> <p>3. Student should choose a course that fulfills one of the following SUNY General Education Requirements:</p> <ul style="list-style-type: none"> <li>- SUNY GER Foreign Language,</li> <li>- SUNY GER Humanities, or</li> <li>- SUNY GER The Arts.</li> </ul> <p>4. Student should choose a course that fulfills one of the following SUNY General Education Requirements:</p> <ul style="list-style-type: none"> <li>- SUNY GER American History,</li> <li>- SUNY GER Social Sciences,</li> <li>- SUNY GER Western Civilization, or</li> <li>- SUNY GER Other World Civilizations.</li> </ul> <p>5. Student should choose a course that fulfills one of the following SUNY General Education Requirements and be a different requirement than the one fulfilled in Semester I:</p> <ul style="list-style-type: none"> <li>- SUNY GER Foreign Language,</li> <li>- SUNY GER Humanities, or</li> <li>- SUNY GER The Arts.</li> </ul> <p>6. Student should choose a course that fulfills one of the following SUNY General Education Requirements and be a different requirement than the one fulfilled in Semester I:</p> <ul style="list-style-type: none"> <li>- SUNY GER American History,</li> <li>- SUNY GER Social Sciences,</li> <li>- SUNY GER Western Civilization, or</li> <li>- SUNY GER Other World Civilizations.</li> </ul> <p>7. Any course offered by the College may be taken, but no math courses numbered MAT 122 Calculus I or lower may be used.</p>	

### Additional Information

Students are encouraged to join departmental clubs and become involved in extra-curricular activities and leadership positions. Please contact the MAT/CSC/ITE department for additional information at (516)-572-7383.

*Nassau Community College reserves the right to add or withdraw courses and to amend, revise, or modify the curricula.*

Rev. 8/19

# NASSAU COMMUNITY COLLEGE



## MATHEMATICS

Associate in Science Degree

MATHEMATICS/COMPUTER SCIENCE/  
INFORMATION TECHNOLOGY

Tel 516.572.7383  
admissions@ncc.edu



**Nassau Community College** offers the **Liberal Arts & Science: Mathematics (A.S.)** program for students needing a strong background in mathematics.

### Our Mission Statement

The Liberal Arts & Science: Mathematics (A.S.) program is designed for students who intend to transfer to a baccalaureate program in applied mathematics, theoretical mathematics, mathematics education or others who need to develop knowledge in the three basic areas of Mathematics: theory and proof, algorithmic thinking and mathematical modeling in order to study a related field, with the goal to complete the baccalaureate degree in two years of additional full-time study.

### What is the Liberal Arts & Science: Mathematics (A.S.) degree?

This degree program gives you a strong background in mathematics covering all courses offered in the first four semesters of a four-year mathematics degree including courses in differential calculus (MAT 122), integral calculus (MAT 123), multivariable calculus (MAT 225), Linear Algebra (MAT 226), Differential Equations (MAT 234) and Foundations of Mathematics (MAT 200). Additional required courses in Discrete Mathematics (MAT 241) and Probability and Statistical Inference (MAT 131) as well as cognate courses in Computer Science and Physics give you an introduction to theoretical vs. applied mathematics. This degree also gives you a broad liberal arts background by requiring additional courses in English Composition, Humanities, Social Sciences and other electives.

### Our Focus

Our program is designed to give you a broad enough background in mathematics where you can successfully transfer to either an applied or theoretical program. We place a strong emphasis on developing good basic skills, an ability to take these basic skills and apply them to a broad range of problems and the capability to communicate these mathematical ideas in written solutions and in analyzing problems. All of our curricula include opportunities to learn how to prove ideas as well as how to use mathematical modeling to solve problems.

### Did You Know...

- According to the *Bureau of Labor Statistics*, the median income for a mathematician/statistician (in 2018) is \$88,190/year of \$42.40/hr
- According to the *Bureau of Labor Statistics*, the job outlook for 2016-2026 for mathematicians/statistician is a 33% growth rate, which is higher than the 7% average for all occupations.
- Mathematician/Statistician can work for the federal

government or in the private sector, many times in teams with other professionals.

- One of the fastest growing areas for mathematics/statisticians is data analytics with the sports industry employing such professionals in their main offices.

### Why the Liberal Arts & Science: Mathematics (A.S.) degree?

If you are planning to pursue a four-year degree in mathematics, start here. We have small classes, tutoring/support services and a caring, dedicated faculty who will help you to acquire a solid foundation in the basic skills needed to be successful in mathematics as well as prepare you to think critically.

First Semester	Credits
CSC 120 Computer Science I	4
ENG 100 Enhanced Composition I or ENG 101 Composition I or ENG 108 The Craft of Composition / Honors English I <sup>(1)</sup>	3
Humanities Elective <sup>(2)</sup>	3
MAT 122 Calculus I <sup>(3)</sup>	4
Social Science Elective <sup>(4)</sup>	3
<b>Total Semester Credits</b>	<b>17</b>
Second Semester	Credits
ENG 102 Composition II or ENG 109 The Art of Analysis / Honors English II	3
Humanities Elective <sup>(5)</sup>	3
MAT 123 Calculus II	4
MAT 241 Discrete Mathematical Structures	3
PED Activity Course(s)	1
Social Science Elective <sup>(6)</sup>	3
<b>Total Semester Credits</b>	<b>17</b>
Third Semester	Credits
HED Health Elective	2-3
MAT 131 Probability with Statistical Inference	3
MAT 200 Foundations of Advanced Mathematics	3
MAT 225 Multivariable Calculus	4
PHY 151 Physics for Science and Math I	4
<b>Total Semester Credits</b>	<b>16-17</b>