

# Mathematics

## Degree Type

Associate in Science

The Associate in Science Degree in Mathematics has been developed to provide the first two years of preparation for a student wishing to complete a bachelor degree with a major in mathematics or mathematics education.

In addition, the Mathematics degree provides a strong foundation for a student who wishes to transfer to a four-year institution to study engineering, physics, or related fields.

Students graduating in mathematics will be capable of interpreting the language of mathematics, perform accurate mathematical calculations, and be able to understand how mathematics can be utilized to model natural phenomena.

Calculus-based Physics I and Calculus-based Physics II are recommended as laboratory science courses to meet the General Education requirements at Nashua Community College.

Students are encouraged to work closely with their academic advisor while at NCC. An early decision by a student as to which four-year college/university he/she plans to transfer will make the advising process more effective.

Upon the completion of the degree in Mathematics, graduates will be able to:

1. Demonstrate technical proficiency and effective problem solving ability in completing mathematical processes.
2. Apply mathematical concepts to other disciplines including business, economics, social sciences, and natural sciences.
3. Communicate mathematics effectively in both oral and written formats using appropriate mathematical language.
4. Use appropriate logical reasoning, understand mathematical proof and be capable of justifying results.

In addition, the graduate will be able to demonstrate competency in the general education outcomes.

## First Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
MATH210N	Calculus I	4	0	4
ENGL101N	College Composition	4	0	4
MATH106N	Statistics I	4	0	4
	Science Core Requirement			4

## First Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
MATH211N	Calculus II	4	0	4
MATH215N	Linear Algebra	4	0	4
	English/Communications Core and Elective Requirements			3
	Science Core Requirement			4

## Second Year - Fall Semester

Item #	Title	Class Hours	Lab Hours	Credits
MATH170N	Discrete Mathematics	4	0	4
MATH212N	Calculus III	4	0	4
	Behavioral Social Science Core Requirement			3
	Humanities/Fine Arts/Philosophy or Global Awareness			3

## Second Year - Spring Semester

Item #	Title	Class Hours	Lab Hours	Credits
CSCI175N	Programming Using C++	2	2	3
MATH220N	Differential Equations	4	0	4
	Behavioral Social Science or History/Political Science			3
	Humanities/Fine Arts/Philosophy or Global Awareness			3
	History/Political Science			3
Total Credits				61