

# Mathematics

## Degree Type

Associate of Science

NHTI's Mathematics degree program offers you a rigorous and cost-effective education with small class sizes to form long-lasting connections with peers and professors. You'll gain hands-on experience as a tutor of math and physics in ACE, by competing with our Math Team, and through investigations in our well-equipped physics lab. In your final semester, you'll investigate a topic of your interest in math in collaboration with a faculty member. In your senior project presentation, you'll share your newfound expertise with the academic community.

**Do you have questions?** Contact Dan Shagena, department chair, at [dshagena@ccsnh.edu](mailto:dshagena@ccsnh.edu) or 603-271-6484 x4307.

## Career Information

This degree program prepares students to transfer successfully into bachelor's degree programs in STEM fields such as mathematics, physics, statistics, engineering, computer science, and mathematics education. All of our graduates who obtained their A.S. in Mathematics have transferred to and enjoyed academic success at UNH.

## Admission Requirements

Apply for this program today on our [Admissions page](#) with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- A grade of C or higher in high school Pre-Calculus and Physics with a lab

## Curriculum

### First Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
CPET107C	Introduction to Programming with C++	2	3	3
INDL101C	STEM in the First-Year Experience	3	0	3
MATH205C	Calculus I	4	0	4
PHYS231C	Physics I (Calculus-Based)	3	3	4
<b>Subtotal Credits</b>		<b>12</b>	<b>6</b>	<b>14</b>



## Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL101C	English Composition	4	0	4
MATH206C	Calculus II	4	0	4
	Mathematics elective (200+)	3	0	3-4
PHYS232C	Physics II (Calculus-Based)	3	3	4
	<b>Subtotal Credits</b>	<b>14-15</b>	<b>3</b>	<b>15-16</b>

## Second Year

### Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL125C	Communication and the Literature of Science and Technology	3	0	3
MATH208C	Multivariable Calculus	4	0	4
	Mathematics elective (200+)	3	0	3-4
	Lab Science elective	3	2	4
	Social Science elective	3	0	3
	<b>Subtotal Credits</b>	<b>16-17</b>	<b>2</b>	<b>17-18</b>

### Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
MATH210C	Differential Equations	4	0	4
MATH290C	Senior Project/Internship	0	12	4
	Humanities/Fine Arts/Language elective	3	0	3-4
	General elective	3	0	3-4
	<b>Subtotal Credits</b>	<b>10-12</b>	<b>12</b>	<b>14-16</b>
	<b>Total Credits</b>			<b>60-64</b>

## Additional Information

### Program Learning Outcomes

Graduates demonstrate the ability to:

- Identify, discuss, and analyze mathematical and physical theories
- Show technical proficiency and effective problem-solving in completing mathematical processes
- Communicate math in both oral and written formats using appropriate language
- Use logical reasoning, understand mathematical proof, and justify results
- Apply math concepts to other disciplines including business, economics, and social sciences

### Student Testimonials

*Initially I thought NHTI would be just a stopping-over point, just a place to get my Gen Eds, but it became a major focal point of my education. I met people here who I'll be in touch with for the rest of my life. And more importantly, NHTI is where I learned how to learn. As a home-schooled student, I had never done school in a brick-and-mortar setting. NHTI is where I learned how to navigate the academic world and developed a good college work ethic. And I learned professionalism working in the Math Lab. This meant a lot, and I enjoyed all of it.*

– Jonathan Cooper, Class of 2017

*I came in with a fairly high level of math, and went directly into upper-level classes. The professors I worked with were really smart, and the small class sizes made things very personal. I'd taken Calc I online and gotten an A but didn't really understand it. Having that 1-on-1 experience in the classroom made all the difference.*

– Rebekah Kneuer, Class of 2017