

ADVANCED MATHEMATICS

PATHWAY DESCRIPTION

Course Offerings/credit (minimum of 3 courses)

<i>Honors Algebra 2</i>	1
<i>Honors Precalculus</i>	1
<i>AP Calculus AB</i>	1
<i>Honors Calculus</i>	1
<i>Probability & Statistics</i>	1
<i>AP Statistics</i>	1
<i>AP Calculus BC</i>	1

Career options

- Actuary
- Engineering
- Biomathematics
- Economist
- Stockbroker
- cryptography
- Finance
- Meteorologist
- Financial Planner

Learning Opportunities

Partnership with engineering firm

NSHS math Team

WPI Math meet

Robotics Team

Various opportunities to earn post secondary credit from AP, VHS, ACN, and other dual/concurrent enrollment programs and providers.

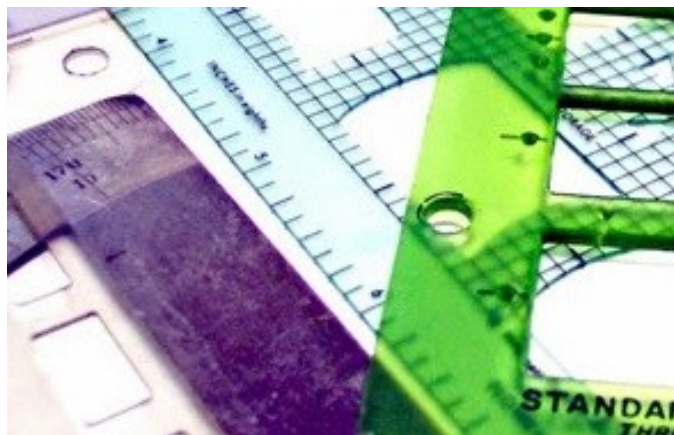
The Advanced Mathematics Pathway was designed for students with strong mathematics skills to increase their knowledge of mathematical concepts and problem solving. Science, engineering, technology, and mathematics (STEM) job openings continue to increase every year, and students that are proficient in mathematics are positioning themselves for a bright future.

According to the Mathematics Association of America(MAA), "Mathematics opens the doors to many promising career paths. CareerCast ranked mathematician as best job for 2014 based on four factors: environment, income, outlook, and stress. Statistician was ranked third and actuary was

ranked fourth. A study by PayScale shows that the top 15 highest-earning college degrees have a common element: mathematics. Not only do many professions and majors (engineering, doctors, physics, nurses, computer science, actuarial science, etc.) require courses in mathematics, but the analytical and problem-solving skills students learn in mathematics can apply to all

disciplines."

Learning high level mathematical skills can be transferred to many future careers. The logic and problem solving skills that are developed while learning and applying complex mathematical concepts is in high demand across numerous career disciplines.



PATHWAY RECOMMENDATION

Students interested in pursuing a pathway in this area should meet with their guidance counselor to select the best sequence of courses that will

satisfy the North Smithfield High School graduation requirements and at the same time, meet the criteria to receive a seal of concentration in Advanced

Mathematics. Students will also develop an Math related focus which will culminate in field experience for the required senior project.