Manhasset Schools Acceleration Pathways
Frequently Asked Questions

Our District offers a wide array of academic pathways that are designed to help students develop their unique talents, passions, and interests. The pathways that we offer in the areas of English, Mathematics, Science, Engineering, Social Studies, and the Arts allow for deep study in each area. As students grow, so too do their interests and passions. Therefore, our pathways are designed to be flexible allowing students to transition onto our various pathways at different times.

When considering our accelerated pathways, parents should keep in mind the totality of their child's school experience and their objectives in managing their academic and extra-curricular schedules. You will see in this FAQ document that many high-level courses are not necessarily dependent on early acceleration. Our FAQ document highlights that while accelerated pathways are an option for qualified students, they are not the sole determinant of accessing high-level courses. Through strategic scheduling decisions that consider the holistic school experience, the majority of students will develop a personalized pathway that demonstrates depth of knowledge and academic rigor without early acceleration.

1. **When can students accelerate in mathematics?**

   The majority of students who accelerate do so in 7th grade. A very small number of students who have mastered 6th grade learning standards before entering 6th grade, accelerate in grade 6. These students have sometimes been exposed to the 6th-grade curriculum through outside private/extra-curricular mathematics experiences.

2. **What is the difference in the mathematics curriculum for those who accelerate in grade 7 vs grade 6?**

   The curriculum for the Math 7 Accelerated class is a single-year class that combines grade 7 and 8 mathematics. The course moves at a faster pace and covers more content than the grade-level course. *Importantly, no grade-level content is skipped in this course.* The result is that students will take 9th-grade math in 8th grade, accelerating them one year ahead of the regular pathway.

   The small number of students who accelerate in grade 6, *skip 6th-grade content*. These students take the grade 7/8 combined course, Math 7 Accelerated, in grade 6. Therefore, this course is only appropriate for those students who have already demonstrated mastery of grade 6 learning standards.

3. **What are the criteria to accelerate in mathematics?**

   Acceleration in grade 7 is for students with high interest and aptitude for mathematics. These students take Math 7 Accelerated. They qualify for this course based on their achievement in grade 6 mathematics and their teacher's recommendation that considers the student's previous academic performance, academic maturity, independence, and ability to maintain the pace of a faster math class.

   Acceleration in grade 6 is for a very small number of students who must successfully progress through a multi-pronged selection process. First, students must score in at least the 98th national percentile on the Quantitative/Non-Verbal combined batteries on the CogAT examination. Students who meet this minimum threshold then move on to phase 2 of the selection process. This includes a secure examination that assesses grade 6 learning standards and a deep conceptual understanding of concepts learned in prior grade levels. A committee made up of the Director of Mathematics, two of the student's teachers, math specialists, and our Administrator for Assessment and Data Analysis is then convened to review classroom work samples and gather teacher feedback on observable behaviors as defined in the mathematics portion of the Renzulli-Hartman scale.

4. **Why does the district have two mathematics acceleration pathways?**

   The majority of students who accelerate do so in 7th grade. The grade 7 acceleration pathway allows students to move faster through the curriculum and ultimately take AP Calculus AB or BC in their senior year of high school.

   The grade 6 acceleration pathway is designed for a very small number of students, who because of their outside exposure and knowledge, can *skip grade 6 mathematics*. These students take the combined grade 7 and 8 curriculum in grade 6 and ultimately take Multivariable Calculus in their senior year. Students must continue to meet the minimum grade requirements in each subsequent course to remain on the pathway.

Grade	Single Acceleration (Typical Pathway)	Double Acceleration (Typical Pathway)
6	Grade 6 Mathematics	Grade 7/8 Combined Mathematics Course
7	Math 7/8 Combined Curriculum Course	Algebra Honors
8	Algebra Honors	Geometry Honors
9	Geometry Honors	Algebra 2 Honors
10	Algebra 2 Honors	Pre-Calculus Honors
11	Pre-Calculus Honors	AP Calculus BC
12	AP Calculus AB or BC	Multivariable Calculus

5. **If my child accelerates in mathematics in grade 7, do they still have the ability to take Multivariable Calculus in their senior year?**

   Yes. Students may choose to do this by co-enrolling in Geometry and Algebra 2. Alternatively, students may occasionally seek outside courses from other registered NYS High Schools to enroll in a summer Geometry or Pre-Calculus course. However, parents should be aware that the depth and rigor of a 6-week summer course will not match that of a full-year Manhasset course. Therefore, this option is not recommended. Students must meet the minimum grade requirement for the summer course to use this alternative. Prior approval for this option is required.

6. **Should I hire a tutor for the CogAT examination or to pre-teach 6th grade mathematics so that my child may be eligible to double-accelerate in mathematics?**

   We do not recommend hiring a tutor for either purpose. The double accelerated pathway was designed for a very small group of students who already possess deep knowledge of the 6th grade learning standards, sometimes gained from outside private/extra-curricular mathematics experiences.

   We urge families not to force a rushed preparation for this pathway. Our review of student success in this pathway revealed that students who are tutored or pre-taught 6th grade mathematics often have knowledge gaps that may not be overcome and experience unnecessary pressure. The result of this is that they may have to drop down into a less rigorous mathematics class because they are unable to maintain success in the pathway throughout secondary school. This not only presents academic challenges, but has a social-emotional impact as well.

   Most students with high aptitude and interest in mathematics do well in the grade 7 acceleration. Students who demonstrate long-term success in the grade 6 double acceleration pathway are those who *do not rely heavily on tutors or preparation to be successful*.

7. **Why is the selection process for double acceleration in mathematics so rigorous?**

   Prior to 2019, there was significant attrition along the early math acceleration pathway. Some cohorts were losing nearly 50% of originally identified students. This presented academic and social-emotional challenges that impacted students negatively. District administrators conducted a comprehensive review of the pathway and adjusted the identification process to help reduce the likelihood of attrition.

8. **If my child is in double accelerated mathematics, will they also be eligible to apply for admittance to the AP Intensive Pathway in Science?**

   Yes. The grade 7/8 combined mathematics course, Math 7 Accelerated, is a prerequisite for Earth Science. Therefore, students who double accelerate may apply to take Earth Science Honors in 7th grade.

9. **How does the AP Intensive Pathway in Science differ from the Science Honors Pathway?**

   Similar to mathematics, the majority of students who demonstrate a high aptitude and interest in science will take the Science Honors Pathway. Students who take the honors pathway typically take three AP science classes in high school. Some students may take four by taking two AP science classes in their senior year. For students following this pathway, additional AP courses are often taken in non-science classes as well.

   A small number of double accelerated mathematics students who are also interested in the AP Intensive Pathway in Science may qualify to apply to the program. As the name suggests, this pathway is very intense. Students should consider the totality of their high school academic and extra-curricular schedules as well as outside-of-school commitments to determine if this pathway is right for them.

Grade	Honors Pathway	AP Intensive Pathway
7	Science 7	Earth Science Honors
8	Living Environment Honors	Living Environment/AP Environmental Sciences
9	Earth Science Honors or Earth Science/AP Environmental Sciences*	AP Biology
10	Chemistry Honors	AP Chemistry
11	AP Physics I	AP Physics I
12	AP Physics 2 or AP Physics C or AP Biology or AP Chemistry	AP Physics 2 or AP Physics C

   *Students who are single accelerated in mathematics may be identified for the Earth Science Honors/AP Environmental Sciences Class provided that they maintain an A average in Living Environment Honors, English, and Algebra Honors.

10. **What is the selection process for the AP Intensive Science Pathway?**

    Because this pathway has students taking a College-Level Advanced Placement course in 8th grade, only a small number of students in the double accelerated mathematics pathway qualify for the AP Intensive Science Pathway. Students in double accelerated mathematics are invited to take a secure exam that assesses skills from both 7th-grade science and Regents Earth Science. A committee comprised of 6th-grade science teachers, math specialists, secondary school teachers, and the Coordinator of Science review classroom grades for math and science, as well as the secure exam grade, and gather teacher feedback on observable behaviors in various measures.

11. **Besides the AP Intensive Science Pathway, what other rigorous pathways are available to students who are interested in science?**

    Through Science Research, students complete independent research projects and are trained in problem-solving and research skills. Through their course work students develop expertise in experimental design, data interpretation, and analysis through a series of hands-on activities culminating with an individual research project. Students can progress through a course sequence that includes an Introduction to Science Research, Advanced Science Research, and STS prep. Through

this course sequence students participate in local and regional competitions where they showcase and defend their work to professionals in their respective fields.

12. Are there honors and advanced placement opportunities available to students that are not connected to mathematics acceleration?

Yes. All of our AP classes (listed below) are available to any student who meets the pre-requisite requirements for enrollment in a particular class. It is only the AP Intensive Pathway in Science that is connected to double acceleration in mathematics. All of our AP Science classes are open to any student who wishes to enroll in a class provided they meet the pre-requisites for that class.

Department	Course	Grade Level Course is Typically Taken
Art	AP Art & Design	11
Art	AP Art History	11 or 12
English	AP English 11 Language & Composition	11
English	AP English 12 Literate & Composition	12
Languages	AP Spanish, French, Italian	12
Mathematics	AP Calculus AB	11 or 12
Mathematics	AP Calculus BC	12 (Grade 11 for double accelerated)
Mathematics	AP Statistics	10, 11 or 12
Mathematics	AP Computer Science A	10, 11, or 12
Mathematics	AP Computer Science Principles	11 or 12
Social Studies	AP World History	10
Social Studies	AP US History	11
Social Studies	AP US Government & Politics	12
Social Studies	AP Micro/Macro Economics	12
Social Studies	AP Macro Economics	12
Social Studies	AP Human Geography	9, 10, 11, or 12
Social Studies	AP Psychology	10, 11, or 12
Social Studies	AP Seminar	10 or 11
Social Studies	AP Research	11 or 12
Science	AP Chemistry	12 (grade 10 for AP Intensive)
Science	AP Physics I	11
Science	AP Physics II	12
Science	AP Physics C	12
Science	AP Biology	12 (grade 9 for AP Intensive)
Science	AP Environmental Science	12 (grade 8 for AP Intensive)

In addition, most courses have pre-AP or Honors level available for students who meet the pre-requisite requirements in grades 9 and 10.

Honors level, pre-AP, and college credit-bearing courses are listed below:

Department	Courses	Grade Level Course is Typically Taken
Art	Pre-AP Art & Design	10, 11
Fine Arts	Repertory Company I, II, and III	10, 11, 12
Music	Symphonic Orchestra, Choir, Wind Ensemble	10, 11, 12
English	English 9H and 10H	9, 10
English	Broadcast Journalism I, II, III, IV*	9-12
World Language	Spanish/Italian/French IV (Pre-AP)	11

Mathematics	Math Research and Advanced Math Research	9-12
Science	Introduction to Science Research, Advanced Science Research, STS Prep	9-12
Engineering (Project Lead the Way)	Intro to Engineering*, Principles of Engineering*, Aerospace Engineering, Computer Integrated Manufacturing*	9-12
Social Studies	Social Studies 9 Advanced, Social Studies 10H	9, 10
Social Studies	AP Capstone (AP Seminar* and AP Research*) *Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate.*	10-12

*College Credit available

13. What other opportunities are there for rigorous coursework that may earn college credit and are not connected to acceleration in mathematics or science?

Project Lead the Way, our engineering pathway, encourages students to adopt a problem-solving mindset with hands-on learning while developing college and career readiness. In three (3) out of the four (4) courses, students have an opportunity to earn college credit through the Rochester Institute of Technology (RIT). This is a rigorous program that carries honors weighting on the Manhasset transcript.

In Broadcast Journalism 4, the final course of the broadcasting sequence, students will produce Good Morning Manhasset, the secondary school's news show, as well as live sports and special events coverage. Students have an opportunity to earn college credit through Hofstra University's Lawrence Herbert School of Communication.