

The purpose of this document is to provide clarity around the Mohonasen High School mathematics program course progressions that students would follow to meet, and exceed, graduation requirements. The sequence of courses outlined in this document are expectations for how students would progress through the high school mathematics course offerings depending on the pathway chosen. Additionally, the department expectations listed below would also be followed as students plan out their 4 year mathematics course schedule.

Mathematics Department Expectations

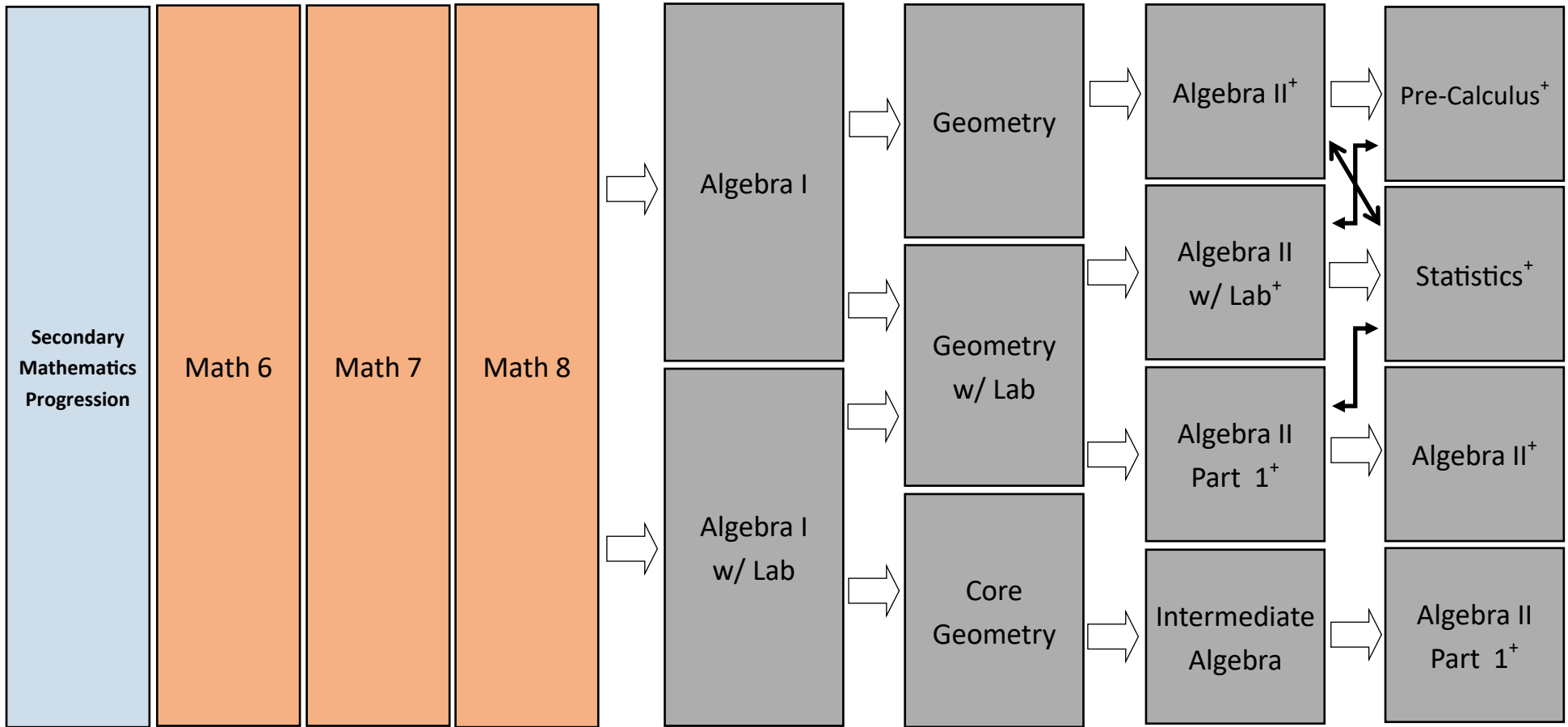
- 1. All students will take four years of mathematics while enrolled at Mohonasen High School;*
- 2. All students will successfully complete one college level course that provides the opportunity to earn college credit. This includes computer science courses.*

As a mathematics department, we firmly believe that successful completion of these expectations are critical for students to develop necessary 21-century skills, and that the skills and concepts learned (collaboration, critical thinking, communication, etc...) are directly applicable to other disciplines (Science, Technology, Business, etc...). As such, students will seek to successfully complete challenging mathematics courses in high school that will help develop life-long skills pertinent to their goals and aspirations.

Secondary Mathematics Program Course Progressions

PROGRAM	GRADE 6	GRADE 7	GRADE 8	GRADE 9	GRADE 10	GRADE 11	GRADE 12
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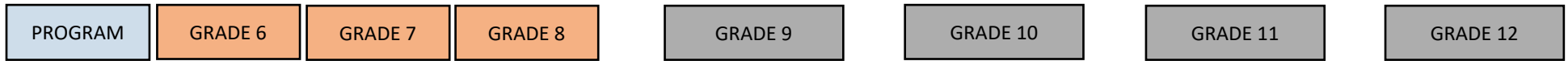
Note: The course progressions outlined below are typical of the average students in those specific progressions. Students may change their course progressions at any time. However, a change to any student's course progression requires prior approval from the Academic Administrator and may require students complete additional work to prepare them for the change in progression.



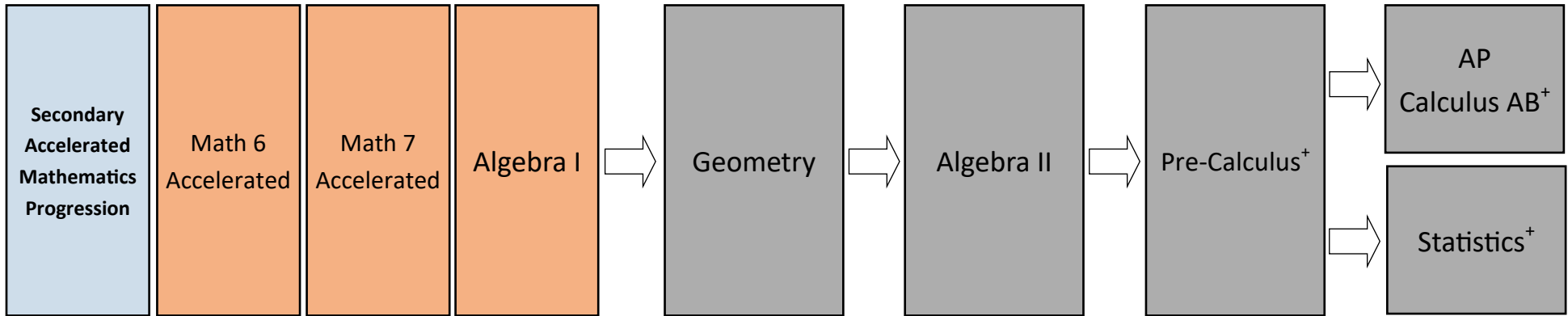
Acceleration entry for students not initially accelerated at Grade 6. Students can attempt to test into the accelerated pathway before Grade 7 and/or Grade 8.

+ indicates the potential for students to earn college credit

Secondary Mathematics Accelerated Program Course Progression



Note: The course progressions outlined below are typical of the average students in those specific progressions. Students may change their course progressions at any time. However, a change to any student's course progression requires prior approval from the Academic Administrator and may require students complete additional work to prepare them for the change in progression.



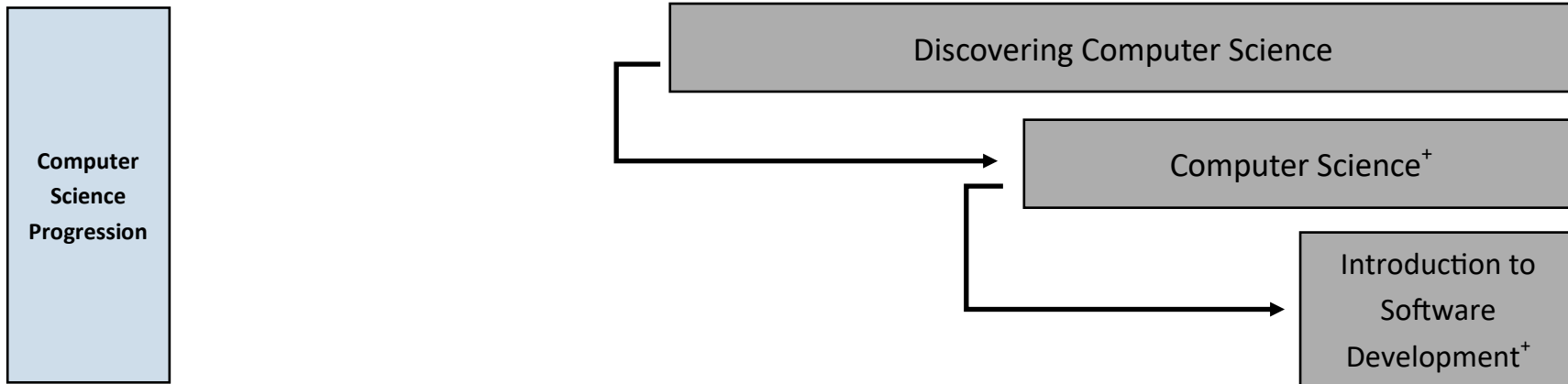
Students have the initial opportunity to enter the accelerated mathematics program when entering grade 6.

+ indicates the potential for students to earn college credit

Computer Science Program Course Progression



Note: The course progressions outlined below are typical of the average students in those specific progressions. Students may change their course progressions at any time. However, a change to any student’s course progression requires prior approval from the Academic Administrator and may require students complete additional work to prepare them for the change in progression.



Computer Science Course Prerequisites

Discovering Computer Science

- Successful completion of:
 - Regents Algebra I; and
- Concurrent enrollment in Regents Geometry, Regents Geometry with Lab, or Common Core Geometry;

Computer Science

- Successful completion of:
 - Regents Geometry; or
 - Regents Geometry with Lab; or
- Teacher recommendation

Introduction to Software Development

- Successful completion of:
 - Computer Science; or
 - Pre-Calculus; or
 - Regents Algebra II with teacher recommendation

The prerequisites to enroll in Discovering Computer Science are completion of Algebra I and concurrent enrollment in a Geometry course. Due to this, students who are accelerated in math are eligible to enroll in Discovering Computer Science in ninth grade.

+ indicates the potential for students to earn college credit

Algebra I Placement Prerequisites

Regents Algebra I

- Math 8 average of 75% or better; and
- Teacher recommendation

Regents Algebra I with Lab

- Math 8 average of less than 75%; and
- Teacher recommendation

Geometry Placement Prerequisites

Regents Geometry

- Successful completion of:
 - Regents Algebra I; or
 - Regents Algebra I with Lab; and
- Regents Algebra I Exam score of 65 or better; and
- Teacher recommendation

Regents Geometry with Lab

- Successful completion of:
 - Regents Algebra I; or
 - Regents Algebra I with Lab; and
- Regents Algebra I Exam score of 65 or better; and
- Teacher recommendation

Common Core Geometry

- Successful completion of:
 - Regents Algebra I; or
 - Regents Algebra I with Lab; and
- Regents Algebra I Exam score of 65 or better; and
- Teacher recommendation

Algebra II and Intermediate Algebra Placement Prerequisites

Regents Algebra II

- Successful completion of:
 - Algebra II Part 1; or
 - Regents Geometry; or
 - Regents Geometry with Lab; and
- Teacher Recommendation

Common Core Algebra II Part 1

- Successful completion of:
 - Regents Geometry; or
 - Regents Geometry with Lab; or
 - Common Core Geometry; and
- Teacher Recommendation

Regents Algebra II with Lab

- Successful completion of:
 - Algebra II Part 1; or
 - Regents Geometry; or
 - Regents Geometry with Lab; and
- Teacher Recommendation

Intermediate Algebra

- Successful completion of:
 - Common Core Geometry; and
- Teacher Recommendation

Advanced Electives Placement Prerequisites

Statistics

- Successful completion of:
 - 2 years of high school math; and
 - Common Core Algebra II Part I; or
 - Regents Algebra II; or
 - Regents Algebra II with Lab; or
 - Pre-Calculus; and
- Teacher Recommendation

Pre-Calculus

- Successful completion of:
 - Regents Algebra II; or
 - Regents Algebra II with Lab; and
 - Regents Algebra II Exam score of 65 or better; and
 - Teacher Recommendation

AP Calc AB

- Successful completion of:
 - Pre-Calculus; and
- Teacher Recommendation