



Mathematics-1

Once you successfully complete Mathematics 10C, you will need to decide which course sequence will meet your needs during the rest of your high school career and beyond. Whether you plan on pursuing further studies or entering the workforce directly, the mathematics program is designed to help you develop the appropriate skills.

There is a mathematics course that will meet your needs, no matter how your plans change.



Who should take the Mathematics-1 course sequence?

- *Mathematics-1 is designed for students who plan to apply for post-secondary programs that may require calculus skills.*
- *If you want to enter a post-secondary program such as engineering, mathematics, sciences, some business studies, or other programs that require advanced math skills, you should take Mathematics-1.*
- *Mathematics 30-1 is a co-requisite for Mathematics 31 and may be required for post-secondary calculus courses.*
- *You should always check the most up-to-date information on post-secondary mathematics entrance requirements. A good place to start is the admissions page of the post-secondary institution that you would like to attend, or the [Alberta Learning Information Service \(ALIS\) website](#), which outlines information regarding mathematics requirements at post-secondary institutions and programs in Alberta.*



What will I learn in Mathematics-1?

- You will study the concept of *function* in-depth, including quadratic, radical, polynomial, rational, trigonometric, exponential, and logarithmic functions.
- You will extend your knowledge of trigonometry to include sine and cosine laws to solve any triangle.
- You will be introduced to counting techniques involving *permutations* and *combinations*; these are the basis for the *binomial theorem*, which has important applications in the areas of calculus and statistics.

What do I do if my interests or future plans change?

- The Grades 10–12 Mathematics Program was designed to be *flexible* and to support student needs.
- After completing Mathematics 20-1, you can continue on to *Mathematics 30-1*. If you decide *Mathematics 30-2* is more appropriate for your future goals, you can take that course instead. You can also choose to take *Mathematics 30-3*.
- No matter how your plans change, there is a mathematics course that will meet your needs.