

Frequently Asked Questions

 **Q:** *How many courses do I need to take each term?*

 **A:** The usual course load is five courses per term. The Honors BSc programs require a minimum GPA of 3.0 on 24 units, i.e., usually eight courses, each Fall/Winter. It is thus possible to take only four courses per term, but it might be good to have one in reserve. Also, most student awards require a load of 30 units, i.e., five courses per term.

 **Q:** *I need to take MATH 117/118 for my honors program, but these classes are full. What can I do?*

 **A:** All you can do is use BearTracks to put yourself on the watch list for those courses. Usually, quite a number of students drop out of MATH 117/118 early in the term.

 **Q:** *Do I have to drop out of honors math/stats if I have a course with a grade less than B?*

 **A:** Nonsense! It's the GPA and the term GPA that count, i.e., you can make up for a course with a grade worse than B with another one. Even if you have a GPA of less than 3.0 in a year, you can make up for it at a later time. You may have to drop out temporarily, but you can apply for readmission later, and if you then get sufficiently good grades everything will be fine.

 **Q:** *I'm interested in the honors math courses even though I'm not enrolled in honors math or stats. Can I still take those courses?*

 **A:** Absolutely! In fact, most students taking honors calculus are *not* enrolled in an honors math/stats program, but in some physics, computing, engineering, etc., program instead: the honors math courses are for all students who enjoy doing math and love a challenge.

 **Q:** *So, when I'm in a math/stats major program, can I still take honors math courses?*

 **A:** Yes.

 **Q:** *What if I realize, late in the term, that I'm not just up to the challenge presented by the honors math courses?*

 **A:** Should you try out an honors course instead of the equivalent course required by your program and then realize that you are not up to the challenge, you can switch to the course appropriate for your stream, e.g., from MATH 117 to MATH 100, 114, 134, 144, or 154 or from MATH 127 to MATH 125, prior to the end of the sixth week of classes. If this should happen, the weight of the homework you missed in your new course will be transferred to the remaining assignments, and if you missed an in-class exam, its weight will be transferred to the final. In any case, you should contact your advisor as soon as possible.

 **Q:** *I took first year non-honors calculus and linear algebra and now want to switch to honors mathematics. What shall I do?*

 **A:** In this situation, you can no longer take MATH 117/118 and 127/227 for credit (you can still sit in on those, however). If you complete the requirements of your honors program from year two onward, we will credit your non-honors calculus/linear algebra courses as their respective honors equivalents. The recommended route is to take MATH 216 concurrently with MATH 217 in the first term of your second year; you should as well take MATH 325 in your second year.

 **Q:** *Do I need linear algebra (MATH 102, 125, or 127) as a prerequisite for MATH 217?*

■ **A:** The calendar requires one linear algebra course as a prerequisite, simply because a certain amount of linear algebra is indispensable for several variable calculus. Still, with consent of the department, linear algebra can be taken concurrently with MATH 217; in this case, you should also be prepared to do some reading on your own on the side.

■ **Q:** *Are all MATH and STAT courses required by the honors programs offered every year?*

■ **A:** Not necessarily. Some 400 level courses may be offered in alternate years only, unless demand is sufficient in the intervening years. To be on the safe side, check with your advisor sufficiently in advance.

■ **Q:** *What are approved science options, arts options, and options?*

■ **A:** An approved science option can be any science course, an approved arts option any arts course, and an approved option any course. If in doubt, check with your advisor.

■ **Q:** *Does this mean that a MATH or STAT course can be an approved (science) option?*

■ **A:** Yes.

■ **Q:** *Aren't the requirements for Years 3 and 4 of the honors programs a bit brutal?*

■ **A:** The requirements listed in the calendar are the total for Years 3 and 4 combined.

■ **Q:** *Can I shift requirements listed in the calendar between years, e.g., take no science options in my first year, take only arts options instead, but make up for it at a later time?*

■ **A:** Absolutely! The calendar is an instrument to assist students with their program, not to straightjacket them.

■ **Q:** *I'm in honors stats, and it seems that some of the STAT courses required in my third and fourth year are rarely offered. What can I do?*

■ **A:** As the number of students in the honors statistics program tends to be small, it is true that some of the 300 and 400 level STAT courses required by the program are not offered every year and sometimes aren't even offered for several years. In this case, individual arrangements have to be made (substitutions, reading courses, etc.). It is therefore very important that you contact your advisor at an early stage to discuss such arrangements.

■ **Q:** *What do I have to do if I want to add one of the approved minors (statistics or computing) in the Honors Mathematics or Honors Applied Mathematics program?*

■ **A:** The honors (applied) programs with a minor are in fact different programs from those without. So you can only switch at the beginning of each academic year (or upon graduation).

■ **Q:** *I'm an honors math/stats student. Can I take business courses?*

■ **A:** If you are in honors math/fin, there is no problem for you to take the business courses required by your program. For all other students, the School of Business lets honors students in mathematics or statistics enroll in their courses only under the following conditions:

1. the department provides a written recommendation on behalf of the student;
2. the student has all the necessary prerequisites;
3. there is space in the course.

As demand for business courses is heavy, students from the School of Business are given first priority. This means that there is no room for casual registrations, and students from outside Business will normally not be registered until close to the end of the registration period.

Frequently Asked Questions for Engineering Students

- **Q:** *I'm an engineering student. Can I enroll in honors math courses?*
- **A:** If you have an 80% math average or higher, you'll be most welcome to take our honors calculus courses. Just go ahead and enroll in MATH 117, 118, or 217 using *BearTracks*.
- **Q:** *What's the best time to do it?*
- **A:** The earlier you do it, the better, i.e., if you want to take honors courses, the best thing is to switch from MATH 100 to MATH 117 in September. Of course, there are two more transition points into the honors stream: in January (entering MATH 118) and the following September (when you would enter MATH 217), but when you're really interested in math, it will be best for you to be enrolled in the honors math classes right from the beginning.
- **Q:** *What's the difference between honors and ordinary calculus?*
- **A:** In the honors calculus courses, we go deeper into the fundamentals of the subject, but since we have an extra lecture hour per week, we have time to cover all the same applications as in an ordinary calculus course.
- **Q:** *What benefits would I have from taking honors calculus?*
- **A:** First of all, if you love math, then it's just fun to be in a class with a lot of other mathematically talented students. Many top engineering students take this course, and they all seem to enjoy it. Also, you will get a stronger mathematical background, which, in turn, will make future courses - not only in mathematics! - easier for you.
- **Q:** *I heard these courses are really hard. Won't I ruin my GPA when I take honors math courses?*
- **A:** It's true: you will have to put a lot of work into an honors math course. However, if you love math, you'll enjoy it! And don't worry too much about your grades: these courses aren't curved. So, typically students who would get an A in MATH 100/101 will also get an A in MATH 117/118.
- **Q:** *Do I need to take both MATH 217 and 317 to substitute for MATH 209?*
- **A:** No. Engineering accepts MATH 217 as equivalent to MATH 209.
- **Q:** *How can I get a taste of MATH 117 and 118, and see if they are right for me?*
- **A:** There are online lecture notes available for [MATH 117/118](#), which give you an idea of what the courses will be like.
- **Q:** *Can I substitute MATH 127 for MATH 102?*
- **A:** No. The syllabus of MATH 102 covers some topics not included in MATH 127, e.g., diagonalization, eigenvalues, and Gram-Schmidt orthonormalization. To get all the topics treated in MATH 102, you would have to take both MATH 127 and 227.