

CPSC 340: Machine Learning and Data Mining: Prerequisite Form

To enroll in CPSC 340, you need prerequisites in four areas:

- Linear algebra (one of MATH 152, 221, or 223).
- Multivariate calculus (one of MATH 200, 217, 226, 253, or 263).
- Probability (one of STAT 200, STAT 203, STAT 241, STAT 251, MATH 302, STAT 302, MATH 318, BIOL 300).
- Basic algorithms and data structures (CPSC 221, or both of CPSC 260 and EECE 320 as well as one of CPSC 210, EECE 210, or EECE 309).

This information is for students who would like to enroll in the course but do not fulfill these prerequisites, as under some circumstances it is still possible for you to enroll. Below are several scenarios where you may be able to enroll in the class without the above prerequisites. [If you are in one of these situations, please enroll in the class or sign up for the waiting list](#) (last year we expanded the class to include all people on the waiting list).

1 Missing Multivariate Calculus

The multivariate calculus prerequisite is new for the 2016-17 academic year, so it might be a surprise to some students. Because of this, for the 2016-17 year only we are allowing [MATH 200 \(or equivalent\) to be taken as a co-requisite provided that the average of the other MATH/STAT prerequisites is at least 76%](#).

2 Graduate Students

Graduate students from any department can register in the course provided that they can show either:

1. [That they have taken equivalent courses \(e.g., in a different program or different school\).](#)
2. [That they are missing one of the above prerequisites, but have taken *related* courses \(see below\).](#)

There are a variety of possible related courses. Below I give three topics and an example of a UBC course where the topic is covered:

- Scientific computing (e.g., CPSC 302).
- Statistical inference (e.g., STAT 305).
- Algorithms and complexity (e.g., CPSC 320).

Machine learning is a fields where all these ideas come together to affect applications in the real world, which makes it rewarding but challenging to learn. Taking any of the above courses will make CPSC 340 easier, and might make up for a missing prerequisite. If you are in either of these two cases, we can bypass the prerequisites and add you to the course.

3 Undergraduate Students

Under some circumstances, undergraduates who do not satisfy the prerequisites may be able to enroll in the course if they are in either of the below situations:

1. That they have taken equivalent courses (e.g., in a different program or different school).
2. They have a 90%+ GPA and are missing one of the above prerequisites, but have taken (or are taking) *related* courses (see above).