Major in Data Science Module (15.0 or 20.0 courses)

This is a guide only. For complete information, see the online Academic Calendar

Last updated: March 14th, 2022

Admission Requirements

- Complete first year (5.0 coursers) with no failures.
- Minimum average of 60% on 3.0 principal courses with no mark less than 60% **in any of the 3.0 principal courses**

Graduation Requirements

Breadth Requirement:
- At least 1.0 course from each of Category A, B, and C as listed in the Academic Calendar.

Essay Requirement:
- 2.0 essay courses (1.0 must be senior course). Note that any modular essay course taken can be used towards this requirement.

Senior Courses:
- 13.0 senior courses(numbered 2000-4999) for a 4 yr degree

Graduation Requirements (cont.)

Average Requirements:
- Minimum overall average of 60%
- Minimum cumulative modular average of 60%
- Passing grade in each course
- Minimum cumulative modular average of 60% in any additional Major or Minor module completed

Residency Requirement:
- The majority of your modular courses must be completed at Western. Please check academic calendar for other residency requirements.

Note: To graduate with a 4 year BSc, at least 11.0 of your 20.0 courses must be taken from the Faculty of Science.
To graduate with a 3 year BSc, at least 8.0 of your 15.0 courses must be taken in the Faculty of Science

Typical stream

	A. Fall term (September to December)	B. Winter term (January to April)
First Year	CA 1000: Calculus I[1]	CA 1501: Calculus II[3]
	MA 1600: Linear Algebra I	CS 1027: CS Fundamentals II
	CS 1026: CS Fundamentals I[2]	other principal course (e.g., DS1000)
	Electives / Breadth requirements	
Second Year	CS 2210: Data Structures and Algorithms	DS 2000: Intro to Data Science
	CS 2211: Systems Programming	SS 2864: Statistical Programming
	CS 2214: Discrete Structures	CS 2212: Intro Software Engineering
	SS 2857: Probability and Statistics I	SS 2858: Probability and Statistics II
Third Year	DS 3000: Intro to Machine Learning	CS 3340: Analysis of Algorithms
	CS 3319: Databases I	SS 3860: Generalized Linear Models
	SS 3843: Intro to Study Design	
	SS 3859: Regression	

- Required first year principal courses
- Modular course (7.0 courses)
- Electives or other modules

Additional Notes:

1. or Calculus 1500A/B
2. or Data Science 1200A/B
3. or Calculus 1301A/B with a mark of >85%

Fourth year:

Any modular course not yet completed

Double Majors:

- Courses common to more than one module require substitution
- For double majors in the faculty of science, a maximum of 1.0 course explicitly required for each module can be counted towards both modules
- Please check with faculty counsellors to review all requirements.