## Honors Specialization in Data Sciences Module (20.0 courses)

### Admission to Honors Specialization Module:
Complete first year (5.0 courses) with no failures including:
- Minimum average of 70% on 3.0 principal courses with no mark less than 60% in any of the 3.0 principal courses:
  - Calculus 1000A/B or Calculus 1500A/B
  - Calculus 1501A/B or Calculus 1301A/B with a mark of at least 85%
  - Mathematics 1600A/B
  - Computer Science 1026 A/B and Computer Science 1027A/B (min 65%)
- 0.5 other principal courses

** min 65% grade required. Note: CS1027 also now requires min 65% in CS1026.**

**NOTE:** At least 1.0 course must be chosen from two of Category A, B, and C as listed in the Academic Calendar (e.g. 1.0 from A and 1.0 from C)

### OPTIONS (5.0) Courses
These may also include any additional module other than Applied Statistics **.

If taking another module that includes an intro stats course (anti-req to SS2858), please consult with other department regarding course substitution.

** Consult ComputerScience (CS) department if considering a CS module.**

Also, you must complete any additional module with a minimum 60% average.

**Notes:**
- Courses common to more than one module taken require substitution.
  - However, if both modules are from faculty of science, a maximum of 1.0 courses explicitly required for each module can be counted towards both modules.
- 2nd Degree students should meet with a faculty counsellor to review other degree requirements (e.g. other than modular courses needed)

### 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

#### Average Requirements:
- Minimum overall average of 65% on the 20.0 courses
- Minimum cumulative modular average of 70% and a minimum mark of 60% in each course of the module
- 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 an Honors BSc, at least 11.0 of your 20.0 courses must be taken from the Faculty of Science.

### Department Recommendation for order in which modular courses should be taken:

#### Second Year
- CS2210A/B Data Structure and Algorithms
- CS2211A/B Software Tools and Systems Programming
- SS2857A/B Probability and Statistics I
- SS2858B/B Introduction to Study Design
- CS3319A/B Discrete Structures for Computing
- SS3858A/B Probability & Statistics II
- SS2864A/B Advanced Data Analysis
- CS2214B/B Data Science I
- SS3859A/B Generalized Linear Models

#### Third Year
- CS3319A/B Databases I
- SS3843A/B Introduction to Study Design
- SS3859A/B Regression
- CS3340B/B Analysis of Algorithms I
- SS3850G/B Data Analysis
- SS3860A/B/B Generalized Linear Models

#### Fourth Year
- CS4414A/B Data Science I
- SS4844A/B Statistical Consulting
- SS4850G/B Advanced Data Analysis

1.0 courses from the “1.5 modular course selection list” **  
0.5 courses from the “0.5 modular course selection list” **

(*** less if some were taken in 3rd year)