Honors Specialization in Statistics (20.0 courses)

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

Last updated June 8, 2021

Year 1 (5.0 Courses)

Calculus 1000A/B or 1500A/B

Calculus 1501A/B**(recommended**) or Calculus 1301A/B with a mark of 85%+

Mathematics 1600A/B

1.5 other principal courses

2.0 options

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)

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 principal courses:
  - Calculus 1000A/B or 1500A/B
  - Calculus 1501A/B or Calculus 1301A/B with a mark of at least 85%
  - Mathematics 1600A/B 1.5 other principal course

Recommended (but not required) first year courses;
Statistical Sciences 1023A/B (and/or Statistical Sciences 1024A/b)

NOTE 1: If not taken in first year, Math 1600A/B must be completed prior to the second term of second year.

NOTE 2: AM1413 may be substituted for the 1.0 Calculus course requirements and AM1411 A/B may be substituted for Mathematics 1600 A/B.

MODULE (9.0 Courses)

6.0 courses: SS 2503A/B, 2857A/B, 2858A/B, 2864A/B, 3657A/B, 3843A/B, 3858A/B, 3859A/B, 3860A/B, 4850F/G, 4861A/B, DS3000A/B
0.5 courses: Calculus 2402A/B **
1.5 courses from: Actuarial Science 4823A/B, Statistical Sciences 4844A/B, 4846A/B, 4860A/B, 4864A/B.
1.0 courses from: Actuarial Science 3424A/B, 4824A/B, 4823A/B, Financial Modelling 3520A/B, 3613A/B, 3817B, 4521A/B, AM3815A/B, any Statistical Sciences course at the 4000 level.

** Calculus 2402A/B may be replaced by (Calculus 2502A/B +Calculus 2503A/B). When such a replacement occurs, the module will include 9.5 courses.

Module shown is as per current calendar year. You may complete module using current calendar year or using calendar in effect in year of module entry.

OPTIONS (6.0 Courses)

These may also include any additional module in the calendar, *excluding any other modules offered by the Department of Statistical and Actuarial Science.*

If taking another module that includes an intro stats course (anti-req to S2858), please consult with other department regarding course substitution.

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).

Progression Requirements

- Minimum cumulative modular average of 70%
- Minimum mark of 60% in each course of module
- Passing grade in each option

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)

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 University. Please check academic calendar for other 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

Calculus 2402A Calculus with Analysis for Statistics
SS2857A Probability and Statistics I

SS2503B Advanced Mathematics for Statistical Applications
SS2858B Probability & Statistics II
SS2864B Statistical Programming (now offered both terms)

Third Year

SS3843A Introduction to Study Design
SS3859A Regression
SS3657A Intermediate Probability

DS3000B Introduction to Machine Learning
SS3860B Generalized Linear Models
SS3858B Mathematical Statistics

1.0 courses from the 1.5 and/or the 1.0 modular course selection lists

Fourth Year

SS4850F/G Advanced Data Analysis
SS4861B Time Series

1.5 courses from the 1.5 and/or the 1.0 modular course selectionlists