**Honors Specialization in Statistics (20.0 courses)**

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

_Last updated July 18, 2018_

### 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

### 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

### Module (9.0 Courses) **

**6.0 courses:** Statistical Sciences 2503A/B, 2857A/B, 2858A/B, 2864A/B, 3657A/B, 3843A/B, 3858A/B, 3859A/B, 3850F/G, 4846A/B or 4853A/B, 4850F/G, 4861A/B.

**0.5 courses:** Calculus 2402A/B.

**1.5 courses:** from: Actuarial Science 3424A/B, 4824A/B, 4823A/B, one of Statistical Sciences 4846A/B or 4853A/B.

**1.0 courses:** from: Actuarial Science 3424A/B, 4824A/B, 4823A/B, Financial Modelling 3520A/B, 3613A/B, 3817B, AM3815A/B, any Statistical science course at the 4000 level, or any course at the 4000 level approved by the Department of Statistical and Actuarial Sciences.

**Notes:**
- 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.

### 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

### 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

#### Third Year
- SS3843A Introduction to Study Design
- SS3859A Regression
- SS3657A Intermediate Probability
- SS3850G Data Analysis
- SS3858B Mathematical Statistics
- 1.0 courses from the 1.0 and/or the 1.5 modular course selection lists

#### Fourth Year
- SS4850F/G Advanced Data Analysis
- SS4861B Time Series
- 0.5 of SS4846A/B Experimental Design
- or SS4853A/B Sampling Theory and Methods
- 1.5 courses from the 1.0 and/or the 1.5 modular course selection lists