Honors Specialization in Actuarial Science Module (20.0 courses)

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

Last updated July 18, 2018

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**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 Economics 1021A/B and Economics 1022A/B
  - 0.5 other principal course

**Recommended (but not required) first year courses:** AS1021A/B, Business 1220, Philosophy 1200

**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.

**NOTE 3:** Economics 1021A/B and Economics 1022A/B, if not taken in first year, must be completed in one of your upper years.

**MODULE (10.5 Courses)**

- **2.5 courses:** Actuarial Science 2553A/B, 2427A/B, 3429A/B, 3431A/B, 4426F/G.
- **4.5 courses:** Statistical Sciences 2503A/B, 2857A/B, 2858A/B, 2864A/B, 3657A/B, 3843A/B, 3858A/B, 3859A/B, 4861A/B.
- **1.5 courses:** Financial Modeling 2555A/B, 2557A/B, 3520A/B.
- **0.5 courses:** Calculus 2402A/B.
- **0.5 course from:** Actuarial Science 3424A/B or 4824A/B.
- **1.0 courses from:** Any Actuarial Science course(s) at the 4000 level or Statistical Sciences 4960F/G or Financial Modeling 4521A/B (or any other course at the 4000 level approved by the Department).

**OPTIONS (4.5 Courses)**

These may also include any additional major or minor module in the Academic Calendar, but excluding both Financial Modelling and Applied Statistics.

**If taking another module that includes an intro stats course (anti-req to SS2858), 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, up to 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 course

**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. 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**

- AS2553A Mathematics of Finance
- FM2555A Corporate Finance
- Calculus 2402A Calculus with Analysis for Statistics
- SS2857A Probability and Statistics I
- AS2427B Life Contingencies I
- FM2557F Financial Markets & Investments
- SS2503B Advanced Mathematics for Statistical Applications
- SS2858B Probability & Statistics II
- SS2864B Statistical Programming*

* May be taken in 3rd year

**Third Year**

- AS3429A Life Contingencies II
- SS3657A Intermediate Probability
- SS3843A Introduction to Study Design
- SS3859A Regression
- AS3424B Loss Models II**
- AS3431B Life Contingencies II
- FM3520B Financial Modelling I
- SS3858B Mathematical Statistics

** Second of AS3424A/B or 4824A/B is required for the module

**Fourth Year**

- AS4426F Actuarial Practice I
- SS4861B Time Series

- 0.5 courses: AS3424A/B or 4824A/B (if not previously completed)
- 1.0 courses: Any 4000 level Actuarial Sciences course or FM4521A/B or SS4960F/G