## BSc or BA (4 year only): Major in Actuarial Science (20.0 courses)

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

**Last updated July 11, 2016**

### Year 1 (5.0 Courses)

- **Calculus 1000A/B or 1500A/B** (or the former Calculus 1100 A/B)
- **Calculus 1501A/B or Calculus 1301A/B with a mark of at least 85%**
- **Mathematics 1600A/B or the former Linear Algebra 1600A/B**
- **Economics 1021A/B and Economics 1022A/B**
- 0.5 other principal course

**Notes:** 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 the Major Module:

Complete first year (5.0 courses) with no failures including:
- Minimum grade of 60% in each of:
  - **Calculus 1000A/B or 1100A/B or 1500A/B**
  - **Calculus 1501A/B or Calculus 1301A/B with a mark of at least 85%**
  - **Mathematics 1600A/B or the former Linear Algebra 1600A/B**
  - **Economics 1021A/B and Economics 1022A/B**
  - 0.5 other principal course

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

**Note 1:** Math1600A/B is normally taken in Year 1. If not taken in Year 1, it must be completed in the first term of Year 2. AM1411A/B may be substituted for Math 1600 A/B.

**Note 2:** AM1413 may be substituted for the Calculus course requirements.

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

### MODULE (6.0 courses) **

- **1.5 courses:** Actuarial Science 2553A/B, 2427A/B, 3429A/B.
- **0.5 courses:** FM2555A.
- **2.5 courses:** Statistical Sciences 2503A/B, 2857A/B, 2858A/B, 2864A/B, 3657A/B.
- **0.5 course:** Calculus 2402A/B.
- **1.0 additional Actuarial Science course** at the 3000 level or higher.

Calculus 2402A/B may be replaced by either (Calculus 2502A/B and Calculus 2503A/B) or (Calculus 2502A/B and Mathematics 2123A/B). When such a replacement occurs, the module will include 6.5 courses.

### OPTIONS (9.0) Courses

An additional Major or Minor module may be taken here. You must successfully complete this additional module with a minimum mark of 60%.

**Notes:**
- *This module can only be used in a 4 year (honor or non-honors) degree*
- Most modular course pre-requisites stipulate a minimum grade of 60%
- Courses common to more than one module taken require substitution
- If you're considering completing another module(e.g. double major), the other module must be from a different department

### Progression Requirements

- Satisfy the progression requirements for the University (Level 1 and Level II as described in the Academic Calendar)

### Graduation Requirements

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<th><strong>Breadth Requirement:</strong></th>
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<td>At least 1.0 course from each of Category A, B, and C as listed in the Academic Calendar</td>
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<tr>
<th><strong>Essay Requirement:</strong></th>
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<tr>
<td>2.0 essay courses (1.0 must be senior course). Any Actuarial, Financial Modelling or Statistical Sciences essay course taken can be used towards this requirement.</td>
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<tr>
<th><strong>Senior Courses:</strong></th>
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<td>13.0 senior courses (numbered 2000-4999)</td>
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<th><strong>Average Requirements:</strong></th>
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<td>Minimum overall average of 60% on the 20.0 courses</td>
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<tr>
<td>Minimum cumulative modular average of 60% in the major module</td>
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<tr>
<td>Passing grade in each course</td>
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<tr>
<td>Minimum cumulative modular average of 60% in any additional Major or Minor module completed</td>
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<th><strong>Residency Requirement:</strong></th>
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<td>Minimum of 15.0 courses must be completed at Western University, as well as the majority of your modular courses.</td>
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To graduate with a BSc, a total of at least 11.0 courses must be taken from the Faculty of Science.

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

**Second Year**

- **AS 2553A** Mathematics of Financial Analysis
- **FM 2555A** Corporate Finance
- **Calculus 2402A** Calculus with Analysis for Statistics
- **SS 2857A** Probability and Statistics I
- **AS 2427B** Life Contingencies I
- **SS 2503B** Advanced Mathematics for Statistical Applications
- **SS 2858B** Probability and Statistics II
- **SS 2864B** Statistical Programming *

* May be taken in 3rd year

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**Third Year**

- **AS 3429A** Life Contingencies II
- **SS 3657A** Intermediate Probability

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**Fourth Year**

1.0 Actuarial Science course at 3000 level or higher (students completing a double major may be able to complete these courses in the same year as the recommended modular 3rd year courses)

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**Notes:** The following course subject name/number changes have been made effective September 2014. Equivalency is automatic when determining the fulfillment of modular requirements:

- AM2503→SS2503; AS2555→FM2555