**Honors BSc: Specialization in Financial Modelling (20.0 courses)**

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

Last updated July 11, 2016

<table>
<thead>
<tr>
<th>Year 1 (5.0 Courses)</th>
<th>Graduation Requirements</th>
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<tr>
<td><strong>Core Courses</strong></td>
<td><strong>Breadth Requirement:</strong></td>
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<tr>
<td>Calculus 1000A/B or 1500A/B (or the former 1500A/B)</td>
<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>
<td>Calculus 1501A/B or Calculus 1301A/B with a mark of at least 85%</td>
<td><strong>Essay Requirement:</strong></td>
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<tr>
<td>Math 1600 A/B</td>
<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>
<td>1.5 other principal course</td>
<td><strong>Senior Courses:</strong></td>
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<tr>
<td>2.0 options</td>
<td>• 13.0 senior courses (numbered 2000-4999)</td>
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**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 1100A/B or 1500A/B
  - Calculus 1501A/B or Calculus 1301A/B with a mark of at least 85%
  - Mathematics 1600 A/B
  - 1.5 other principal course

**Recommended (but not required) first year courses:**
- Economics 1021A/B and 1022A/B, Computer Science 1026 A/B and/or Computer Science 1027A/B, 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.

**MODULE (9.5 Courses) **

| 3.5 courses: Statistical Sciences 2503A/B, 2857A/B, 2858A/B, 2864A/B, 3657A/B, 3858A/B, 4861A/B. |
| 0.5 courses: Actuarial Science 2553A/B. |
| 2.0 courses: Calculus 2402A/B, Applied Math 2811B, 2814F/G, 3815A/B |
| 0.5 courses from: Applied Math 361F/G, 4613A/B** 4617A/B**, Financial Modelling 4998F/G/Z, Statistical Sciences 4999F/G/Z or Actuarial Science 4997F/G/Z. |

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 10.0 courses.

# May be offered only in odd-numbered academic years.
## May be offered only in even-numbered academic years.

**OPTIONS (5.5 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:**
- Courses common to more than one module taken require substitution
- If you’re considering completing another module, the other module must be from a different department

**Progression Requirements**
- Minimum cumulative modular average of 70%
- Minimum mark of 60% in each course of module
- Passing grade in each optional course

**Graduation 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:**
- Minimum of 15.0 courses must be completed at Western University, as well as the majority of your modular courses

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**
- AS2553A Mathematics of Financial Analysis
- FM2555A Corporate Finance
- Cal 2402A Calculus with Analysis for Statistics
- SS2857A Probability and Statistics I
- FM 2557B Financial Markets and Investments
- SS2503B Advanced Mathematics with Statistical Applications
- AM2811B Linear Algebra II
- AM2814G Numerical Analysis*
- SS2858B Probability and Statistics II
- SS2864 Statistical Programming*

*can be taken in 3rd year

**Third Year**
- AM3815A Partial Differential Equations I
- SS3657A Intermediate Probability
- FM3613A/B Mathematics of Financial Options**
- FM3817A/B Optimization Methods for Financial Modelling**
- FM3520B Financial Modelling I
- SS3858B Mathematical Statistics

**Fourth Year**
- AM4613A/B Finite Element Methods or AM4617A/B Numerical Solutions
- FM4521A/B Advanced Financial Modelling
- SS4861A/B Time Series

**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; AM3613→FM3613; AM3817→FM3817; AS2555→FM2555; AS2557→FM2557; SS3520→FM3520; SS4521→FM4521; SS4998→FM4998; AM2813→AM2814F/G