Major in Financial Modelling Module (15.0 or 20.0 courses)

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

Last updated June 22, 2019

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 1600 A/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 the Major Module:

Complete first year (5.0 courses) with no failures including:

- Minimum grade of 60% in each of:
  - Calculus 1000A/B or Calculus 1100A/B
  - Calculus 1301A/B with a mark of at least 85% or Calculus 1501A/B
  - Mathematics 1600 A/B
  - 1.5 other principal courses

Recommended (but not required) first year courses: Economics 1021A/B and Economics 1022A/B, Philosophy 1200, Computer Science 1026A/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.

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-for a general degree **:

- Minimum overall average of 60% on the 20.0 courses
- Minimum cumulative modular average of 60% in the major 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 residency requirements.

Notes:

- **** honors degree(with double major) requires a 70% average within each module**, with no Ds in any modular course
- **To graduate with a 4 year general or honors BSc degree,** at least 11.0 of 20.0 courses must be from Faculty of Science
- **To graduate with a 3 year BSc degree,** at least 8.0 of your 15.0 courses must be taken from the Faculty of Science.

MODULE (6.0 courses) @

0.5 courses: Actuarial Science 2553A/B.
1.5 courses: Calculus 2402A/B**, Applied Math 2814F/G, 3815A/B.
1.5 courses: Financial Modelling 2555A/B, 2557A/B, 3817A/B.
2.0 courses: Statistical Sciences 2503A/B, 2857A/B, 2858A/B, 3657A/B.
0.5 course from: Financial Modelling 3613A/B, Financial Modelling 3520A/B.

** 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.

@ 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

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

Second Year

AS2553A Mathematics of Finance
FM2555A Corporate Finance
Calc2402A Calculus with Analysis for Statistics
SS2857A Probability and Statistics I
FM2557B Financial Markets and Investments
SS2503B Advanced Mathematics for Statistical Applications
AM2814G Numerical Analysis
SS2858B Probability and Statistics II

OPTIONS (9.0) Courses for a 4 year Degree @@

These may also include any additional module *other than Actuarial Science.*

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:

@@ **A 3 year degree (FM major only) requires only 4 optional courses.**

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)

Third Year

AM3815A Partial Differential Equations
SS3657A Intermediate Probability
FM3817B Optimization Methods for Financial Modeling

0.5 FM3613b Mathematics of Financial Options**, or FM3520a** Financial Modelling I

Progression Requirements

- Satisfy the progression requirements for the University (Level 1 and Level II as described in the Academic Calendar)
- See graduation requirements for honors degree (with double major)
- **Note:** some modular course pre-requisites stipulate min. grade of 60%

Fourth Year

Any modular courses not yet completed