

ACTUARIAL MATHEMATICS, B.COMM., HONOURS

Degree Requirements

Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

Course	Title	Hours
Year 1		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles ¹	3
Select one of the following:		3
MATH 1230	Differential Calculus ¹	
MATH 1500	Introduction to Calculus	
MATH 1520	Introductory Calculus for Management and Social Sciences	
STAT 1000 or STAT 1150	Basic Statistical Analysis ¹ or Introduction to Statistics and Computing	3
Select 6 credit hours of ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC ^{1,2}		6
Select 3 credit hours of Written English "W" ^{1,3}		3
GMGT 1010	Business and Society ⁴	3
Select 3 credit hours of Electives ^{1,5}		3
Hours		27
Years 1-2		
GMGT 2060	Management and Organizational Theory ^{4,6}	3
GMGT 2070	Introduction to Organizational Behaviour ^{4,6}	3
MKT 2210	Fundamentals of Marketing ^{4,6}	3
Hours		9
Year 2		
ACC 1100	Introductory Financial Accounting	3
GMGT 2010	Business Communications	3
ENTR 2030	Introduction to Entrepreneurship: Business and Social Perspectives	3
Select 3 credit hours of Electives ⁷		3
Hours		12
Years 2-3		
ACC 1110	Introductory Managerial Accounting	3
FIN 2200	Corporate Finance ⁸	3
HRIR 2440	Human Resource Management ⁸	3
MIS 2000	Information Systems for Management ⁸	3
MSCI 2150	Introduction to Management Sciences ⁸	3
SCM 2160	Supply Chain and Operations Management ⁸	3
Hours		18

Year 3		
GMGT 3300	Commercial Law	3
Select 3 credit hours from International Business Requirement ⁹		3
Select 3 credit hours from Ethics ¹⁰		3
Hours		9
Years 3-4		
Select 12 credit hours of Major courses		12
Select 15 credit hours of Business Options ¹¹		15
Select 12 credit hours of Electives ⁷		12
Hours		39
Year 4		
GMGT 4010	Administrative Policy	3
Select 3 credit hours from Alternative Management Studies ¹²		3
Hours		6
Total Hours		120

- Foundation Courses: All students regardless of admit type must complete these Foundation courses and achieve a minimum grade of "C" in each. These 24 credit hours are the minimum admission requirements for Track 1 transfer students (See applicant information bulletin for details). MATH 1510 may be chosen presented for admission as an alternative Math course.
- 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfil other degree requirements.
- Students are required to complete a three credit hour course to satisfy the Written English "W" requirement, minimum grade of "C". The "W" course for the Foundation course requirement must be from a specific discipline (i.e., ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.
- GMGT 1010, GMGT 2060, GMGT 2070 and MKT 2210 can be taken in Year 2 if entering with 24 credit hours.
- PHIL 1290 is a preferred elective in Year 1.
- It is an option to complete either 3 credit hours in Year 1 and 6 credit hours in Year 2 or all 9 credit hours in Year 2.
- The 15 credit hours of electives (taken over Years 2, 3 and 4) must include 3 credit hours at the 2000 level or higher, 3 credit hours of Written English "W", 6 credit hours at any level, and 3 credit hours of Business Options or electives at the 2000 level or higher.
- 12 credit hours from the following core course are to be completed in Year 2: ACC 1110, FIN 2200, HRIR 2440, MIS 2000, MSCI 2150, SCM 2160. Choose courses according to prerequisite requirements in your major. The remaining 6 credits are completed in the third year.
- International Business Requirement: Choose one of the following: INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management Topic only) or SCM 3230
- Ethics requirement: Complete one of the following: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as electives.

¹¹ 15 credit hours of Business Options which must be at the 2000 Level or higher, except for language courses used as part of the International Business Major. 12 credit hours of Business Options may be used to complete an optional second major.

¹² Alternative Management Requirement: Complete one of the following: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, INDG 3120, INDG 4220, INDG 4320, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3246 (or the former MKT 3240 when titled Sustainability Marketing Topic only).

Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: INDG 3120, INDG 4220, INDG 4320 and POLS 3270.

Students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

Specific Requirements for the Major

The Actuarial Mathematics Major consists of:

Course	Title	Hours
Select 12 credit hours from the following:		12
ACT 2020	Economic and Financial Applications	
ACT 2120	Interest Theory	
ACT 3130	Actuarial Models 1	
ACT 3230	Actuarial Models 2	
ACT 3340	Financial Derivatives for Actuarial Practice	
ACT 4010	Regression Modeling in Actuarial Science	
ACT 4020	Short Term Actuarial Mathematics I	
ACT 4030	Short Term Actuarial Mathematics II	
Total Hours		12

Notes:

1. ACT 4020 and ACT 4030 collectively satisfy the requirement for the Short-Term Actuarial Mathematics Exam by the Society of Actuaries.
2. Student declaring Actuarial Mathematics as their first major may take MATH 2720 as either a Business Option or non-Business Elective.

Students admitted to the Asper School of Business prior to the current academic year should refer to the Academic Calendar for the year in which they were admitted for the requirements for this major.

To graduate with an Actuarial Mathematics Major, students are required to attain a minimum grade of "C+" in all 12 credit hours of Actuarial courses that will contribute to the Major.

If STAT 2150 is completed, this satisfies the prerequisite for FIN 3410. Alternatively STAT 2000 is a recommended elective as a prerequisite for FIN 3410.

Prior to registration, all students interested in or enrolled in Actuarial Mathematics are highly encouraged to consult the Director of the Warren Centre or an Undergraduate Program Advisor for program planning advice.