

ACTUARIAL MATHEMATICS, B.SC. HONOURS

Degree Requirements

Honours

Course	Title	Hours
Year 1		
For entry to this program a student requires a minimum grade of "B" in one of the courses below (excluding elective credits).		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
MATH 1220	Linear Algebra ¹	3
MATH 1230	Differential Calculus ¹	3
MATH 1232	Integral Calculus ¹	3
MATH 1240	Elementary Discrete Mathematics	3
STAT 1150	Introduction to Statistics and Computing ¹	3
STAT 2150	Statistics and Computing	3
6 credit hours of electives		6
Hours		30
Year 2		
GMGT 1000	Writing Skills for Business	1.5
IDM 1020	Data Software for Business	1.5
ACT 2120	Interest Theory ²	3
ACT 2210	Introduction to Risk Management ²	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
ACC 1100	Introductory Financial Accounting	3
FIN 2010	Introduction to Finance ²	3
MATH 2720	Multivariable Calculus ¹	3
GMGT 2010	Business Communications ³	3
IDM 2020	Introduction to Business Analytics	3
Hours		30
Year 3		
ACT 3130	Actuarial Models 1 ²	3
ACT 3340	Valuations for Actuarial Practice ²	3
ACT 4010	Regression Modeling in Actuarial Science ²	3
ACT 4020	Short Term Actuarial Mathematics I ²	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
12 credit hours of electives ⁵		12
Hours		30
Year 4		
ACT 3230	Actuarial Models 2 ²	3
ACT 4030	Short Term Actuarial Mathematics II ²	3
ACT 4040	Time Series and Statistical Learning in Actuarial Science ²	3
ACT 4060	Actuarial Aspects of Investment Practice ²	3
ACT 4160	Introduction to Property and Casualty Insurance Industry ²	3

15 credit hours of electives ⁵	15
Hours	30
Total Hours	120

¹ The following substitutions are allowed:

- MATH 1210 (B), or MATH 1300 (C+) in place of MATH 1220 (C),
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230 (C),
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232 (C),
- STAT 1000 (C) and STAT 2000 (B) in place of STAT 1150,
- MATH 2150 in place of MATH 2720.

² A minimum grade of "C+" is required in this course to graduate.

³ GMGT 2010 fulfills the written English requirement.

⁴ ACT 4030 may be taken in Year 3 or 4.

⁵ 18 credit hours of the elective requirements must be taken from the following: FIN 2420, and 3000 or 4000 level courses from ACT, ACC, ENTR, FIN, GMGT, HRIR, IDM, INTB, LEAD, MIS, MKT, MSCI, OPM, SCM, SGMT, COMP, ECON, MATH or STAT.