STATISTICS - ACTUARIAL JOINT, B.SC. HONOURS

Statistics - Actuarial Mathematics Joint Honours Entrance, Continuation, and Graduation Requirements

The Department of Statistics and the Warren Centre for Actuarial Studies and Research offer a joint Honours program for students wishing in depth study in Statistics and Actuarial Mathematics.

To enter the Joint Honours program, students must have completed 24 credit hours with a minimum DGPA of 3.00. Students must also obtain a minimum grade of "B" in STAT 2150. All of the courses listed in Year 1 of the program grid are program requirements and students are strongly urged to take them in the first year.

To continue in the Joint Honours Statistics - Actuarial Mathematics program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of "C+" in each of ACT 2120, ACT 2210, ACT 3130, ACT 3230, ACT 3340, ACT 4020, ACT 4030, ACT 4060, ACT 4160, FIN 2010, and a grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree.

Degree Requirements

Joint Honours

Course	Title	Hours
Year 1		
STAT 1150	Introduction to Statistics and Computing [1]	3
STAT 2150	Statistics and Computing (B)	3
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
MATH 1220	Linear Algebra 1 [1]	3
MATH 1230	Differential Calculus [1]	3
MATH 1232	Integral Calculus [1]	3
MATH 1240	Elementary Discrete Mathematics	3
One "W" course		3
3 credit hours of electives		3
	Hours	**30**
Year 2		
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
ACT 2120	Interest Theory [2]	3
ACT 2210	Introduction to Risk Management [2]	3
ACC 1100	Introductory Financial Accounting	3
FIN 2010	Introduction to Finance [2]	3
MATH 2720	Multivariable Calculus [1]	3
6 credit hours of electives [3, 4]		6
	Hours	**30**
Year 3		
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
STAT 3690	Multivariate Analysis	3
ACT 3130	Actuarial Models 1 [2]	3
ACT 3340	Valuations for Actuarial Practice [2]	3
ACT 4020	Short Term Actuarial Mathematics I [2]	3
ACT 4030	Short Term Actuarial Mathematics II [2, 5]	3
6 credit hours of electives [3, 4]		6
	Hours	**30**
Year 4		
STAT 4100	Statistical Inference	3
STAT 4250	Statistical Learning	3
ACT 3230	Actuarial Models 2 [2]	3
ACT 4060	Actuarial Aspects of Investment Practice [2]	3
ACT 4160	Introduction to Property and Casualty Insurance Industry [2]	3
6 credit hours of 4000 level courses in Statistics [3, 4]		6
9 credit hours of electives [3, 4]		9
	Hours	**30**
	Total Hours	**120**

1. The following substitutions are allowed:
   - MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220;
   - MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230;
   - MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232;
   - MATH 2150 in place of MATH 2720;
   - STAT 1000 and STAT 2000 (B) in place of STAT 1150.
2. A minimum grade of "C+" is required in this course to graduate.
3. The following courses are recommended electives for this program: COMP 1010, FIN 3410, FIN 4240, STAT 3030, STAT 3490, STAT 3550, STAT 4150, STAT 4630.
4. The following courses are not to be used for credit in this program: STAT 3000, STAT 4000.
5. ACT 4030 may be taken in Year 4.