

STATISTICS - ECONOMICS JOINT, B.SC. HONOURS

Statistics - Economics Joint Honours Entrance, Continuation, and Graduation Requirements

The Department of Statistics along with the Department of Economics (Faculty of Arts) offer a Joint Honours program for students wishing in depth study in Statistics and Economics. For Economics course listings, refer to the Faculty of Arts (<https://catalog.umanitoba.ca/undergraduate-studies/arts/economics/#coursestext>).

Students will normally take STAT 2150 in second year and enter Honours in Year 3.

To enter the Joint Honours Statistics - Economics program in the Faculty of Science, the student must have a minimum grade of "B" in both of ECON 1010 and ECON 1020 (or ECON 1210 and ECON 1220) and STAT 2150; and have satisfied the Faculty of Science requirements for entry to the honours program. Students are strongly encouraged to take MATH 1220, MATH 1230, MATH 1232 and MATH 1240 in Year 1.

To continue in the Joint Honours Statistics - Economics program in the Faculty of Science, a minimum DGPA of 3.00 is required.

To graduate with the B.Sc. Joint Honours Statistics - Economics degree from the Faculty of Science, a student must achieve a minimum DGPA of 3.00, and a minimum grade of "C" in each course that contributes to the 120 credit hours of the degree.

Degree Requirements

Joint Honours

Course	Title	Hours
Year 1		
One of A or B:		6
A:		
ECON 1010	Introduction to Microeconomic Principles (B)	
ECON 1020	Introduction to Macroeconomic Principles (B)	
B:		
ECON 1210	Introduction to Canadian Economic Issues and Policies (B)	
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies (B)	
STAT 1150	Introduction to Statistics and Computing ¹	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
COMP 1010	Introductory Computer Science ¹	3
6 credit hours of electives including the required "W" course		6
Hours		30
Year 2		
ECON 2010	Microeconomic Theory 1	3

ECON 2020	Macroeconomic Theory 1	3
STAT 2150	Statistics and Computing (B)	3
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2080	Introduction to Analysis	3
MATH 2150	Multivariable Calculus ¹	3
6 credit hours of approved Economics electives ²		6
Hours		30
Year 3		
ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
MATH 2160	Numerical Analysis 1	3
MATH 3610	Introduction to Mathematical Modelling	3
3 credit hours of approved Economics electives ²		3
6 credit hours of approved Statistics electives ³		6
Hours		30
Year 4		
ECON 4040	Seminar in Applied Econometrics	3
ECON 4042	Topics in Econometrics	3
STAT 4100	Statistical Inference	3
12 credit hours of approved Economics electives ²		12
9 credit hours of approved Statistics electives ³		9
Hours		30
Total Hours		120

- ¹ The following substitutes are allowed:
- COMP 1012 in place of COMP 1010;
 - MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220;
 - MATH 1500 (B) in place of MATH 1230;
 - MATH 1700 (B) in place of MATH 1232;
 - MATH 2720 in place of MATH 2150;
 - STAT 1000 and STAT 2000 (B) in place of STAT 1150.

Students must attain specific grade requirements in order to meet the upper level course prerequisites. Consult course descriptions for further information.

- ² Of the 21 credit hours of electives in Economics in Years 2, 3 and 4, no more than 6 credit hours may be at the 2000 level or below; ECON 2030 and ECON 3040 are recommended in Year 2 or 3. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.
- ³ The 15 credit hours of electives in Statistics in Years 3 and 4 must all be at the 3000 level or higher, at least 9 of which must be at the 4000 level. The following courses are recommended: STAT 3030, STAT 3490, STAT 3550, STAT 3690, STAT 4150, STAT 4250, STAT 4630. The following courses are not to be used for credit in this program: STAT 3000, STAT 4000.

(Letters in brackets indicate minimum prerequisite standing for further study.)