ECONOMICS-MATHEMATICS, B.A. JOINT HONOURS

Degree Requirements

Course	Title	Hours
Year 1		
One of the following pairs of Introductory Economics courses:		6
Both of:		
ECON 1010 & ECON 1020	Introduction to Microeconomic Principles and Introduction to Macroeconomic Principles	
or both of:		
ECON 1210 & ECON 1220	Introduction to Canadian Economic Issues and Policies and Introduction to Global and Environmental Economic Issues and Policies	
MATH 1220	Linear Algebra 1 [1]	3
MATH 1230	Differential Calculus [1]	3
MATH 1232	Integral Calculus [1]	3
MATH 1240	Elementary Discrete Mathematics [1]	3
STAT 1150	Introduction to Statistics and Computing [1,2]	3
COMP 1010	Introductory Computer Science 1 [2]	3
6 credit hours of electives, which should include the required "Written English" course [3]		6
	Hours	**30**
Year 2		
ECON 2010	Microeconomic Theory 1	3
ECON 2020	Macroeconomic Theory 1	3
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
9 credit hours of approved electives [3]		9
	Hours	**30**
Years 3-4		
ECON 3010	Microeconomic Theory 2	3
ECON 3020	Macroeconomic Theory 2	3
ECON 3040	Introduction to Econometrics [2]	3
MATH 2030	Combinatorics 1	3
MATH 2160	Numerical Analysis 1	3
MATH 3320	Algebra 2	3
MATH 3340	Complex Analysis 1	3
MATH 3440	Ordinary Differential Equations	3
MATH 3470	Real Analysis 2	3
MATH 3472	Real Analysis 3	3
24 credit hours of approved Economics courses [4]		24
3 credit hours from:		3
MATH 3420	Numerical Analysis 2	
MATH 3460	Partial Differential Equations	
MATH 3610	Introduction to Mathematical Modelling	
MATH 4370	Linear Algebra and Matrix Analysis	
or any Mathematics course at the 4000 level		
3 credit hours of Mathematics courses at the 3000 or 4000 level		3
Refer to the information directly below this list for other important degree requirements students need to complete prior to graduation		
	Hours	**60**
	Total Hours	**120**

[1] Students in this program must achieve a minimum grade of "B" in MATH 1230, MATH 1232, MATH 1220, and MATH 1240. Students are strongly advised to take MATH 1220, MATH 1230, and MATH 1232. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: MATH 1210 (A), MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) in place of MATH 1230, MATH 1700 (A) in place of MATH 1232. With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150.

[2] Some courses may be taken in a different year than indicated; STAT 1150, COMP 1010, ECON 3040 may be taken in Year 2. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.

[3] Students may not use the following courses for credit in this program: MATH 1010, MATH 1018, MATH 1020, FA 1020, MATH 1080, and MATH 1090.

[4] Of the 24 credit hours in electives in Economics in Years 3 and 4, no more than 6 credit hours may be at the 2000 level or below and at least 6 credit hours must be at the 4000 level. Students are encouraged to take ECON 4010, ECON 4020 and ECON 4040.

While completing the courses listed above, students in the B.A. Honours Degree program must satisfy the University's Written English (W) and Mathematics (M) requirements, plus the following Faculty requirements in order to graduate:

Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available Honours programs, please consult the specific listing (https://catalog.umanitoba.ca/undergraduate-studies/arts/#programstext) for the relevant department.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor (https://catalog.umanitoba.ca/undergraduate-studies/arts/#Arts-Honours-Minor) requirements listed under the B.A. General Degree, may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1. The minimum number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120. Information on the specific course requirements are found under each department. (https://catalog.umanitoba.ca/undergraduate-studies/arts/#programstext)

2. In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (https://catalog.umanitoba.ca/undergraduate-studies/arts/#Residency-Requirement) and attain a minimum degree grade point average of 3.0.

3. Included among the courses presented for graduation there must be at least three credit hours completed in each of five different Faculty of Arts (https://catalog.umanitoba.ca/undergraduate-studies/arts/#Five-subject-field) subject fields.

4. Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science (https://catalog.umanitoba.ca/undergraduate-studies/arts/#Arts-Social-Sciences), at least six credit hours from the list of courses that satisfy the Bachelor of Arts Science (https://catalog.umanitoba.ca/undergraduate-studies/arts/#Arts-Science) requirement, and at least three credit hours from the list of courses that satisfy the Indigenous Content (https://catalog.umanitoba.ca/undergraduate-studies/arts/#Indigenous-Content) requirement.