

# MATHEMATICAL ECONOMICS (MAEC)

Department of Economics and Finance, Gordon S. Lang School of Business and Economics

Most economic theory rests on explicit, formal, mathematical and/or statistical foundations. This specialization articulates and emphasizes these interactions. It is most suitable for students who either have, or wish to develop, a strong analytical background.

## Major (Honours Program)

A minimum of 20.00 credits is required, including:

Code	Title	Credits
<b>Semester 1</b>		
CIS*1500	Introduction to Programming	0.50
ECON*1050	Introductory Microeconomics	0.50
MATH*1200	Calculus I	0.50
1.00 electives		1.00
<b>Semester 2</b>		
ECON*1100	Introductory Macroeconomics	0.50
MATH*1210	Calculus II	0.50
1.50 electives		1.50
<b>Semester 3</b>		
ECON*2310	Intermediate Microeconomics	0.50
ECON*2410	Intermediate Macroeconomics	0.50
STAT*2040	Statistics I	0.50
1.00 electives		1.00
<b>Semester 4</b>		
ECON*3740	Introduction to Econometrics	0.50
2.00 electives or restricted electives <sup>1</sup>		2.00
<b>Semester 5</b>		
ECON*3710	Advanced Microeconomics	0.50
2.00 electives or restricted electives <sup>1</sup>		2.00
<b>Semester 6</b>		
ECON*3100	Game Theory	0.50
ECON*3810	Advanced Macroeconomics	0.50
1.50 electives or restricted electives <sup>1</sup>		1.50
<b>Semester 7</b>		
ECON*4640	Advanced Econometrics	0.50
ECON*4710	Advanced Topics in Microeconomics	0.50
ECON*4700	Advanced Mathematical Economics	0.50
1.00 electives or restricted electives <sup>1</sup>		1.00
<b>Semester 8</b>		
ECON*4810	Advanced Topics in Macroeconomics	0.50
0.50 credits in Economics at the 4000 level		0.50
Select 0.50 credits from the following:		
FIN*4100	Financial Econometrics	0.50
MATH*3200	Real Analysis	0.50
STAT*4340	Statistical Inference	0.50
STAT*4350	Applied Multivariate Statistical Methods	0.50

STAT*4360	Applied Time Series Analysis	0.50
1.00 electives		1.00

1

At least 1.00 credits of the 4.00 restricted electives credits must be from Mathematics and 1.00 credits must be from Statistics. The remaining 2.00 credits can be from either subject area. Of the 4.00 credits, at least 1.00 credits must be at the 3000 level or above and the remaining 3.00 credits must be at the 2000 level or above.

**Note:** Courses from MATH or STATS will be allowed with the appropriate prerequisites, or by permission of the instructor.