



## Adding Value to Your Team

Mathematics is an invaluable element of economic analysis and has opened up large areas of inquiry. Most economic theory rests on explicit, formal, mathematical and/or statistical foundations. This specialization articulates and emphasizes these interactions. This helps students to understand problems involving consumer behaviour, the interactions among producers as they compete for market share and macroeconomics outcomes such as inflation, unemployment, international trade and competitiveness.

## University of Guelph Advantage

Guelph's Mathematical Economics program provides an excellent preparation for a management career in business or government and provides students with a concentrated academic foundation. Prior to their first work term, students have studied intermediate level economic theory, mathematics, statistics/econometrics and computer/information technology. At the University of Guelph, the Economics program has a broad focus with students applying theory to multiple areas including:

- Environment and natural resources
- Housing and health
- Finance and banking
- International/regional development
- Government policies
- Labour and organizations

## Student Strengths

- Excellent critical thinking and analytical skills, developed as students complete extensive research projects
- Strong leadership and communication skills, which students develop through their education and work experiences
- The ability to handle and gather accurate economic data relevant to a research problem, and a comprehensive understanding of economic problems as they apply to a variety of industries
- Thorough knowledge of statistical procedures

# Mathematical Economics Course Sequencing

YEAR	FALL (SEPT-DEC)	WINTER (JAN-APRIL)	SUMMER (MAY-AUG)
<b>ONE</b>	<ul style="list-style-type: none"> <li>• INTRODUCTION TO PROGRAMMING</li> <li>• INTRODUCTORY MICROECONOMICS</li> <li>• CALCULUS I</li> <li>• 2 ELECTIVES</li> </ul>	<ul style="list-style-type: none"> <li>• INTRODUCTORY MACROECONOMICS</li> <li>• CALCULUS II</li> <li>• 3 ELECTIVES</li> </ul>	<b>OFF</b>
<b>TWO</b>	<ul style="list-style-type: none"> <li>• INTERMEDIATE MICROECONOMICS</li> <li>• INTERMEDIATE MACROECONOMICS</li> <li>• STATISTICS I</li> <li>• INTRODUCTION TO CO-OPERATIVE EDUCATION</li> <li>• 2 ELECTIVES</li> </ul>	<ul style="list-style-type: none"> <li>• INTRODUCTION TO ECONOMETRICS</li> <li>• 4 ELECTIVES OR RESTRICTED ELECTIVES</li> </ul>	<b>WORK TERM ONE</b>
<b>THREE</b>	<b>WORK TERM TWO</b>	<ul style="list-style-type: none"> <li>• GAME THEORY</li> <li>• ADVANCED MACROECONOMICS</li> <li>• 3 ELECTIVES OR RESTRICTED ELECTIVES</li> </ul>	<b>WORK TERM THREE</b>
<b>FOUR</b>	<ul style="list-style-type: none"> <li>• ADVANCED MICROECONOMICS</li> <li>• 4 ELECTIVES OR RESTRICTED ELECTIVES</li> </ul>	<b>WORK TERM FOUR</b>	<b>WORK TERM FIVE</b>
<b>FIVE</b>	<ul style="list-style-type: none"> <li>• ADVANCED TOPICS IN MICROECONOMICS</li> <li>• ADVANCED ECONOMETRICS</li> <li>• ADVANCED MATHEMATICAL ECONOMICS</li> <li>• 2 ELECTIVES OR RESTRICTED ELECTIVES</li> </ul>	<ul style="list-style-type: none"> <li>• ADVANCED TOPICS IN MACROECONOMICS</li> <li>• ONE 4000 LEVEL ECONOMICS COURSE</li> <li>• 1 COURSE FROM LIST BELOW*</li> <li>• 2 ELECTIVES</li> </ul>	

\*ONE OF:

- FINANCIAL ECONOMETRICS
- REAL ANALYSIS
- STATISTICAL INFERENCE
- APPLIED MULTIVARIATE STATISTICAL METHODS
- APPLIED TIME SERIES ANALYSIS

BASED ON THE 2022/23 UNDERGRADUATE CALENDAR

PLEASE SEE THE CURRENT UNDERGRADUATE CALENDAR FOR MORE INFORMATION