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:

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

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.