

# FINANCIAL ECONOMICS

The Financial Economics major guides students interested in a career in finance to the most useful courses in the two departments currently teaching financial topics, and makes it easier for students who have strong financial economics interests to obtain a minor or area of concentration outside mathematics or economics. Students wishing to major in Financial Economics are required to take the core economics theory courses in macroeconomics and microeconomics to provide a strong theoretical foundation. Beyond those courses, the student specializes in finance. The two departments' offerings in Mathematics and Economics complement each other well. Economics courses reinforce the concepts of optimization and comparative statics and give students command of computational tools that are ubiquitous in the world of finance. The mathematics courses examine mathematical models and lines of reasoning used in finance.

## Requirements for the Major

Code	Title	Credits
<b>Core</b>		
ECO-101	Principles of Economics	1
ECO-251	Economic Approach With Excel	0.5
ECO-253	Introduction to Econometrics	1
ECO-291	Intermediate Microeconomic Theory	1
ECO-292	Intermediate Macro	1
ECO-361	Corporate Finance	1
ECO-362	Money and Banking	1
MAT-251	Mathematical Finance	0.5
MAT-252	Mathematical Interest Theory	0.5
MAT-253	Probability Models	0.5
MAT-254	Statistical Models	0.5
MAT-353	Probability Models II	0.5
<b>Total Credits</b>		<b>9</b>
<b>Collateral Requirements</b>		
MAT-111	Calculus I	1
MAT-112	Calculus II	1
<b>Total Credits</b>		<b>2</b>

We recommend that Financial Economics students take ECO377 Investment (if available). Students taking a Financial Economics major may have a minor or second major in Mathematics, but may not count MAT-251 Mathematical Finance, MAT-252 Mathematical Interest Theory, MAT-253 Probability Models, MAT-254 Statistical Models, or MAT-353 Probability Models II toward that major or minor. Students taking a Financial Economics major may NOT have a major or minor in Economics.

## Comprehensive Exam

The written and oral comprehensive exams, designed jointly by the Economics and Mathematics departments and specifically targeted to the financial economics student, serve as a capstone as well as an assessment experience.

## Suggested Route through the Financial Economics Major

Course	Title	Credits
<b>Freshman</b>		
<b>Fall Semester</b>		
MAT-111	Calculus I <sup>1</sup>	1
<b>Credits</b>		<b>1</b>
<b>Spring Semester</b>		
MAT-112	Calculus II <sup>1</sup>	1
ECO-101	Principles of Economics <sup>2</sup>	1
<b>Credits</b>		<b>2</b>
<b>Sophomore</b>		
<b>Fall Semester</b>		
ECO-291	Intermediate Microeconomic Theory	1
ECO-251	Economic Approach With Excel	0.5
MAT-253	Probability Models	0.5
MAT-353	Probability Models II	0.5
<b>Credits</b>		<b>2.5</b>
<b>Spring Semester</b>		
MAT-254	Statistical Models	0.5
ECO-253	Introduction to Econometrics	1
<b>Credits</b>		<b>1.5</b>
<b>Junior</b>		
<b>Fall Semester</b>		
MAT-251	Mathematical Finance	0.5
MAT-252	Mathematical Interest Theory	0.5
ECO-361	Corporate Finance <sup>3</sup>	1
ECO-292	Intermediate Macro	1
<b>Credits</b>		<b>3</b>
<b>Senior</b>		
<b>Fall Semester</b>		
ECO-362	Money and Banking	1
<b>Credits</b>		<b>1</b>
<b>Total Credits</b>		<b>11</b>

<sup>1</sup> Co-curricular requirement for the major

<sup>2</sup> May be taken in the fall of the freshman year

<sup>3</sup> May be taken in the fall of the senior year

Several of the MAT courses can be delayed one year. Students beginning with MAT-100 Math Modeling and Precalculus may take MAT-100 in the Fall of their Freshman year and MAT-111 in the Spring of their Freshman year. Students beginning with MAT-010 Pre-Calc With Intro to Calculus or could follow the path below.

Course	Title	Credits
<b>Freshman</b>		
<b>Fall Semester</b>		
MAT-010	Pre-Calc With Intro to Calculus <sup>1</sup>	1
<b>Credits</b>		<b>1</b>
<b>Spring Semester</b>		
ECO-101	Principles of Economics <sup>2</sup>	1

MAT-110	Calc I With Pre-Calc Review <sup>1</sup>	1
<b>Credits</b>		<b>2</b>
<b>Sophomore</b>		
<b>Fall Semester</b>		
MAT-112	Calculus II <sup>1</sup>	1
ECO-251	Economic Approach With Excel	0.5
ECO-291	Intermediate Microeconomic Theory	1
<b>Credits</b>		<b>2.5</b>
<b>Spring Semester</b>		
MAT-254	Statistical Models	0.5
ECO-253	Introduction to Econometrics	1
<b>Credits</b>		<b>1.5</b>
<b>Junior</b>		
<b>Fall Semester</b>		
ECO-361	Corporate Finance <sup>3</sup>	1
MAT-253	Probability Models	0.5
MAT-353	Probability Models II	0.5
<b>Credits</b>		<b>2</b>
<b>Spring Semester</b>		
ECO-292	Intermediate Macro	1
<b>Credits</b>		<b>1</b>
<b>Senior</b>		
<b>Fall Semester</b>		
MAT-251	Mathematical Finance	0.5
MAT-252	Mathematical Interest Theory	0.5
ECO-362	Money and Banking	1
<b>Credits</b>		<b>2</b>
<b>Total Credits</b>		<b>12</b>

<sup>1</sup> Co-curricular requirement for the major

<sup>2</sup> May be taken in the fall of the freshman year

<sup>3</sup> May be taken in the fall of the senior year

Senior comprehensive examinations for the Financial Economics major will be jointly written and administered by the Economics and Mathematics departments and overseen by the two department chairs. For further questions contact the Economics department chair.