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**Degree: Bachelor of Science**  
**Major: Mathematics and Economics**

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The College of Arts and Sciences administers an interdisciplinary major program in Mathematics and Economics leading to the Bachelor of Science degree. The major, with courses taught by faculty in the Departments of Economics and Mathematical Sciences, provides a strong background in mathematics and economics. Students graduating with this degree will be well prepared for graduate studies in economics or in mathematics.

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CURRICULUM	CREDITS
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**University Requirements**

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| <input type="checkbox"/> ENGL 110 Critical Reading and Writing (minimum grade C-)                                                              | 3   |
| <input type="checkbox"/> First Year Experience                                                                                                 | 0-4 |
| <input type="checkbox"/> Discovery Learning Experience                                                                                         | 3   |
| <input type="checkbox"/> Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content | 3   |

**College Requirements**

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|-------------------------------------------------------------------------------------------------------------------------|---|
| <input type="checkbox"/> Writing (minimum grade C-)<br>Second writing course taken after completion of 60 credit hours. | 3 |
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**Breadth Requirements**

Eighteen credits from Groups A, B and C with a minimum of six credits from each group.

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|----------------------------------|---|
| <input type="checkbox"/> Group A | 6 |
| <input type="checkbox"/> Group B | 6 |
| <input type="checkbox"/> Group C | 6 |

**Major Requirements**

A grade of C- or better is required for major courses and related work.

**Computer and Information Sciences Section**

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| <input type="checkbox"/> Either CISC 105 or CISC 106 (for those with no previous equivalent experience), or CISC 181 Introduction to Computer Science | 3 |
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## Economics Section

- ECON 301 Quantitative Macroeconomic Theory ..... 3
- ECON 303 Intermediate Macroeconomic Theory ..... 3
- ECON 422 Econometric Methods and Models I ..... 3
- ECON 423 Econometric Methods and Models II ..... 3
- One of the following two courses ..... 3
  - ECON 406 Markets: Information and Uncertainty
  - ECON 426 Mathematical Economic Analysis
- One of the following five courses ..... 3
  - ECON 302 Banking and Monetary Policy
  - ECON 430 Advanced Macroeconomic Theory
  - ECON 443 International Monetary Economics
  - FREC 471 Futures and Options Markets
  - FINC 311 Principles of Finance

## Mathematics Section

- One of the following two courses ..... 3
  - MATH 210 Discrete Mathematics I
  - MATH 230 Finite Mathematics with Applications
- MATH 242 Analytic Geometry and Calculus B ..... 4
- MATH 243 Analytic Geometry and Calculus C ..... 4
- MATH 268 Perspectives on Mathematics ..... 1
- MATH 302 Ordinary Differential Equations ..... 3
- MATH 349 Elementary Linear Algebra ..... 3
- MATH 529 Fundamentals of Optimization ..... 3
- One of the following two options (A or B)
  - Option A**
    - MATH 350 Probability Theory and Simulation Methods ..... 3
    - MATH 450 Mathematical Statistics ..... 3
  - Option B**
    - MATH 201 Introduction to Statistical Methods I ..... 3
    - MATH 202 Introduction to Statistical Methods II ..... 3

- ❑ One of the following two options (C or D)

**Option C**

MATH 245 An Introduction to Proof .....	3
MATH 401 Introduction to Real Analysis .....	3

**Option D**

One of the following four courses .....	3
MATH 426 Introduction to Numerical Analysis and Algorithmic Computation	
MATH 503 Advanced Calculus for Applications	
MATH 512 Contemporary Applications of Mathematics	
MATH 694 Methods of Optimization	

- ❑ MATH 530 / ECON 530 Applications of Mathematics in Economics ..... 3
- ❑ At least 39 credits in MATH and ECON courses at or above the 300 level.  
MATH 308, MATH 379, MATH 380 and MATH 382 are not applicable.

❑ **Credits to total a minimum of** ..... **124**

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For more information on this major, visit the web page

[www.math.udel.edu/programs/ugrad/program.html](http://www.math.udel.edu/programs/ugrad/program.html)