Graduates with strong analytical skills are highly valued in today’s increasingly data-driven and interconnected business world. The Mathematical Economics major provides a course of study that allows students to not only acquire some of these highly valued analytical skills, but also integrates that knowledge with a deeper understanding of the business world. This combination of mathematics and economics knowledge makes Mathematical Economics graduates both highly competitive on the job market and excellent candidates for graduate school.

The Mathematical Economics major satisfies the requirements for the B.S. degree in the School of Arts & Sciences. It requires students to take 12 core units followed by 4 elective courses. The core courses serve to build a strong basic foundation in both economics and mathematics. The elective courses then allow the student to tailor their major to their post-graduation goals. To provide further breadth to their education Math-Econ majors may also declare additional majors (including in the Business School) as long as these additional majors are not Economics or Mathematics.

Recent Math-Econ graduates have chosen electives sequences towards post-graduation paths that include jobs in data science, finance, economics, actuarial sciences, consulting, and management, and graduate school in economics, statistics, strategy, and business. Advisors and coordinators in the major work closely with students to choose electives consistent with the students’ short and long term goals. The program coordinators additionally work with other departments to help Math-Econ majors take non-major courses that complement their studies towards post-graduation goals in fields such as finance, consulting, and actuarial sciences.

The list of core and elective courses for the 16-unit Mathematical Economics major are:* 

**Core Courses (12 required courses):**

MATH 211 – Calculus I  
MATH 212 – Calculus II  
MATH 235 – Multivariable Calculus  
MATH 245 – Linear Algebra  
MATH 329 – Probability  
CMSC 150 – Intro to Computing  
ECON 101 – Principles of Microeconomics  
ECON 102 – Principles of Macroeconomics  
ECON 270 – Introductory Econometrics  
ECON 271 – Microeconomic Theory  
ECON 272 – Macroeconomic Theory  
ECON 341 – Mathematical Economics  

**Electives (4 courses)**  
Two 300-level Mathematics Courses (in addition to MATH 329)  
Two 300-level Economics Courses (in addition to MATH 341)  

**Honors Program (optional)**  
Students with an overall & major GPA of 3.3 or higher may optionally apply for the Honors Program in Mathematical Economics. Students in the honors program, in addition to the completing the courses outlined above, must also complete an honors thesis and complete either the ECON 490-ECON 491 – Honors Seminar/Research sequence or take two units of MATH 340 – Directed Independent Study. The students completed honors thesis must be read by and approved by a committee of at least three readers, and presented to the faculty in both departments. The three readers must include a lead advisor, a consulting advisor, and an additional faculty member from the mathematics or economics departments. The lead and consulting advisors must be from different departments.

Feel free to contact the Mathematical Economics Program Coordinators, Paul Kvam (pkvam@richmond.edu) or Saif Mehkari (smehkari@richmond.edu), with any questions.

*Major requirements and course listing information is subject to change. This is not an official catalog listing. Please always refer to the University of Richmond Registrar’s website for the most up-to-date information.