This major was designed for students who may be interested in the quantitative aspects of economic analysis and mathematics. Graduates will be well prepared to pursue a career in business or industry (such as forecasting, analysis, or research). However, many students completing this degree will choose to enter graduate school in economics, business, applied mathematics, or a related field. The curriculum for the joint major consists of nine economics courses, including the core theory courses and some quantitative field courses, seven mathematics courses, and two courses in statistics.

**Required courses for the Mathematics – Economics joint major**

The mathematics – economics joint major requires the completion of 59 credits, or as few as 52 with UHC (University Honors Course) options, distributed as follows.

**Mathematics courses**
- MATH 0220 Analytic Geometry and Calculus 1
- MATH 0230 Analytic Geometry and Calculus 2
  - Note: Qualified students may substitute MATH 0235 Honors 1-Variable Calculus (UHC) for MATH 0220 and MATH 0230
- MATH 0240 Analytic Geometry and Calculus 3
- MATH 0413 Introduction to Theoretical Mathematics
- MATH 0420 Introduction to Theory 1-Variable Calculus
  - Note: Qualified students may substitute MATH 0450 Introduction to Analysis (UHC) for MATH 0413 and MATH 0420
- MATH 0500 or ECON 0900 Professional Development
- MATH 1270 Ordinary Differential Equations 1 or MATH 1275 Honors Ordinary Differential Equations 1

**Statistics courses**
- STAT 1151 Introduction to Probability
- STAT 1152 Introduction to Mathematical Statistics

**Economics courses**
- ECON 0100 Introduction to Microeconomic Theory
- ECON 0110 Introduction to Macroeconomic Theory
- ECON 1100 Intermediate Microeconomics
- ECON 1110 Intermediate Macroeconomics
- ECON 1150 Applied Econometrics 1
- ECON 1200 Introduction to Game Theory
- One ECON non 0800-series elective course
- Two ECON 1000-level courses having either ECON 1100 or ECON 1110 as a prerequisite

**Recommended courses**

Students are encouraged to take at least one field course in mathematics (MATH 1100, 1110, 1280, 1470, 1530, 1540, 1550, 1700) or statistics (STAT 1221, 1311, 1321, 1631, 1632).

**Grade requirements**

A grade of C or better is required in each course that is to count toward the major.

**Satisfactory/No Credit option**

Only MATH 0500 or ECON 0900 may be taken on the S/NC basis. All other courses must be taken on a letter grade basis.

**Writing (W) requirement**

Students must complete at least one W-course in the major.

**Honors major requirements**

Honors in the mathematics – economics joint major is granted if the student:
- Completes these courses in lieu of those previously specified:
  - MATH 0235 Honors 1 Variable Calculus
  - MATH 0240 Analytic Geometry and Calculus 3
  - MATH 0450 Introduction to Analysis
  - MATH 1185 Honors Linear Algebra 1
  - MATH 1530 Advanced Calculus 1
  - STAT 1151 Introduction to Probability
  - STAT 1152 Introduction to Mathematical Statistics;
- Completes all required economics courses taking ECON 1180 Mathematical Economics and a pro-seminar (ECON 1700 – 1730) for the two ECON 1000-level electives; and
- Maintains a minimum GPA of 3.0 in the mathematics courses, a GPA of 3.5 in the economics courses, and an overall GPA of 3.5.

**Advising**

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- Katherine Wolfe (Economics)
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- Jane Caldwell Wallace (Economics)
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Checklist for the Mathematics – Economics joint major

Mathematics courses
_______ MATH 0220
_______ MATH 0230
_______ MATH 0240
_______ MATH 0413
_______ MATH 0420
_______ MATH 0500 or ECON 0900
_______ MATH 1270 or 1275

One of the following
_______ MATH 1180
_______ MATH 1185

Statistics courses
_______ STAT 1151
_______ STAT 1152

Economics courses
_______ ECON 0100
_______ ECON 0110
_______ ECON 1100
_______ ECON 1110
_______ ECON 1150
_______ ECON 1200
_______ ECON _______ (non 0800-series elective)
_______ ECON 1______
_______ ECON 1______

Note: The two ECON 1000-level electives require either ECON 1100 or ECON 1110 as a prerequisite.