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
  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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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

**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.