

ECONOMICS AND MATHEMATICS

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The Economics and Mathematics major is intended for students with a strong interest in both mathematics and economics and for students who may pursue a graduate degree in economics.

PREREQUISITES

The major has prerequisites in both mathematics and economics: MATH 120; ECON 110 or 115; and ECON 111 or 116. With permission of the directors of undergraduate studies, upper-level courses may be substituted for prerequisite courses. Upper-level courses substituted for prerequisites do not count toward the total of twelve term courses (beyond the introductory level in economics and mathematics) required for the major.

REQUIREMENTS OF THE MAJOR

A total of twelve term courses is required beyond the introductory level in economics and in mathematics: seven term courses in economics and five term courses in mathematics. These courses must include:

1. Two courses in economic theory, ECON 125 and ECON 126. (Beginning with the class of 2021, ECON 121 may no longer be substituted for ECON 125 and ECON 122 may no longer be substituted for ECON 126).
2. A year of mathematical economics, ECON 351 and one of ECON 350, 417, or 433
3. Two courses in econometrics, ECON 135 and 136 (with permission of the director of undergraduate studies in Economics, S&DS 241 and 242 may be taken instead of ECON 135, in which case they count as one economics course and not as mathematics courses).
4. A course in linear algebra, MATH 222 or 225 (or 230 and 231, for two course credits).
5. An introductory course in analysis, MATH 300 or 301.

Distinction in the Major To be considered for Distinction in the Major, students must meet minimum grade standards, as specified in the Undergraduate Curriculum section, and submit a senior essay that earns a grade of A or A-. One-term essays may be written in either an Economics department senior seminar or in ECON 491. Two-term senior essays may be written in either an Economics senior seminar and ECON 492 or in ECON 491 and 492. (The paper must be written in a course taken in the senior year.) For details see Economics. All courses beyond the introductory level in Mathematics and Economics are counted in the computation of grades for Distinction.

Credit/D/Fail Courses taken Credit/D/Fail may not be counted toward the requirements of the major.

SENIOR REQUIREMENT

Students must take the senior seminar in mathematics, MATH 480. A senior essay in Economics is optional.

ADVISING

Students interested in the major should consult both directors of undergraduate studies, and verify with each that their proposed program meets the relevant guidelines. Registration forms must be signed by both directors of undergraduate studies each term.

REQUIREMENTS OF THE MAJOR

Prerequisites MATH 120; ECON 110 or 115; ECON 111 or 116

Number of courses 12 term courses beyond prerequisites (incl senior req)

Distribution of courses 5 courses in math and 7 in econ

Specific courses required ECON 125, 126, 135, 136, (ECON 350 or 417 or 433), ECON 351; MATH 222 or 225 (or 230 and 231), MATH 300 or 301

Substitution permitted S&DS 241 and 242 for ECON 135, with permission of DUS in Econ

Senior requirement Senior sem in math (MATH 480); optional senior essay in economics