Mathematical methods are used today in the social sciences as well as the physical and biological sciences. A minor program in mathematics is a useful supplement to a major program in many widely differing areas. The Mathematics Department has a list of suggested electives to complement various major programs (see below).

If you complete the minor following these guidelines, you then need the approval of the coordinating advisor in the Department of Mathematics, 250 Mathematics Building.

1. Required courses

   A. Calculus: 254 (or the accelerated or honors courses)
   B. Foundations of Higher Mathematics: 345 or 190H. Math 366 can fulfill this requirement only if it is required for the student’s major.
   C. Linear Algebra: 568 or 571 or 520H

2. Elective courses (as necessary to reach 20 credit hours)

To reach the 20 hour minimum (at least 15 hours must be in math), students may select courses from the following:

- Differential Equations: 255 or 415 or 521H
- Any 500 level Math course, excluding Math 532 or 588
- Math 601, 602, 603.02, 606, 607, 618, 647, 648, 649, 665, 666, 701
- Statistics 420, 421, or 610

Suggested Course Options for Various Majors

Target: Atmospheric Science — Math 255 or 415 or 521H, 512, 572, 606, 530, 531H, Stat 420, 421, or 610
Target: Biology or Pre-Med — Math 255 or 415 or 521H, 512, 530, 531H, 578, Stat 420, 421 or 610
Target: Economics — Math 255 or 415 or 521H, 547, 548, 549, 572, 618, 530, 531H Stat 420, 421 or 610
Target: Engineering — Math 255 or 415 or 521H, 512, 513 or 551, 540H, 541H, 572
Target: Finance or Accounting — Math 255 or 415 or 521H, 618, 530, 531H, Stat 420, 421 or 610
Target: Mathematical History — Math 504, 507, and/or 576H, 577H
Target: Philosophy — Math 647, 648, 649
Target: Physics — Math 514 or 522H, 540H, 541H, 547, 548, 549, 572, 601, 602, 603.02, 701

3. Restrictions

   --Courses used to fulfill a student’s major requirements may not be used towards the 20 hour minimum; such courses may be used to fulfill the requirements in part I, with zero hours counting toward the minor.

   --Math H487, 593, or 693 may not be used on a minor.

Arts and Sciences minor program guidelines

The following guidelines govern this minor.

Required for graduation No
Credit hours required A minimum of 20 at 200 level or above.
Transfer credit hours allowed A maximum of 10
Overlap with the GEC Permitted
Overlap with the major Not allowed and
   • The minor must be in a different subject than the major.
   • The same courses cannot count on the minor and on the major.
Overlap between minors Each minor completed must contain 20 unique hours.

Grades required
   • Minimum C- for a course to be listed on the minor.
   • Minimum 2.00 cumulative point-hour ratio required for the minor.
   • Course work graded Pass/Non-Pass cannot count on the minor.

Approval required The minor program description sheet indicates if the minor course work must be approved by:
   • The academic unit offering the minor

Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by:
   • The academic unit offering the minor

College of Arts and Sciences
Curriculum and Assessment Services
154 Denney Hall, 164 W. 17th Ave.
http://artsandsciences.osu.edu
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DH Update 11/2/10
Mathematical methods are used today in the social sciences as well as the physical and biological sciences. A minor program in mathematics is a useful supplement to a major program in many widely differing areas. The Mathematics Department has a list of suggested electives to complement various major programs. See non-honors Mathematics Minor Sheet for suggested course options for various majors.

If you complete the minor following these guidelines, you then need the approval of the coordinating advisor in the Department of Mathematics, 250 Mathematics Building.

1. Required courses
   A. Calculus: 254 (or the accelerated or honors courses)
   B. Foundations of Higher Mathematics: 345 or 190H. Math 366 can fulfill this requirement only if it is required for the student’s major.
   C. Linear Algebra: 568 or 571 or 520H

Honors students are expected to complete the Honors Mathematics Minor and are required to fulfill one of the following additional requirements.

Option #1:
   • Complete at least 20 hours of math at the 200 level or above to include the REQUIRED COURSES
   • At least TWO of the courses MUST BE Honors math courses
   • Must have at least a 3.0 CPHR in the courses that constitute the minor (see bullets in Option 1).

Option #2:
   • Complete at least 22 hours of math at the 200 level or above to include the REQUIRED COURSES
   • At least ONE of the courses MUST BE an Honors math course
   • Must have at least a 3.2 CPHR in the courses that constitute the minor (see bullets in Option 2).

Option #3:
   • Complete at least 25 hours of math at the 200 level or above to include the REQUIRED COURSES
   • Must have at least a 3.3 CPHR in the courses that constitute the minor (see bullets in Option 3).

2. Elective courses (as necessary to reach 20-25 credit hours)

To reach the stated minimum within a particular Option (at least 15 hours must be in math), students may select courses from the following:

- Differential Equations: 255 or 415 or 521H
- Any 500 level course, excluding Math 532 or 588
- Math 601, 602, 603.02, 606, 607, 618, 647, 648, 649, 665, 666, 701
- Statistics 420, 421, or 610

3. Restrictions

Courses used to fulfill a student’s major requirements may not be used towards the stated minimum in a particular Option; such courses may be used to fulfill the requirements in part I with zero credit hours counting toward the minor.

--Math H487, 593, or 693 may not be used on a minor.

Mathematics minor program guidelines

The following guidelines govern this minor.

Required for graduation  No

Credit hours required  A minimum of 20, 22, or 25 depending on Option

Transfer credit hours allowed  A maximum of 10

Overlap with the GEC  Permitted

Overlap with the major  Not allowed and

• The minor must be in a different subject than the major.
• The same courses cannot count on the minor and on the major.

Overlap between minors  Each minor completed must contain 20, 22, or 25 unique hours depending on the Option.

Grades required

• Minimum C- for a course to be listed on the minor.
• Stated minimum cumulative grade point average required for the minor as specified in Options.
• Course work graded Pass/Non-Pass cannot count on the minor.

Approval required  The minor program description sheet indicates if the minor course work must be approved by:

• The academic unit offering the minor

Filing the minor program form  The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the minor  Once the minor program is filed in the college office, any changes must be approved by:

• The academic unit offering the minor