MINOR IN MATHEMATICS

E-mail: mathadvising@illinois.edu

Web address for department: www.math.illinois.edu (http://www.math.illinois.edu)

Students must complete MATH 241, and at least one 400-level MATH course for admission into the minor. The Mathematics minor is designed to prepare students majoring in some other discipline with a background in mathematics that is both broad and deep. Students interested in pursuing the minor should have completed the calculus sequence through MATH 241, and one additional Math course at the 400-level demonstrating a strong record of success in college-level mathematics courses. Given the cumulative character of mathematics preparation, students earning grades of C or below in previous mathematics courses are advised not to pursue the minor.

MATH 241 Calculus III 4
Completed in one of two ways:

MATH 347 Fundamental Mathematics (and four courses chosen from at least two of the following lists of courses) 15

OR

five courses chosen from at least two of the following lists of courses.

Algebra
MATH 410 Lin Algebra & Financial Apps
MATH 415 Applied Linear Algebra
MATH 416 Abstract Linear Algebra
MATH 417 Intro to Abstract Algebra
MATH 418 Intro to Abstract Algebra II
MATH 427 Honors Abstract Algebra
MATH 453 Elementary Theory of Numbers

Discrete Mathematics
MATH 412 Graph Theory
MATH 413 Intro to Combinatorics
MATH 414 Mathematical Logic
MATH 482 Linear Programming

Analysis
MATH 284 Intro Differential Systems
MATH 285 Intro Differential Equations
MATH 286 Intro to Differential Eq Plus
MATH 424 Honors Real Analysis
MATH 425 Honors Advanced Analysis
MATH 441 Differential Equations
MATH 442 Intro Partial Diff Equations
MATH 444 Elementary Real Analysis
MATH 446 Applied Complex Variables
MATH 447 Real Variables
MATH 448 Complex Variables
CS 450 Numerical Analysis
MATH 484 Nonlinear Programming
MATH 487 Advanced Engineering Math
MATH 489 Dynamics & Differential Eqns

Geometry
MATH 402 Non Euclidean Geometry
MATH 403 Euclidean Geometry
MATH 423 Differential Geometry
MATH 428 Honors Topics in Mathematics
MATH 432 Set Theory and Topology
MATH 481 Vector and Tensor Analysis

Probability and Statistics
MATH 461 Probability Theory
STAT 400 Statistics and Probability I
STAT 410 Statistics and Probability II ¹
or STAT 420 Methods of Applied Statistics

Total Hours 19

¹ Students may use STAT 410 or STAT 420, but not both toward the minor.