

# MATHEMATICS MINOR

for the Minor in Mathematics

**department website:** <https://www.math.illinois.edu/>  
**department faculty:** Mathematics Faculty (<https://math.illinois.edu/directory/faculty/>)  
**overview of college admissions & requirements:** Liberal Arts & Sciences (<http://catalog.illinois.edu/schools/las/academic-units/>)  
**college website:** <https://las.illinois.edu/>  
**email:** [mathadvising@illinois.edu](mailto:mathadvising@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.

Code	Title	Hours
MATH 241	Calculus III	4
Completed in one of two ways:		15
MATH 347	Fundamental Mathematics (and four courses chosen from at least two of the following lists of courses)	
OR		
five courses chosen from at least two of the following lists of courses.		
<b>Algebra</b>		
ASRM 406	Linear Algebra with Financial Applications (formerly MATH 410)	
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	Number Theory	
<b>Discrete Mathematics</b>		
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH 414	Mathematical Logic	
MATH 482	Linear Programming	
<b>Analysis</b>		
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
<b>Geometry</b>	
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
<b>Probability and Statistics</b>	
MATH 461	Probability Theory
STAT 400	Statistics and Probability I
STAT 410	Statistics and Probability II <sup>1</sup>
or STAT 420 Methods of Applied Statistics	
Total Hours	19

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