## **MATHEMATICS MINOR, UG**

for the Undergraduate Minor in Mathematics

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
Five courses choser	n from the following lists:	15
Algebra		
ASRM 406	Linear Algebra with Financial Applications (formerly MATH 410)	
MATH 257	Linear Algebra with Computational Applications	
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	
Discrete Mathem	atics	
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 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	
Fundamentals		
MATH 347	Fundamental Mathematics	
Geometry		
MATH 402	Non Euclidean Geometry	

Total Hours		19
or STAT 420	Methods of Applied Statistics	
STAT 410	Statistics and Probability II (Students may use STAT 410 or STAT 420, but not both toward the minor)	
STAT 400	Statistics and Probability I	
MATH 461	Probability Theory	
Probability and Statistics		
MATH 481	Vector and Tensor Analysis	
MATH 432	Set Theory and Topology	
MATH 428	Honors Topics in Mathematics	
MATH 423	Differential Geometry	
MATH 403	Euclidean Geometry	

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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