

MATHEMATICS, BSLAS

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Mathematics

department page:

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/las>)

college website: <https://las.illinois.edu/>

email: mathadvising@illinois.edu

A Major Plan of Study form, declaring concentration and supporting coursework, must be completed and submitted to the LAS Student Academic Affairs Office except for students in the Teaching of Mathematics concentration. Please complete this form with an advisor in the Mathematics Undergraduate Office within 1-2 semesters of completing MATH 347 or MATH 348.

Departmental distinction: Distinction will be awarded on the basis of selection of 400-level courses in mathematics and the grade point average. Graduation with High Distinction or Highest Distinction in Mathematics requires participation in the Program for Distinction in Mathematics or Mathematics Education. Full details are available at the departmental website.

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Code	Title	Hours
Required Core Courses		
MATH 241	Calculus III ¹	4
MATH 347	Fundamental Mathematics	3-4
	or MATH 348 Fundamental Mathematics-ACP	
MATH 416	Abstract Linear Algebra ²	3
MATH 417	Intro to Abstract Algebra	3
	or MATH 427 Honors Abstract Algebra	
MATH 424	Honors Real Analysis ³	3
	or MATH 44 Elementary Real Analysis	
	or MATH 44 Real Variables	
MATH 461	Probability Theory ⁴	3-4
	or STAT 400 Statistics and Probability I	

CS 101	Intro Computing: Engrg & Sci	3-4
or CS 125	Intro to Computer Science	
Approved supporting coursework or any minor		12
Mathematics Courses		
Select a total of two courses from two of the following three lists:		6
Geometry		
MATH 402	Non Euclidean Geometry	
MATH 403	Euclidean Geometry	
MATH 423	Differential Geometry	
MATH 481	Vector and Tensor Analysis	
Differential Equations and Complex Analysis		
MATH 441	Differential Equations	
MATH 446	Applied Complex Variables	
MATH 448	Complex Variables	
Number Theory		
MATH 453	Elementary Theory of Numbers	
Two additional 400- or 500-level Math courses		6
Total Hours		46-49

- ¹ Students should have credit for MATH 220/MATH 221 and MATH 231 before enrolling in MATH 241.
- ² Beginning in Fall 2012, students may not receive credit for both MATH 416 and either ASRM 406 (formerly MATH 410) or MATH 415. However, if one course is taken prior to Fall 2012, credit may be earned for both MATH 416 and either of ASRM 406 (formerly MATH 410) or MATH 415.
- ³ If MATH 424 or MATH 447 is completed, a requirement for the Graduate Preparatory concentration has been satisfied.
- ⁴ If STAT 400 is completed, a requirement for the Operations Research concentration has been satisfied.