Mathematics (B.A.)

2024-2025 catalog

Student Name: _____ **ID Number:** _____

Major Requirements

All classes must be completed with a C- grade or better. Each course may count only once towards the major. No more than 4 credits of internship may count towards the major. Students completing a major in Mathematics are not eligible for a minor in Mathematics. At least two MAT courses numbered 300 or above must be taken at Augsburg.

Term Completed/Planned	Grade	Credit	Course #	Title
Complete **both** Calculus I and Calculus II				
		4	MAT145 and 145L: Calculus I (NSM)	
		4	MAT146 and 146L: Calculus II (NSM)	
Complete **both** advanced discrete mathematics and linear algebra				
		4	MAT302	Discrete Mathematical Structures
		4	MAT315	Linear Algebra
Complete **one (1)** geometric perspective course				
		4	MAT255	Multivariable Calculus
		4	MAT335	Exploring Geometry
Complete **one (1)** theoretical structures course				
		4	MAT350	Graph Theory
		4	MAT360	Dynamical Systems
		4	MAT370	Real Analysis
		4	MAT380	Abstract Algebra
Complete **one (1)** MAT elective numbered 300 or above				
		4		
Complete **one (1)** advanced mathematics elective numbered 350 or above, chosen from:				
		4	MAT350	Graph Theory
		4	MAT360	Dynamical Systems
		4	MAT370	Real Analysis
		4	MAT373	Probability Theory
		4	MAT380	Abstract Algebra
		4	MAT395	Topics
		4	MAT399	Internship (or 4 credits of MAT 396, 397, 398)
		4	MAT455	Numerical Mathematics and Computation
		4	MAT465	Modeling and Differential Equations in Biological and Natural Sciences
		4	MAT485	Visualizing Mathematics with 3D Printing
		4	MAT499	Independent Study
Complete **one (1)** advanced elective, chosen from:				
		4	DST elective numbered 300 or above	
		4	ECO416	Mathematical Economics
		4	An additional MAT elective numbered 300 or above	
		4	PHY327	Special Functions of Mathematical Physics
Pass MAT491 in your final semester				
		0	MAT491	Mathematics Colloquium
Complete **one (1)** Speaking skill course				
		2	MAT201	Communicating Mathematics
		4	COM111	Public Speaking (HUM)
		4	COM115	Scientific and Technical Public Speaking (HUM)
			Speaking skill course from another major:	

Abbreviation Key: ML = Modern Language; SC = Signature Curriculum; EM = Engaging Minneapolis; AE = Augsburg Experience; KC = Senior Keystone Course; NSM = Natural Science & Mathematics - no lab; NSM-L = Natural Science & Mathematics-with lab; SBS = Social & Behavioral Science; FA = Fine Arts; HUM = Humanities