

Mathematics: Secondary Education (B.S.)

2023-2024 catalog

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

Major Requirements

Additional secondary education requirements must be met. 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 one (1) data analysis course				
_____	_____	4	DST164	Introduction to Statistics (with R) (NSM) (recommended)
_____	_____	4	MAT163	Introductory Statistics (<i>offered infrequently</i>)
Complete one (1) computational reasoning course				
_____	_____	4	CSC165 and 165L	Introduction to Computer Programming (Python)
Complete one (1) geometric perspective course				
_____	_____	4	MAT335	Exploring Geometry
Complete both advanced discrete mathematics and linear algebra				
_____	_____	4	MAT302	Discrete Mathematical Structures
_____	_____	4	MAT315	Linear Algebra
Complete one (1) theoretical structures course				
_____	_____	4	MAT360	Dynamical Systems
_____	_____	4	MAT370	Real Analysis
Complete one (1) applied projects course				
_____	_____	4	DST475	Machine Learning
_____	_____	4	DST490	Data Visualization for Social Justice (KC)
_____	_____	4	MAT455	Numerical Mathematics and Computation
_____	_____	4	MAT465	Modeling and Differential Equations in Biological and Natural Sciences
Complete one (1) advanced mathematics elective numbered 350 or above				
_____	_____	4	MAT380	Abstract Algebra
Complete one (1) advanced elective, chosen from:				
_____	_____	4	MAT325	History of Mathematics
Complete one (1) additional supporting course				
_____	_____	3	ESE330	5-12 Methods: Mathematics
Pass MAT491 in your final semester				
_____	_____	0	MAT491	Mathematics Colloquium

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

Student's Signature Date

Advisor's Printed Name Signature Date

Advisor(s): By signing, you indicate you have verified the accuracy of the information above. Faculty advisors must initial next to each course substitution/waiver and sign this form.