



MATHEMATICS FOR SECONDARY EDUCATION

Courses required for the first year: MATH-160, MATH-250; second language requirement
Courses recommended for the first year: PSYC-100, MATH-220, MATH-230, POLS-101, Courses Designated with a PA, PP, PN, PL, or G.
Contact: Dr. Stacey Rodman, Mathematics Department Chair (staceyrodman@augustana.edu) or Mike Egan, Mathematics Education Advisor (mikeegan@augustana.edu)

*Students interested in this major are strongly encouraged to contact one of these advisors prior to registration for Spring Semester.

The Major in MATHEMATICS FOR SECONDARY EDUCATION

[Mathematics placement](#) is determined by the student's Math Index Score (MIS) and the math courses taken in high school and grades earned.

Mathematics placement can be improved using [ALEKS](#). ALEKS improvement must be **completed** before a student registers for a course.

It is recommended that the student complete MATH-160 Calculus in the fall semester of the 1st year and MATH-250 Discrete Mathematics in the spring semester of the 1st year to allow for flexibility in scheduling. MATH-160 is a prerequisite for MATH-250, so it is not possible to take both classes in the spring. At minimum, students must complete MATH-160 Calculus no later than the spring semester of the first year.

If a student has credit for MATH-160, then MATH-220 Integration: Techniques and Applications (2 credits) and MATH-230 Series: Techniques and Applications (2 credits) is recommended for Fall term first year.

32 credits including MATH-160, MATH-220, MATH-230, MATH-250, MATH-330, MATH-350, MATH-410, MATH-450, MATH-470. Student teaching is the senior inquiry experience.

Candidates can also earn licensure to teach Math in grades 5-8 by completing the major in Mathematics for Secondary Education.

Required Courses

Course Number	Course Name	Learning Perspective	Prerequisites	Usually offered: F, J, SP, SU*	Credits
MATH-160	Calculus	Q	MIS placement or MATH-140	F, SP	4
MATH-220	Integration: Techniques and Applications		MATH-160	F, SP	2

MATH-230	Infinite Series: Techniques and Applications		MATH-160	F, SP	2
MATH-250	Discrete Mathematics	Q	MATH-160	SP	4
MATH-330	Probability and Statistics		MATH-250	F	4
MATH-350	Linear Algebra		MATH-250	F	4
MATH-410	Real Analysis		MATH-350	SP	4
MATH-450	Algebraic Structures		MATH-350	SP	4
MATH-470	Foundations of Geometry	PH	MATH-350	F	4

EDUCATION PROFESSIONAL SEQUENCE (Required)

Course Number	Course Name	Learning Perspective	Prerequisites	Usually offered: F, J, SP, SU*	Credits
EDUC-301	Educational Psychology and Assessment		Sophomore standing	F, SP	4
EDUC-310	Computers in Education		EDUC-301; Retention in Teacher Education	SP	1
EDUC-340	Methods of Inclusion	D	EDUC-301; Retention in Teacher Education	F, SP	4
EDUC-370	General Methods		EDUC-301; Retention in Teacher Education	F	4
EDUC-384	Methods 5-12 Math		EDUC-370 or EDUC-412; Retention in Teacher Education	SP	4
EDUC-396	Clinical Experience 5-8		EDUC-301 and EDUC-340; Retention in Teacher Education	F, SP	1
EDUC-397	Clinical Experience 9-12		EDUC-301 and EDUC-340; Retention in Teacher Education	F, SP	1
EDUC-412	Methods of Literacy: 5-12		EDUC-301; Retention in Teacher Education	F	4

INTR-ED A93	Student Teaching	PH	EDUC-396 and EDUC-397; Retention in Teacher Education	F, SP	10
EDUC-422	Clinical Seminar	PH	Co-requisite: Student Teaching and EDUC-450	F, SP	1
EDUC-450	School and Society	PH	Co-requisite: Student Teaching and EDUC-422	F, SP	2

Major Overview

This major is required for teaching licensure in Illinois in grades 9-12. Students completing this major along with all other licensure requirements are eligible for high school teaching positions in mathematics in Illinois. Students who complete this major will have met most requirements for licensure to teach math in grades 5-8.

*Fall, J-term, Spring, Summer; see [Academic Calendar](#) for specific dates

Updated May 2025