



Graduate Certificate

Mathematics Specialist Certificate

12 credits, 2 terms



Mathematics (1-6, 5-8, or 8-12)

COURSE OFFERINGS PLAN / PREREQUISITES

P	rofessional Seminar, Independent Learning Project	every term
MAT609	Euclidean Geometry	Fall
MAT625	Number Theory (req. MAT611)	Fall
MAT611	Calculus I (preqs. MAT607, 609)	Fall, Spring
MAT615	History of Math (preqs. MAT607, 609, 611)	Fall, Spring
MAT631	Calculus II (req. MAT611)	Spring
MAT613	Discrete Math (preqs. MAT607, 609)	Spring
MAT621	Data Analysis	Spring
MAT635	Applied Math (preqs. MAT611, 631)	Spring
MAT623	Teaching Numerical & Geometric Structures.	Spring, Summer
MAT603	Arithmetic to Algebra	Summer
MAT605	Technol. in Math (preqs. 607, 609, 611, 613)	Summer
MAT607	College Algebra	Summer
MAT618	Math Essentials	Summer
MAT627	Abstract Algebra (req. MAT607)	Summer
MAT629	Non-Euclidean Geometry (req. MAT609)	Summer
MAT633	Probability & Statistics (req. MAT613)	Summer
MAT790-791	Practicum and Practicum Seminar	Fall, Spring

Prerequisites as listed or program chair's approval.

This program is best suited for current classroom teachers who wish to add mathematics as a new subject area to their professional skills; and to new teacher candidates entering the teaching profession who are non-mathematics majors, and who wish to earn a highly qualified title to their academic experience and broaden their teaching careers as a mathematics specialist or mathematics coach.

Choose math specialist option in elementary/middle school or high school math, and take courses as outlined below.

3-credit courses for your Math Specialist choice		Elem/Middle School	High School
MAT603	Arithmetic to Algebra: Developing Math Patterns & Ideas		•
MAT623	Teaching Numerical & Geometric Structures.		•
MAT615	History of Math.	•	•
MAT708	Diagnosis & Remediation of Learning Problems in Math	•	•
MAT611	Calculus I		•
MAT609	Euclidean Geometry		•

Admissions requirements: Bachelor's degree and other general requirements. Applicants for levels 5-8 and 8-12 must take a Cambridge College math placement test. Based on test results and program chair's recommendation, selected lower level math courses may be required before initial licensure courses.

Matriculation: All new students must register for the non-licensure option until they pass the MA Communication & Literacy Test (MTEL).

Non-licensure option: All program components are required except the Practicum, Practicum Seminar and teacher tests. Non-licensure students must complete all pre-practicum hours embedded in the courses.

Satisfactory academic progress — All students must maintain a minimum GPA of 3.0 or be placed on academic probation.

Program and course schedule subject to change.

