



Graduate Certificate

# Mathematics Specialist Certificate

• CIP code 131311 • 12 credits, 2 terms

MEd



## Mathematics (5-8 or 8-12)

**Math placement test:** 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.

**Non-licensure option:** All program components are required (including pre-practicum) *except* for SEI, Practicum Readiness course, Practicum, Practicum Seminar, and MTEL exams.

**\*Program credits:** 35 credits total if SEI is completed before enrollment, 38 credits if SEI is completed at Cambridge College.

**Program and course schedule subject to change.**

**Program Description** — 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	Common Core Math. . . . .		•
MAT605	Technol in Math Learning & Teaching . . . . .	•	•
MAT700	Inclusion in Math Class . . . . .	•	•
MAT611	Calculus I . . . . .		•
MAT609	Euclidean Geometry . . . . .		•

### COURSE OFFERINGS PLAN / PREREQUISITES

MAT700	Inclusion in Math Class . . . . .	every term
MAT623	Common Core Math . . . . .	Fall, Summer
MAT605	Technol. in Math (preqs. 607, 609, 611, 613) . . . . .	Fall
MAT609	Euclidean Geometry . . . . .	Fall
MAT625	Number Theory (req. MAT611) . . . . .	Fall
MAT611	Calculus I (preqs. MAT607, 609) . . . . .	Fall, Spring
MAT618	Math Essentials . . . . .	Fall, spring
MAT615	History of Math (preqs. MAT607, 609, 611) . . . . .	Spring
MAT708	Diagnosis & Remediation of Learning Problems in Mathematics . . . . .	Fall, Spring
MAT790-791	Practicum and Practicum Seminar . . . . .	Fall, Spring
MAT631	Calculus II (req. MAT611) . . . . .	Spring
MAT613	Discrete Math (preqs. MAT607, 609) . . . . .	Spring
MAT635	Applied Math (preqs. MAT611, 631) . . . . .	Spring
MAT603	Arithmetic to Algebra . . . . .	Summer
MAT607	College Algebra . . . . .	Summer
MAT627	Abstract Algebra (req. MAT607) . . . . .	Summer
MAT629	Non-Euclidean Geometry (req. MAT609) . . . . .	Summer
MAT633	Probability & Statistics (req. MAT613) . . . . .	Summer

Prerequisites as listed or program chair's approval.

Course delivery format of all courses is face-to-face (F2F).

If a student wishes to cover both levels, one four-course certificate for one level must be completed, and then the student may re-enroll to complete a second certificate for the other level: Complete the remaining two courses above, and two more courses below, for a total of four courses:

- MAT615 History of Math
- MAT613 Discrete Math

The two certificates may not be taken concurrently.

(All courses @ 3 credits except as noted.)