

**Mathematics (1-6, 5-8, or 8-12)****Mathematics Specialist
Certificate** • CIP code 131311

12 credits, 2 terms

Practicum Prerequisites

- Pass all MTEL teacher tests required for this license: Communication & Literacy, and Elementary Mathematics, Middle School Mathematics, or Mathematics (8-12).
- SEI605 Sheltered English Immersion or ESE-endorsed course or SEI MTEL.
- Pre-Practicum — successfully complete 90 hours in diverse settings (0 credit).
- Pass all required courses including Independent Learning Project.
- Submit Practicum Application and Practicum Placement Approval Form.

Practicum & Seminar (licensure students only) 5 credits**Practicum** in Mathematics — 300 hours (3 credits)

Guided and evaluated by a licensed/certified math teacher in the classroom and Cambridge College mathematics supervisor. Practicum locations are subject to ESE regulations and must be discussed with the program chair and approved by the pre-practicum/practicum coordinator.

MAT790A Practicum 1-6

MAT790B Practicum 5-8

MAT790C Practicum 8-12

MAT791 Practicum Seminar in Mathematics Teaching (2 credits)

Electronic exit portfolio (Taskstream) required for credit.

COURSE OFFERINGS PLAN / PREREQUISITES

Professional Seminar, Independent Learning Project	Fall, Spring
MAT618 Math Essentials	Fall, Spring
MAT623 Teaching Numerical & Geometric Structures.	Fall, Summer
MAT708 Diagnosis & Remediation of Learning Problems in Mathematics	Fall, Spring
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
MAT615 History of Math (preqs. MAT607, 609, 611)	Fall, Spring
MAT790-791 Practicum and Practicum Seminar	Fall, Spring
MAT631 Calculus II (req. MAT611)	Spring
MAT613 Discrete Math (preqs. MAT607, 609)	Spring
MAT621 Data Analysis	Summer
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.

(All courses @ 3 credits except as noted.)

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

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	Teaching Numerical & Geometric Structures.	•	
MAT615	History of Math.	•	•
MAT708	Diagnosis & Remediation of Learning Problems in Math	•	•
MAT611	Calculus I	•	•
MAT609	Euclidean Geometry	•	•

