



Master of Education Leading to Massachusetts INITIAL LICENSURE

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

For licensure: 38 credits, 4 terms • Without licensure: 33 credits, 3 terms  
 Program approved by the Mass. Dept. of Elementary & Secondary Education

## Requirements

### Professional Seminar & Project .....9 credits

EME691N-693N Professional Seminar in Mathematics -  
 Initial Level — 3 terms @ 2 credits. .... 6  
 Includes clinical journal, assessments, professional growth plan.  
 EME800 Independent Learning Project ..... 3

### Initial Licensure Courses ..... 24 credits

#### Take courses for your licensure level ..... 1-6...5-8.. 8-12

MAT603	Arithmetic to Algebra: Developing Math Patterns & Ideas	•••••
MAT605	Technol in Math Learning & Teaching	•••••
MAT607	College Algebra	•••••
MAT609	Euclidean Geometry	•••••
MAT611	Calculus I	•••••
MAT613	Discrete Math	•••••
MAT615	History of Math	•••••
MAT618	Math Essentials	•••••
MAT621	Data Analysis	•••••
MAT623	Numerical & Geometric Structures	•••••
MAT625	Number Theory	•••••
MAT627	Abstract Algebra	•••••
MAT629	Non-Euclidean Geometry	•••••
MAT631	Calculus II	•••••
MAT633	Probability & Statistics	•••••
MAT635	Applied Math	•••••

### Practicum .....5 credits

#### Prerequisites

- Pass all teacher tests required by your state for this license. Massachusetts: Communication & Literacy and Math 1-6, 5-8, or 8-12 (MTEL).
- Pre-Practicum — 90 hours ..... 0
- Pass all required courses.

### MAT790 Practicum in Mathematics— 150 hours ..... 3

Home state site under a mathematics teacher with the appropriate license, under Cambridge College supervision.

- MAT790A Practicum 1-6
- MAT790B Practicum 5-8
- MAT790C Practicum 8-12

### MAT791 Practicum Seminar in Mathematics Teaching ..... 2

- Exit Performance Portfolio required for credit.

### Non-licensure option

All program components are required except the Practicum, Practicum Seminar, and teacher tests. Program will total 33 credits. Non-licensure students must complete all course contact hours and pre-practicum hours embedded in the courses.

## Course Offerings Plan

### EVERY TERM

EME691N-693N Professional Seminar ..... start in first term  
 Take Communication & Literacy test (MTEL) ..... first term  
 EME800 Independent Learning Project ..... with Seminar III

### SUMMER With the National Institute for Teaching Excellence

MAT623 Numerical & Geometric Structures  
 MAT603 Arithmetic to Algebra  
 MAT605 Technol. in Math ..... preqs. MAT607, 609, 611 & 613  
 MAT607 College Algebra  
 MAT618 Math Essentials  
 MAT627 Abstract Algebra. .... preq. MAT607  
 MAT629 Non-Euclidean Geometry ..... preq. MAT609  
 MAT633 Probability & Statistics ..... preq. MAT613

### FALL

MAT609 Euclidean Geometry  
 MAT611 Calculus I ..... preqs. MAT607 & 609  
 MAT615 History of Math ..... preqs. MAT607, 609 & 611  
 MAT625 Number Theory. .... preq. MAT611  
 MAT790 Practicum *and* MAT791 Practicum Seminar

### SPRING

MAT611 Calculus I ..... preqs. MAT607 & 609  
 MAT613 Discrete Math ..... preqs. MAT607 & 609  
 MAT615 History of Math ..... preqs. MAT607, 609 & 611  
 MAT621 Data Analysis  
 MAT623 Numerical & Geometric Structures  
 MAT631 Calculus II. .... preq. MAT611  
 MAT635 Applied Math ..... preqs. MAT611 & 631  
 MAT790 Practicum *and* MAT791 Practicum Seminar

All courses meet for 35 contact hours/3 credits.

Prerequisites as listed or program coordinator's approval.

Course offerings plan for Cambridge, subject to change without notice. Regional centers set their own schedules.

**Admission requirements:** Bachelor's degree and other general requirements (see Admission).  
 Applicants for levels 5-8 and 8-12 must take a Cambridge College math placement test. Based on test results and program coordinator's recommendation, selected lower level math courses may be required before initial licensure courses.  
**Program subject to change:** As Massachusetts requirements for licensure change, the College reserves the right to alter the program to better prepare students to meet new requirements.

## Cambridge College School of Education

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