



Master of Education Leading to Massachusetts INITIAL LICENSURE

# Middle School Mathematics/Science (5-8)

43 credits, 6 terms • This program has been submitted to the Mass. Dept. of Elementary & Secondary Education for approval. Some changes may be required pending approval.

## Requirements

### Professional Seminar & Project.....7 credits

EME691N	Professional Seminar in Mathematics I, Initial Level	2
ESE691	Professional Seminar I in General Science Education	2
Includes clinical journal, assessments, professional growth plan.		
ESM800	Independent Learning Project	3

### Initial Licensure Courses

#### Science Content..... choose 4 credits

Online courses offered in collaboration with the Jason Academy.  
One course required from each group of courses below.

#### Physical Sciences

SCI603	Electricity & Magnetism	1
SCI609	Transfer of Energy	1
SCI615	Forces & Motion	1

#### Earth Sciences

SCI607	Structure of the Earth	1
SCI613	Earth in the Solar System	1
SCI617	Earth's History	1

#### Life Sciences

SCI601	Aquatic Ecology	1
SCI611	Ocean Science	1

#### Science Methodology .....9 credits

SCI682	Methods & Materials for Teaching Life Science	3
SCI684	Methods & Materials for Teaching Earth Science	3
SCI686	Methods & Materials for Teaching Physical Science	3

#### Mathematics ..... 18 credits

MAT623	Numerical & Geometric Structures	3
MAT607	College Algebra	3
MAT609	Euclidian Geometry	3
MAT611	Calculus I	3
MAT613	Discrete Mathematics	3
MAT615	History of Mathematics	3

#### Practicum .....5 credits

##### Prerequisites

- Pass all teacher tests required by your state for this license.  
Massachusetts: Communication & Literacy and Middle School Mathematics/Science (MTEL).
- Pre-Practicum — 75 hours .....0
- Pass all required courses.

**ESM790M Practicum in Mathematics (5-8)** — 150 hours ..... 1.5

**ESM790S Practicum in Science (5-8)** — 150 hours ..... 1.5

Home state site under mathematics and science teachers with the appropriate licenses, under Cambridge College supervision.

**ESM791 Practicum Seminar** ..... 2

- Exit Performance Portfolio required for credit.

## Course Offerings Plan

### EVERY TERM

EME691N Professional Seminar in Math I, Initial Level  
ESE691 Professional Seminar I in General Science Education  
Take Communication & Literacy test (MTEL) ..... first term  
**Online science courses** — two five-week periods each term; selected courses offered each period.

ESM800 Independent Learning Project .....with Seminar II

### SUMMER With the National Institute for Teaching Excellence

MAT623	Numerical & Geometric Structures
MAT607	College Algebra
SCI682	Meth. & Mat. for Life Science
SCI684	Meth. & Mat. for Earth Science
SCI686	Meth. & Mat. for Physical Science

### FALL

MAT609	Euclidean Geometry
MAT611	Calculus I ..... preqs. MAT609
MAT615	History of Math. .... preqs. MAT607, 609 & 611
SCI686	Meth. & Mat. for Physical Science .....in Burlington, MA
ESM790M, 790S Practicum <b>and</b> ESM791 Practicum Seminar	

### SPRING

MAT611	Calculus I ..... preq. MAT609
MAT613	Discrete Math ..... preq. MAT609
MAT615	History of Math. .... preqs. MAT609 & 611
SCI682	Meth. & Mat. for Life Science .....in Burlington, MA
SCI684	Meth. & Mat. for Earth Science .....in Burlington, MA
ESM790M, 790S Practicum <b>and</b> ESM791 Practicum Seminar	

**All courses meet** for 35 contact hours/3 credits.

**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 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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Cambridge  
College