

# Elementary Education

## Mathematics Added Endorsement Program K-8

Student Name:

UID:

This program of the University of Iowa College of Education is approved by the state of Iowa as preparation for endorsement number 142, Mathematics K-8, when completed with or following a Teacher Education Program.

### Requirements

- Completion of the methods of teaching mathematics courses listed below.
- Completion of a minimum additional twenty-four semester hours in mathematics to include courses in algebra, computer programming, geometry, measurement, number theory, and probability and statistics.
- [Admission to the Teacher Education Program](#).
- Completion of the TEP Professional Education Course Requirements and field experiences.

### Professional Education Requirements

Complete both of the following.

Course	Course Title	Credit	Session/Substitute
EDTL:3163	Methods: Elementary School Mathematics	3 s.h.	
EDTL:3534	Methods: Middle School Mathematics	3 s.h.	

### Mathematics Content Requirements

Complete a minimum 24 s.h. in the following areas.

#### Algebra

Complete one of the following or an approved substitute.

Course	Course Title	Credit	Session/Substitute
MATH:1020	Elementary Functions	4 s.h.	
MATH:1240	Finite Mathematics	4 s.h.	
MATH:1340	Mathematics for Business	4 s.h.	
MATH:1440	Mathematics for Biological Sciences	4 s.h.	
MATH:2550	Engineering Mathematics III: Matrix Algebra	2 s.h.	
MATH:2700	Introductions to Linear Algebra	4 s.h.	

#### Computer Programming

Complete one of the following or an approved substitute.

Course	Course Title	Credit	Session/Substitute
CS:1020	Principles of Computer	3 s.h.	
CS:1110	Introduction to Computer Science	3 s.h.	
CS:1210	Computer Science I: Fundamentals	3 s.h.	

## Geometry and Measurement

Complete one of the following or an approved substitute.

Course	Course Title	Credit	Session/Substitute
EDTL:3142	Geometry and Measurement	3 s.h.	
MATH:1140	Mathematical Basis of Elementary Geometry (formerly: Geometry for Elementary Teachers)	3 s.h.	
MATH:2150	Foundations of Geometry	3 s.h.	

## Number Theory

Complete one of the following or an approved substitute.

Course	Course Title	Credit	Session/Substitute
EDTL:3141	Number and Operations	3 s.h.	
MATH:1120	Logic of Arithmetic	3 s.h.	
MATH:3720	Introduction to Abstract Algebra	3 s.h.	

## Probability and Statistics

Complete one of the following or an approved substitute.

Course	Course Title	Credit	Session/Substitute
STAT:1010	Statistics and Society	3 s.h.	
STAT:1020	Elementary Statistics and Inference	3 s.h.	
STAT:1030	Statistics for Business	4 s.h.	
STAT:2020	Prob. & Stats. For Engineering & Physical Science	3 s.h.	
STAT:3120	Probability and Statistics	4 s.h.	
STAT:4143	Introduction to Statistical Methods	3 s.h.	

## Complete one of the following or an approved substitute.

Course	Course Title	Credit	Session/Substitute
MATH:1380	Calculus & Matrix Algebra for Business	4 s.h.	
MATH:1460	Calculus for the Biological Sciences	4 s.h.	
MATH:1550	Engineering Math I: Single Variable Calculus	4 s.h.	
MATH:1850	Calculus I	4 s.h.	

## Electives

Complete courses from CS, MATH, STAT, or approved substitutes, to reach 24 s.h.

Course	Course Title	Credit	Session/Substitute

### **Course Overlap with Mathematics 5-12 endorsement**

The following course options from above are also required coursework as part of the University of Iowa approved program for [endorsement 143 Mathematics grades 5-12](#).

- CS:1210 Computer Science I: Fundamentals
- MATH:1850 Calculus I
- MATH:2150 Foundations of Geometry
- MATH:2700 Introductions to Linear Algebra
- MATH:3720 Introduction to Abstract Algebra
- STAT:3120 Probability and Statistics

### **Additional Information**

This Program Guide is for planning and documentation of program completion. State requirements for licensure and endorsements are subject to change without notice; check with your advisor or the Office of Education Services for updated requirements. Course transfer and substitution may require syllabi or other documentation in addition to transcript. Revised 7/22/2022 DH/BJ version 4.3.

For additional information, admissions procedures, or advising referral, please contact Office of Student Services, College of Education, N201 Lindquist Center, Iowa City, IA 52242, 319-335-5359, FAX: 319-335-5364, [ask-education@uiowa.edu](mailto:ask-education@uiowa.edu), <https://education.uiowa.edu/>