

Middle School Mathematics Endorsement Competencies & Requirements

Purpose

The Middle School Mathematics Endorsement can be attached to an Educator License with an Elementary or Secondary area of concentration. Candidates who currently hold a Utah Educator License and meet all the requirements of the Middle School Mathematics endorsement are approved to teach:

Attached to an Elementary Teaching License:

- Math 6 (in a Middle School setting)
- Math 7
- Math 7 Extended
- Math 8
- Math 8 Extended

Attached to a Secondary Teaching License:

- Math 6 (in a Middle School setting)
- Math 7
- Math 7 Extended
- Math 8
- Math 8 Extended
- Secondary Mathematics I
- Secondary Mathematics Extended

Endorsement Requirements

The Middle School Mathematics Endorsement has the following 2 competency areas:

Area 1: Mathematics Content Knowledge

Requirements can be fulfilled for Area 1 by one of the following options:

- Earning a bachelor's degree with a minor in Mathematics or related field
OR
- Passing Praxis 5161 or 5165
OR
- Earning an Early Adolescent National Board Certification in Mathematics (EA NBCT)

OR

- Earning a Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST)

OR

- Completing specific university/college courses.

Area 2: Disposition, Skills, and Pedagogy

Requirements can be fulfilled for Area 2 by one of the following options:

- Earning a bachelor's degree in mathematics education

OR

- Earning an Early Adolescent National Board Certification in Mathematics award (EA NBCT)

OR

- Earning a Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST)

OR

- Completing specific Microcredential Stacks

OR

- Completing specific university/college courses

Beyond these options for Areas 1 and 2, competency can be demonstrated through other experiences such as teaching a course, holding certification in a related area, or having work experience directly related to the requirement. Please contact Mike Spencer at mike.spencer@schools.utah.gov before submitting an endorsement application if you can demonstrate competency in one or more of these alternative methods.

An applicant may qualify for a **Professional Endorsement** when they have demonstrated competency in all requirements for both Area 1 and Area 2.

An applicant may qualify for an **Associate Endorsement** when they have:

- Demonstrated competency in at least one of the two Areas

OR

- Completed at least 9 credit hours of coursework towards the endorsement (or other competency area equivalent)

If taking Utah-Based University Courses approved by USBE:

- For individual coursework, applicants must earn a C or higher in each course taken.
- Unless specifically indicated, all courses require a minimum of Calculus I as a prerequisite.
- AP Coursework is accepted.
- Mathematics (or related) degrees must include Algebra, Geometry, and Statistics coursework.
- If you would like to learn more about a specific mathematics program or approved courses, please visit the following websites for Utah Institutions of Higher Education:

[Brigham Young University](#)

[Snow College](#)

[Southern Utah University](#)

[University of Utah](#)

[Utah State University](#)

[UMEP](#) (Utah Mathematics Endorsement Project at USU)

[Utah Tech University](#)

[Utah Valley University](#)

[Weber State University](#)

[Westminster College](#)

Middle School Mathematics Endorsement Requirement Options

Requirement Area 1: Middle School Mathematics Content Knowledge

[Mathematics Content Knowledge Competencies](#)

College Minor

University degree minor in mathematics or related field.

Certificate or Experiences

[Early Adolescence National Board Certification in Mathematics](#) (EA NBCT Math)

[Presidential Award for Excellence in Mathematics and Science Teaching](#) (PAEMST)

Awardee or Finalist

Content Exam

[ETS Praxis](#)

- Praxis 5161
 - Utah Passing Score 160
- Praxis 5165
 - Utah Passing Score 152

University Courses

Approved Utah Institutions of Higher Education courses and their corresponding course numbers listed by required course:

[College Algebra](#)

[*Calculus prerequisite does not apply.](#)

- Brigham Young University - College Algebra - Math 110
- Snow College - College Algebra - Math 1050
- Southern Utah University - College Algebra - Math 1050
- University of Utah - College Algebra - Math 1050
- Utah State University - College Algebra - Math 1050 or Math 1051
 - UMEP - Contact the program director.
- Utah Tech University - College Algebra/Pre-Calculus - Math 1050
- Utah Valley University - College Algebra - Math 1050 or Math 1055
- Weber State University - College Algebra - Math 1050
- Westminster College - College Algebra - Math 141

[Trigonometry](#)

[*Calculus prerequisite does not apply.](#)

- Brigham Young University - Trigonometry - Math 111
- Snow College - Trigonometry - Math 1060
- Southern Utah University - Trigonometry - Math 1060
- University of Utah - Trigonometry - Math 1060
- Utah State University - Trigonometry - Math 1060

- UMEP - Contact the program director.
- Utah Tech University - Trigonometry - Math 1060
- Utah Valley University - Trigonometry - Math 1060
- Weber State University - Trigonometry - Math 1060
- Westminster College - College Algebra - Math 142

Calculus I

- Brigham Young University - Calculus I - Math 112
- Snow College - Calculus I - Math 1210
- Southern Utah University - Calculus I - Math 1210
- University of Utah - Calculus I - Math 1210
- Utah State University - Calculus I - Math 1210
 - UMEP - Calculus I - Math 4910-A
- Utah Tech University - Calculus I - Math 1210
- Utah Valley University - Calculus I - Math 1210
- Weber State University - Calculus I - Math 1210
- Westminster College - Calculus I - Math 201

Requirement Area 2: Middle School Mathematics Dispositions, Skills, and Pedagogy

[Pedagogy, Skills, and Dispositions Competencies](#)

College Degree

University degree in Mathematics Education.

Certificate or Experiences

[Early Adolescence National Board Certified Teacher in Mathematics](#) (EA NBCT Math)

[Presidential Award for Excellence in Mathematics and Science Teaching](#) (PAEMST)

Awardee or Finalist

Microcredentials

[Algebra for Secondary Mathematics Teaching](#)

Microcredential Courses:

- Building Procedural Fluency from Conceptual Understanding
- Eliciting and Using Evidence of Student Thinking

- Establishing Goals to Focus Learning
- Facilitating Meaningful Mathematical Discourse
- Implementing Tasks that Promote Reasoning and Problem Solving
- Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics
- Using and Connecting Mathematical Representations

[Geometry for Secondary Mathematics Teaching](#)

Microcredential Courses:

- Content Standards
- Connection to Other Standards
- History
- Misconceptions
- Pedagogy
- Technology

[Statistics and Probability for Secondary Mathematics Teaching](#)

Microcredential Courses:

- Assessment
- Conceptual Underpinnings
- Statistical Habits of Mind
- Misconceptions
- Statistical Literacy
- Technology

[Secondary Mathematics Methods](#)

Microcredential Courses:

- Mathematical Modeling
- Pedagogy
- Reflective Assessment
- Standards
- Standards Progression
- (Mathematical Educational) Technology

University Courses

Approved Utah Institutions of Higher Education courses and their corresponding course numbers listed by required course:

[Algebra for Secondary Mathematics Teaching](#)

- Brigham Young University - Contact the program director.

- Snow College - Contact the program director.
- Southern Utah University - Math for Secondary Education I - Math 3010
- University of Utah - Algebra for Secondary Mathematics Teaching - Math 3430
- Utah State University - Pedagogical Foundations of Algebra - Math 3010
 - UMEP - Algebra for Secondary Mathematics Teaching - Math 3010
- Utah Tech University - Algebra for Secondary Mathematics Teaching - Math 3010
- Utah Valley University - Algebra for Secondary Mathematics Teaching or Algebra for Middle School Mathematics Teaching - Math 3030 or Math 290R
- Weber State University - Algebra from a Teaching Perspective - Mthe 4110
- Westminster College - Contact the program director.

Geometry for Secondary Mathematics Teaching

- Brigham Young University - Survey of Geometry or Euclidean Geometry: Content, Learning, and Teaching - MthEd 362 or MthEd 562
- Snow College - Contact the program director.
- Southern Utah University - Math for Secondary Education II - Math 3020
- University of Utah - Geometry for Secondary Mathematics Teaching - Math 3420
- Utah State University - Geometry for Secondary Mathematics Teaching or Geometry for Middle School Mathematics Teaching - Math 4030 or Math 290R
 - UMEP - Geometry for Secondary Mathematics Teaching - Math 5010 or Math 3110
- Utah Tech University - Geometry and Statistics for Secondary Mathematics Teaching - Math 3020
- Utah Valley University - Geometry for Secondary Mathematics Teaching or Geometry for Middle School Mathematics Teaching - Math 4030 or Math 290R
- Weber State University - Geometry from a Teaching Perspective - Mthe 2120 or Mthe 3070
- Westminster College - Contact the program director.

Statistics for Secondary Mathematics Teaching

- Brigham Young University - Teaching Statistics and Probability - MthEd 301
- Snow College - Contact the program director.
- Southern Utah University - Contact the program director.
- University of Utah - Statistics for Secondary Mathematics Teaching - Math 3410
- Utah State University - Statistics and Probability for Secondary Mathematics Teaching - Stat 4010
 - UMEP - Statistics for Secondary Mathematics Teaching - STAT 4010

- Utah Tech University - Contact the program director.
- Utah Valley University - Statistics & Probability for Secondary Mathematics Teaching or Statistics & Probability for Middle School Mathematics Teaching - Math 4040 or Math 290R
- Weber State University - Probability and Statistics from a Teaching Perspective - Mthe 3060
- Westminster College - Contact the program director.

Middle School or Secondary Mathematics Teaching Methods

Applicants may demonstrate competency for this requirement with 3 or more years of experience teaching Secondary Mathematics.

- Complete the [Verification of Educator Experience Form](#) as evidence of demonstrating competency for this requirement.

University Courses

- Brigham Young University - Mathematics Teaching in the Public Schools AND Practicum in Mathematics Education - MathEd 377 AND MathEd 378
- Snow College - Contact the program director.
- Southern Utah University - Methods of Teaching Secondary Mathematics - Math 4900
- University of Utah - Methods of Teaching Secondary Mathematics - Math 4090
- Utah State University - Methods for Teaching Middle Level Mathematics or Methods for Teaching Mathematics - Teal 4630 OR Teal 6630 OR Math 4500 OR Math 6500
 - UMEP - Methods of Teaching Secondary Mathematics - Math 4500
- Utah Tech University - Methods Teach Secondary Mathematics - Math 4500
- Utah Valley University - Methods of Secondary School Mathematics Teaching OR Methods of Middle School Mathematics Teaching - Math 3010 or Math 290R
- Weber State University - Methods and Technology for Teaching Secondary Mathematics - Mthe 3010
- Westminster College - Methods of Teaching Secondary School Math - Educ 387

For questions, please contact Mike Spencer, the Secondary Mathematics Specialist at mike.spencer@schools.utah.gov.