

# EDUCATION, BS: MATHEMATICS EDUCATION, GRADES 4-12

The Mathematics Education Program is available for students who plan to teach mathematics in 6th through 12th grade. Mathematics Program students gain real world experience in the classroom through student teaching or on-the-job experiences at area schools. Students who satisfactorily complete the program requirements also meet the Wisconsin teacher certification requirements for teaching mathematics subject areas in those grades. Students at this level of certification may add the following licenses while pursuing or after obtaining their Mathematics licensure as their initial certification:

- Bilingual
- English as a Second Language

## Requirements

### General Education Requirements (GERs)

UW-Milwaukee has General Education Requirements (<https://catalog.uwm.edu/policies/undergraduate-policies/#generaleducationtext>) that must be met in order to earn a bachelor's degree. Some of the requirements of your program may fulfill the campus GERs. Please review the requirements and consult with your academic advisor.

### Program Admission Requirements (p. 2)

#### Program Core

Code	Title	Credits
COMMUN 103	Public Speaking (GER-HU, fulfilled prior to program admission)	3
CURRINS 328 or CURRINS 300	Introduction to Teaching Science and Mathematics in Middle and High School Introduction to Teaching: Colloquium and Fieldwork	3
ED PSY 330	Introduction to Learning and Development	3
Choose one: <sup>1</sup>		3
ANTHRO 213	American Indian Peoples of Wisconsin (GER-CD, SS)	
ENGLISH 276	Introduction to American Indian Literature: (GER-CD, HU)	
AIS 203	Western Great Lakes American Indian Community Life of the Past (GER-CD, SS)	
HIST 263	North American Indian History Since 1887 (GER-CD, SS)	
<b>Total Credits</b>		<b>12</b>

<sup>1</sup> Non-Western History or Contemporary Culture and Minority Group Relations (Act 31) statutory requirements can both be met by taking one class. Program may allow fulfillment of Act 31 with a 1-day workshop.

#### Content Area

Code	Title	Credits
MATH 231 or MATH 221	Calculus and Analytic Geometry I (QL-B, GER-NS) Honors Calculus I	4
MATH 232 or MATH 222	Calculus and Analytic Geometry II Honors Calculus II	4
MATH 240 or MATH 234	Matrices and Applications Linear Algebra and Differential Equations	3
MATH 341	Seminar: Introduction to the Language and Practice of Mathematics	3
MATH 431	Modern Algebra with Applications	3
MATH 451	Axiomatic Geometry	3
MATH 575	High School Mathematics from an Advanced Viewpoint	3
MTHSTAT 215	Elementary Statistical Analysis	3
Any 300-level or about MATH course or MATH 233-suggested courses:		3
MATH 305 or MATH 405	Introduction to Mathematical and Computational Modeling Mathematical Models and Applications	
MATH 313 or MATH 315	Linear Programming and Optimization Mathematical Programming and Optimization	
MATH 320	Introduction to Differential Equations	
MATH 325	Vector Analysis	
MATH 405	Mathematical Models and Applications	
MATH 413	Introduction to Numerical Analysis	
MATH 417	Computational Linear Algebra	
MATH 451	Axiomatic Geometry	
MATH 523	Advanced Calculus I	
MATH 535	Linear Algebra	

**Total Credits** **29**

### Professional Education Requirements

**MACSTEP Sequence** - Milwaukee Area Collaborative Secondary Science (and Math) Teacher Education Program. Formal admission to the School of Education required. A grade of C or better must be met for all professional requirements, including student teaching.

Code	Title	Credits
<b>Summer</b>		
CURRINS 332	Teaching of Mathematics 3	3
EXCEDUC 531	Inclusion for Secondary Educators: Humanities, the Arts, Foreign Language	3
<b>Fall</b>		
CURRINS 516	Field Work in Middle School	3
CURRINS 532	Teaching of Mathematics: Secondary	3
CURRINS 541	Principles and Methods of Teaching ESL	3
EXCEDUC 601	Behavioral Supports	3
<b>Spring</b>		
<b>Student Teaching (Spring)<sup>2</sup></b>		
Take 12 credits:		12
CURRINS 431	Student Teaching in Mathematics	

CURRINS 432	Student Teaching Mathematics Seminar	3
<b>Total Credits</b>		<b>33</b>

<sup>2</sup> Students must complete paperwork in order to be assigned a student teaching placement. To be approved for placement, additional criteria must be met. See Benchmarks (p. 2) for details.

### Additional Requirements for Graduation

- A minimum cumulative GPA of 2.5.
- A minimum GPA of 3.0 in all mathematics content area courses and a minimum 2.75 GPA in all professional education courses.
- Satisfactory completion of a minimum 120 credits.
- Completion of the last year of coursework (30 credits) in residence at UW-Milwaukee.

## Advance to Major

### Program Admission Requirements

Application to the Mathematics Education program requires satisfactory completion of the requirements listed below. For more information about the application process, visit our website (<http://uwm.edu/education/academics/mathematics/>).

- **Satisfaction of QL-A, QL-B, OWC-A, and OWC-B.**
- **Completion of** CURRINS 328, Introduction to Teaching Science and Mathematics in Middle and High School, with a grade of C or better.
- **Completion of** COMMUN 103 with a grade of C or better.
- **A 2.5 minimum cumulative GPA** in all UWM and transfer courses at the time of admission application.
- **A minimum of 58 credits** (UWM and transfer credits) at the time of admission application. It is not required to have all the Core Curriculum courses completed at the time of application.
- **Meeting with faculty advisor** to review admission application. Faculty signature required on application.
- **Pass a Criminal Background Check (CBC)** as required by the Wisconsin Department of Public Instruction for all applicants to a professional education preparation program.

## Benchmarks

### Student Teaching

Students must complete paperwork in order to be assigned a student teaching placement. To determine your deadline (February or April), visit the Office of Clinical Experiences website (<https://uwm.edu/education/academics/clinical-experiences/>).

To be approved for placement, you must meet the following criteria:

- Be admitted to the School of Education;
- Completion of all required coursework;
- Cumulative GPA of a minimum 2.75; 2.5;
- A minimum of 2.75 in all your professional education courses;
- Content Knowledge Requirement: A minimum of 3.0 in all your mathematics content used for certification or passing score on the Praxis II General Mathematics Content Test;
- C or better in all mathematics content being used for certification;
- C or better in all professional sequence courses;

- TB test results submitted to the Office of Clinical Experiences; and
- Passing Criminal Background Check submitted to the Office of Clinical Experiences.

## Undergraduate Advising

Our purpose is to provide collaborative, mentoring relationships which promote educational, career, and professional development. We value a student-centered, holistic, and ethical approach to advising based on strong partnerships with students, faculty and staff, and the larger campus community. We are committed to creating a respectful and supportive environment. We encourage students to be self-reliant through informed decisions and choices based upon dissemination of accurate information. We value our own continuous professional development to enhance the quality of the advising experience.

### How to Prepare for an Advising Meeting

- Review your Advisement Report in PAWS (<http://uwm.edu/registrar/academic-unit-services/paws-academic-advisement/>).
- Come prepared with questions or topics for discussion.
- Make a list of courses you think you should take.
- Investigate opportunities to prepare for the job you want.
- Keep a record of your academic progress.
- Understand you are ultimately responsible for creating your educational, life, and career plans.
- Maintain honest and open communication with your advisor.
- Take responsibility for choices you make as a student and member of the UW-Milwaukee community.

### Scheduling an Appointment

Office of Student Services  
Enderis Hall, Room 209  
(414) 229-4721  
[soeinfo@uwm.edu](mailto:soeinfo@uwm.edu)

### Graduate Advising

If you are a School of Education graduate student, you may schedule an appointment with your faculty advisor by contacting your faculty advisor directly. Faculty contact information can be found in the People Directory (<https://uwm.edu/education/people/>). Your faculty advisor will be listed in your PAWS account.

## Honors in the Department of Teaching and Learning

Departmental Honors are granted to students who have achieved a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester.

## College of Community Engagement and Professions Dean's Honor List

GPA of 3.750 or above, earned on a full-time student's GPA on 12 or more graded credits in a given semester.

## Honors College Degree and Honors College Degree with Distinction

Granted to graduating seniors who complete Honors College requirements, as listed in the Honors College (<https://catalog.uwm.edu/honors-college/>) section of this site.

## Commencement Honors

Students with a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester, will receive all-university commencement honors and be awarded the traditional gold cord at the December or May Honors Convocation. Please note that for honors calculation, the GPA is **not** rounded and is truncated at the third decimal (e.g., 3.499).

## Final Honors

Earned on a minimum of 60 graded UWM credits: Cum Laude - 3.500 or above; Magna Cum Laude - 3.650 or above; Summa Cum Laude - 3.800 or above.