

# Mathematics Education (Grades 4-12) Major - Bachelor of Science (BS)

## Major requirements

Completion of the Mathematics Education Program and associated benchmark assessments (<http://catalog.uwlax.edu/undergraduate/education/#SOE-program-requirements>) will lead to endorsement for the following Wisconsin teaching license:

- Middle and High School Mathematics, grades 4-12 (1400).

Students in all education programs must satisfy the School of Education (SOE) core requirements (<http://catalog.uwlax.edu/undergraduate/education/#SOE-core>).

Students in all teacher education programs must be admitted to the School of Education (<https://www.uwlax.edu/soe/undergrad/admission-to-soe/>) in order to complete their program requirements and be eligible for endorsement for the appropriate teaching license(s). Students majoring in mathematics education (grades 4-12) must meet specific program admission criteria (<http://catalog.uwlax.edu/undergraduate/education/#K-12>).

## Retention and advancement

Teacher candidates may be retained in their teacher education program provided they fulfill the conditions described in the SOE Retention Policy (<http://catalog.uwlax.edu/undergraduate/education/#retention>). Students must complete all course requirements and other benchmarks prior to student teaching as described in the Student Teaching and Internship Policy (<http://catalog.uwlax.edu/undergraduate/education/#student-teaching>). Additional SOE program requirements, including the culminating assessment of pedagogical knowledge, are described on the SOE catalog page (<http://catalog.uwlax.edu/undergraduate/education/>).

## Curriculum

The Mathematics Education Program is aligned with Wisconsin Teacher Standards (WTS) and the National Council of Teachers of Mathematics (NCTM) Standards.

## Required general education courses (13 credits)

Besides the courses specified below, mathematics education majors will need to satisfy additional general education requirements (<http://catalog.uwlax.edu/undergraduate/generaleducation/#generaleducationrequirements>). The General Education Program requires a total of 42 credits.

Code	Title	Credits
EDS 203	School, Society, and Teachers <sup>1,4</sup>	3
EDS 206	Multicultural Education <sup>2,4</sup>	3
MTH 207	Calculus I <sup>3</sup>	5
MTH 215	Mathematics for Middle School Teachers I <sup>3</sup>	2
<b>Total Credits</b>		<b>13</b>

- <sup>1</sup> Counts toward General Education Program requirement: Self and Society (GE Category 6).
- <sup>2</sup> Counts toward General Education Program requirement: Minority Cultures or Multiracial Women's Studies (GE Category 3).
- <sup>3</sup> Counts toward the General Education Program requirement: Mathematical/Logical Systems and Modern Languages (GE Category 2).

## Allied education requirements (21 credits)

Code	Title	Credits
<b>Courses not requiring admission to the School of Education</b>		
EDS 309	Teaching Global Perspectives Across the Curriculum	3
PSY 212	Lifespan Development <sup>4</sup>	3
SPE 200	Foundations of Special Education <sup>4</sup>	3
<b>Student teaching semester<sup>5</sup></b>		
EDS 492	Student Teaching Seminar	1
One of the following: <sup>4</sup>		11
EDS 496	Student Teaching: Middle/High School Education (4-12)	
EDS 495	Teaching Internship	
<b>Total Credits</b>		<b>21</b>

## Mathematics major content requirements (43 credits)

Code	Title	Credits
<b>Courses not requiring admission to the School of Education</b>		
MTH 208	Calculus II	4
MTH 216	Mathematics for Middle School Teachers II <sup>3</sup>	2
MTH 225	Foundations of Advanced Mathematics <sup>6</sup>	4
STAT 245	Probability and Statistics	4
MTH 309	Linear Algebra	4
MTH 315	Algebraic Structures for Middle and High School Teachers	3
MTH 316	Geometry for Middle and High School Teachers	3
MTH 479	Mathematics/Statistics Teaching Assistant	2
<b>Courses requiring admission to the School of Education</b>		
MTH 321	Teaching Mathematics with Technology	3
MTH 401	Survey of Advanced Mathematics	3
MTH 451	Curriculum and Content in Science and Mathematics <sup>4</sup>	2
MTH 452	The Learner and Learning in Mathematics <sup>4</sup>	2
MTH 454	Field Experience I in Mathematics Education <sup>4</sup>	2
MTH 455	Field Experience II in Mathematics Education <sup>4</sup>	2
MTH 460	Capstone on Teaching and Learning Mathematics for Secondary Teachers	3
<b>Total Credits</b>		<b>43</b>

- <sup>4</sup> Also satisfies an SOE core requirement.
- <sup>5</sup> Must complete all course requirements and other benchmarks prior to student teaching. For more information, please see the Student Teaching and Internship Policy (<http://catalog.uwlax.edu/undergraduate/education/#student-teaching>).
- <sup>6</sup> May substitute CS 225 for MTH 225.

Additional teacher education requirements are listed on the School of Education (<http://catalog.uwlax.edu/undergraduate/education/>) catalog page.

## Degree requirements

All teacher education students must complete the general education, School of Education, major/minor, and university degree requirements in order to qualify for a degree. The easiest way to track all of these requirements is to refer to the Advisement Report (AR) found in the Student Information System (WINGS) Student Center. All enrolled students have access to the AR.

- General education (<http://catalog.uwlax.edu/undergraduate/generaleducation/>)
- School of Education requirements (<http://catalog.uwlax.edu/undergraduate/education/>)
- Baccalaureate degree requirements (p. 2)

## Baccalaureate degree requirements

Candidates for the Bachelor of Arts or the Bachelor of Science degrees must accomplish the following:

1. Fulfill the general education requirements.
2. Complete at least one ethnic studies (diversity) course.
3. Complete the courses prescribed by the Undergraduate Curriculum Committee for the degree desired in the respective school or college.
4. Earn a minimum of 120 semester credits with at least a 2.00 cumulative GPA.<sup>1,2</sup>
5. At least 40 credits must be earned in 300/400 level courses. Transfer courses earned or transferred at the 300/400 level apply to this requirement.
6. Complete major and minor requirements with at least a 2.00 GPA<sup>1, 2</sup> in each major and minor (and concentration or emphasis, if selected).
7. A minimum of 30 semester credits in residence at UWL is required for graduation. (See undergraduate resident requirement (<http://catalog.uwlax.edu/undergraduate/academicpolicies/graduation/#undergraduate-residence-requirement>).
8. Submit an application for graduation via the "Apply for Graduation" link in the WINGS Student Center as soon as the student has registered for his or her final semester or summer term in residence. December and winter intersession graduates should apply by May 1. May and summer graduates should apply by December 1.

<sup>1</sup> Grade point average requirements for some programs will be considerably higher than 2.00. Re-entering students may be required to earn credits in excess of the 120 needed for graduation in any curriculum in order to replace credits earned in courses in which the content has changed substantially in recent years. Each case will be judged on its own merit.

<sup>2</sup> The grade point average recorded at the time the degree is awarded will not be affected by future enrollment.

**No degree will be awarded unless all requirements are fulfilled and recorded within 30 days after the official ending date of each term.**

## Sample degree plan

Below is a sample degree plan that can be used as a guide to identify courses required to fulfill the major and other requirements needed for degree completion. A student's actual degree plan may differ depending

on the course of study selected (second major, minor, etc.). Also, this sample plan assumes readiness for each course and/or major plan, and some courses may not be offered every term. Review the course descriptions or the class timetable (<http://www.uwlax.edu/records/registration/>) for course offering information.

The sample degree plans represented in this catalog are intended for first-year students entering UWL in the fall term. Students should use the Advisement Report (AR) in WINGS (<https://wings.uwlax.edu>) and work closely with their faculty advisor(s) and college dean's office to ensure declaration and completion of all requirements in a timely manner.

### General Education Program

The general education curriculum (Gen Ed) is the common educational experience for all undergraduates at UWL. Sample degree plans include Gen Ed placeholders to ensure completion of the general education requirements. Courses may be rearranged to fit the needs or recommendations of the student's program of study. Gen Ed courses may be taken during winter term (January between the semesters) and summer to reduce the course load during regular terms (fall and spring). Students should consult with their advisor and/or the college academic services director in their college/school for assistance with course and schedule planning. Refer to the general education requirements (<http://catalog.uwlax.edu/undergraduate/generaleducation/>) for more specific details.

At least 40 credits of the 120 credits required must be earned at the 300/400-level.

**Note:** New students and transfer students with less than 12 credits earned are required to take FYS 100 First-Year Seminar (3 cr.) during one of their first two semesters at UWL.

*This sample degree plan does not establish a contractual agreement. It identifies the minimum requirements a student must successfully complete, to qualify for a degree, in a format intended to assist the student in planning their academic career. Actual degree plans may differ.*

Year 1		
Fall	Credits Spring	Credits
MTH 207 (Gen Ed Math)	5 MTH 208	4
MTH 215 (Gen Ed Math)	2 ENG 110 or 112 (Gen Ed Literacy-Written)	3
CST 110 (Gen Ed Literacy-Oral)	3 Gen Ed World History	3
EDS 203 (Gen Ed Self & Society)	3 MTH 216	2
FYS 100 (Gen Ed First-Year Seminar)	3 Gen Ed Natural Lab Science	4
	<b>16</b>	<b>16</b>
Year 2		
Fall	Credits Spring	Credits
MTH 225	4 MTH 309	4
MTH 315	3 MTH 316	3
EDS 206 (Gen Ed Minority Cultures)	3 EDS 309	3
Gen Ed Global Studies	3 Gen Ed Humanistic Studies	3
Gen Ed Arts	2-3 PSY 212	3
	Apply for admission to SOE <sup>1</sup>	
	<b>16</b>	<b>16</b>
Year 3		
Fall	Credits Spring	Credits
STAT 245	4 Gen Ed Health & Well-Being	3
MTH 479	2 MTH 401	3

University Elective	3 MTH 321	3
SPE 200	3 MTH 451	2
University Elective	3 MTH 454	2
Apply for Field Experience I <sup>2</sup>	University Elective	2
	Apply for Field Experience II <sup>2</sup>	
	Apply for Student Teaching <sup>3</sup>	
<b>15</b>		<b>15</b>

**Year 4**

Fall	Credits Spring	Credits
MTH 460	3 All course requirements and other benchmarks must be completed prior to student teaching. <sup>4</sup>	
MTH 452	2 EDS 492	1
MTH 455	2 EDS 496	11
University Elective	3	
Gen Ed Arts	2-3	
University Elective	2	
<b>14</b>		<b>12</b>

**Total Credits: 120**

<sup>1</sup> See the SOE admissions website (<https://www.uwlax.edu/soe/undergrad/admission-to-soe/>) for complete admission and application details. Students will be required to complete a criminal background check (<http://catalog.uwlax.edu/undergraduate/education/#criminal-background-check>) at the time of application for admission.

<sup>2</sup> Students applying for field and student teaching placements will be asked to disclose any criminal charges (<http://catalog.uwlax.edu/undergraduate/education/#disclosure-past-offenses>).

<sup>3</sup> Students must apply for student teaching (<https://www.uwlax.edu/soe/field-and-student-teaching-experience/for-teacher-candidates/>) through the Office of Field Experience one year prior to the student teaching semester.

<sup>4</sup> For more information, please see the Student Teaching and Internship Policy (<http://catalog.uwlax.edu/undergraduate/education/#student-teaching>).