

ELEMENTARY CERTIFICATION TEACHING MAJOR/MINOR - MATHEMATICS STUDIES

Are you ready to help students become problem solvers?

Do you want to help children learn mathematics with understanding? A bachelor's degree in Mathematics Studies will prepare you to support students who reason about mathematical ideas rather than rely on rules and procedures.

Our program will ready you to become a classroom teacher for all subjects in grades K-5 with the option to become certified to teach mathematics in grades 6-8 upon meeting the endorsement requirements. Either way, you'll be ready to work with diverse learners with a program that combines academic studies, professional training and multiple field experiences in local schools.

With successful completion of the program, you will earn both a bachelor's degree and faculty recommendation for the Michigan Elementary Standard Certificate.

Major Requirements

A minimum of 30 semester hours from the following:

Code	Title	Credit Hours
Required Courses		
MATH 104 or MATH 105	College Algebra Pre-Calculus	4
MATH 113 or MATH 115	Calc I for Biology & Life Sci Calculus I	4
MATH 385 or MATH 383	Math for Elemen Teachers I Mathematics for Teachers III: Whole Numbers and Operations	3
MATH 386 or MATH 384	Math for Elem Teachers II Mathematics for Teachers IV: Fractions and Operations	3
MATH 387	Math for Elem Teachers III	3
MATH 442	Geometry for Teachers	3
MATH 443	Algebra for Teachers	3
MATH 444	Data Anlsys, Prob&Stat for Tchrs	3
Recommended Electives		
Select 4-6 credit hours:		4-6
MATH 131	Conceptual Mathematics	
MATH 227	Introduction to Linear Algebra	
MATH 300	Math Lang Proof & Struct	
MATH 391	Topics in Mathematics Edu	
MATH 445	Number & Prop'l Rsnng for Tchrs	
MATH 446	Discrete Math/Modeling for Tch	
MATH 447	Micro in Math for Teachers	
STAT 263	Introduction to Statistics	
or other courses approved by Academic Advisor		
Total Credit Hours		30-32

Program Notes:

1. Minimum GPA's are required for program completion: 2.75 cumulative, 2.75 in major, 2.75 in optional minor(s), and 2.75 in Professional Studies.
2. Advising Policy: The student is responsible for complying with requirements described in the Undergraduate Catalog as well as on the Four Phase Checklist. Students are expected to meet with their College of Education, Health, and Human Services advisor at least once per year and in the term prior to graduation.
3. Courses taken on a PASS/FAIL basis will NOT be accepted toward program completion.
4. The minimum number of semester hours required to graduate is 120.
5. CEHHS recommends successful program completers for State of Michigan Certification, however, it is ultimately up to the State of Michigan to issue certificates. Certain offenses on a criminal record can keep individuals from obtaining teacher certification. Please refer to The Revised School Code, Act 451 of 1976, section 380.1539b.
6. Students must meet Dearborn Discovery Core (<https://umdearborn.edu/academic-program-and-course-development/dearborn-discovery-core-general-education/>) requirements.

Professional Requirements

The professional sequence of education courses consists of a minimum of 43 semester hours of credit. This concentration of study represents the core of your professional preparation. At least one practicum is required prior to student teaching. The semester hours are distributed as follows:

Code	Title	Credit Hours
Foundations		
EDA 340 or EDA 306	Foundations of American Ed Foundations of Professionalism in Education	3
Multicultural Education		
EXPS 410	Multicult in School and Soc	3
Not Required for Early Childhood Majors		
Psychology		
EDC 300	Educational Psychology	3
EDC 412 or EDC 417	Social Devl/Pos Guidnce Techn (required for Early Childhood majors) Mgmt of Classroom Behavior	3
EDC 460	Educating the Exceptional Chld	3
Not Required for Early Childhood Majors		
Methodologies (See Note #1 below)		
EDD 452	Methods of Teaching Math K-8	3
EDD 468	Teach Read/Lang Arts- Elem Grd ¹	3
EDD 467	Practicum in Reading Instruct ¹	1
EDD 471	Reading Instr: Models and Meth ¹	3
EDD 485	Teach Science in the Elem Grd	3
EDD 495	Elementary Social Studies Methods	3
Professional Semester (See Notes #3 & #5 below)		
EDD 435	Dir Teaching: Elementary Sch	10
EDD 437	Seminar: Teaching Elementary Grades	2
Total Credit Hours		43

¹ EDD 467 and EDD 471 are to be taken concurrently. Both require EDD 468 as a prerequisite.

Notes:

1. Enrollment in all the required EDD courses is open only to those who are officially admitted to and in good academic standing in the Teacher Certification Program at UM-Dearborn. See Four-Phase Checklist for more information.
2. Eligibility for directed teaching requires meeting all the requirements listed on the Four-Phase Checklist.
3. Recommendations for teacher certification and additional endorsements require passing scores on the MTTC Elementary Education (#103) exam and other MTTC subject area tests.
4. Minimum number of hours to graduate is 128 semester hours.

4. Courses taken on a PASS/FAIL basis will NOT be accepted toward program completion.
5. In order to be recommended for endorsements, students must pass the appropriate MTTC exam in addition to completing the coursework.
6. MTTC test scores must be reported by electronic delivery or direct mail from Pearson Evaluation Systems to the University of Michigan-Dearborn College of Education, Health, and Human Services. No hand carried scores will be accepted.

Learning Goals

1. Candidates for certification will be capable in their content specialty areas (teaching major(s) and/or minor(s)).
2. Candidates for certification will be capable users of pedagogical knowledge.
3. Candidates for certification will be reflective about their practice.

Minor Requirements

A minimum of 20 semester hours from the following:

Code	Title	Credit Hours
Required Courses		
MATH 104 or MATH 105	College Algebra Pre-Calculus	4
MATH 385 or MATH 383	Math for Elemen Teachers I Mathematics for Teachers III: Whole Numbers and Operations	3
MATH 386 or MATH 384	Math for Elem Teachers II Mathematics for Teachers IV: Fractions and Operations	3
MATH 387	Math for Elem Teachers III	3
MATH 442	Geometry for Teachers	3
MATH 443	Algebra for Teachers	3
Recommended Electives		
Select 2-3 credit hours:		2-3
MATH 131	Conceptual Mathematics	
MATH 227	Introduction to Linear Algebra	
MATH 300	Math Lang Proof & Struct	
MATH 391	Topics in Mathematics Edu	
MATH 444	Data Anlsys, Prob&Stat for Tchrs	
MATH 445	Number & Prop'l Rsnng for Tchrs	
MATH 446	Discrete Math/Modeling for Tch	
STAT 263	Introduction to Statistics	
or other courses approved by Academic Advisor		
Total Credit Hours		21-22

Program Notes:

1. A minimum GPA of 2.75 is required for a minor.
2. For the minor 6 or more semester hours must be at the 300 level or above.
3. Advising Policy: The student is responsible for complying with requirements described in the Undergraduate Catalog as well as on the Four Phase Checklist. Students are expected to meet with their College of Education, Health, and Human Services advisor at least once a year and in the term prior to graduation.