

MATHEMATICS MAJOR

Secondary Education Emphasis (BSE) (48 units)

Effective beginning Fall 2023
This major does not require a minor

For students interested in a career as a mathematics educator at the middle or high school level.

COURSES		OFFERED*	PRE-REQUISITE	
<i>Major Requirements:</i>				
MATH 200	1 unit	Mathematics: Form and Function	S	CoReq: MATH 253
MATH 248*	1 unit	Tutoring Seminar	F	MATH 253 with C or better
MATH 253	5 units	Calculus and Analytic Geometry I (GQ)	E	MATH 152 or (MATH 142 and 151) each with C or better
MATH 254	4 units	Calculus and Analytic Geometry II	E	MATH 253 or (MATH 250 and 151) or (MATH 250 and 152) each with C or better
MATH 255	4 units	Calculus and Analytic Geometry III	E	MATH 254 with C or better
MATH 270*	3 units	Problem Solving for Mathematics Teachers	F	MATH 149 or MATH 253 with C or better
MATH 280	3 units	Discrete Mathematics	E	(MATH 250 with B or better) or (MATH 253 with C or better)
MATH 301	3 units	Introduction to Analysis	E	MATH 254 with C or better and MATH 280
MATH 333*	3 units	Euclidean Geometry	F	MATH 270 or MATH 280
MATH 355	3 units	Matrices and Linear Algebra	E	MATH 253 or (MATH 250 and (MATH 151 or MATH 152)) with C or better
MATH 359	3 units	Probability and Statistics for Teachers	S	MATH 253 or (MATH 250 and 151) or (MATH 250 and 152) each with C or better
MATH 421	3 units	Mathematics for High School Teachers I	S	MATH 280, MATH 301, and 3 units of upper level math
MATH 422	3 units	Mathematics for High School Teachers II	F	MATH 353 and MATH 421 (to be updated with MATH 333, MATH 433)
MATH 433*	3 units	Non-Euclidean Geometry	S	MATH 333
MATH 452	3 units	Introduction to Abstract Algebra	F	MATH 280 or consent of instructor; UnReq: MATH 415
STAT 230*	3 units	Intro to Statistical Reasoning & Analysis	E	MATH 139 or MATH 142 with C or better

* Course is new requirement as of Fall 2023.

LICENSURE (44 units)

In addition to major requirements, students in secondary programs complete coursework and field experiences that provide opportunities to synthesize and apply knowledge of subject matter in upper-elementary, middle, and high schools. The following courses are required:

1. SPECED 205 3 units Introduction to Special Education
 2. CIGENRL 350 3 units Introduction to ESL and Bilingual-Bicultural Education
 3. Foundations Block 9 units
- PREREQ: 2.75 comb GPA or passing score on all parts of PRAXIS CORE (or PPST/PRAXIS I), ACT, SAT, GRE
COREQ: concurrent enrollment in EDFNDPRC 210 & EDFOUND243 or consent
- EDFOUND 212 3 units Educational Psychology
EDFOUND 243 3 units Foundations of Education in a Pluralistic Society
EDFNDPRC 210 3 units Introduction to Education and Teaching

MILESTONES
Math Exit Interview

The following courses require admission to the College of Education & Professional Studies:

4. CIGENRL 400 3 units Pedagogy and Practice of Mathematics Modeling for STEAM Education
 5. EDFOUND 425 3 units Measurement and Evaluation in the Secondary School
 6. ELEMMD 425 3 units Teaching Mathematics in the Elementary/Middle Grades
 7. SECNDED 428 3 units The Teaching of Mathematics in the Secondary School
 8. SECNDED 466 3 units Literacy in the Disciplines
 9. CIGENRL 470 2 units Student Teaching Seminar (taken with Student Teaching)
10. Student Teaching 12 units Select one of the following options:
 CIFLD 402 2 units Directed Teaching-Alternative Placement Middle School
 CIFLD 414 10 units Directed Teaching-Secondary
 ~~—OR—~~
 CIFLD 404 2 units Directed Teaching-Alternate Placement Secondary
 CIFLD 412 10 units Directed Teaching-Middle School

For additional information, visit the College of Education & Professional Studies website: <http://www.uww.edu/coeps/advising-admissions/admissions>.