

MATHEMATICS FOR ELEMENTARY EDUCATION

The Mathematics for Elementary Education Major

This major serves as a second major for Elementary Education majors. It prepares pre-service teachers to be mathematical leaders in elementary schools.

Admission Requirements for the Mathematics Major

Rigorous high school coursework with above-average grades in mathematics and/or computer science courses.

Requirements for the Mathematics for Elementary Education Major

Code	Title	Credits
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-190	Pre-calculus	4
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-360	Number Theory	3
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School	9
Total Credits		46

Note: The pre-requisite for MA-190 is MA-180. However, credit will not be given for both MA-131 and MA-180. If a student wishes to register for MA-190 upon completion of MA-131, he/she must receive a C- or better in MA-131 and complete a packet of supplementary materials that will be reviewed by either the MA-190 instructor or department chair.

MA-130, MA-131, and MA-132 must be completed with grades of at least B-, a student may retake any one of these courses at most once to increase a grade below a B-, and may retake at most two of these courses.

MA-190, MA-200, and MA-240 must be completed with grades of at least C-, a student may retake any one of these courses at most once to increase a grade below a C-, and may retake at least two of these courses.

Students taking ED-425 and ED-435 must complete all prerequisite coursework for the Elementary Education Major Teacher Licensure Program and pass 053 Mathematics (Elementary) MTEL.

Sample Timeline for the Mathematics for Elementary Education Major

Year One

Semester One		Credits
MA-130	Number and Operations for Teachers (QR)	3
ED-150 or ED-155	Introduction to the Teaching Profession (ICW) or Teaching and Learning in Elementary School	3
PS-101	General Psychology (HBS)	3
EN-101	College Writing I (WR)	3
FYS	First-Year Seminar (FYS)	3
	Credits	15

Semester Two

MA-131	Patterns, Functions and Algebra for Teachers (QR)	3
MA-190	Pre-calculus	4
PS-210	Developmental Psychology	3
EN-102	College Writing II (WR)	3
HI-111	US History to 1877 (CON)	3
	Credits	16

Year Two

Semester Three

MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-200	Calculus I	4
ED-250	Educational Psychology	3
HI-112	US History 1865 to the Present (USW)	3
MU-237	Music in the Elementary School (CA)	3
	Credits	16

Semester Four

MA-201	Calculus II	4
ED-261	Introduction to the Foundations of Reading	3
ED-271	International and Comparative Education (GP)	3
ED-275	Curr/Instr in Elementary Ed	3
EV-120	Integrated Environmental Science for Educators (NSP LAB)	4
	Credits	17

Year Three

Semester Five

MA-240	Theory of Proof	4
MA-302	Probability and Statistics	3
ED-304	Best Practices for English Language Learners (TLC)	3
ED-306	Elementary Reading, Language Arts and Literature	6
	Credits	16

Semester Six

MA-303	Mathematical Modeling	3
ED-320	Elementary Science	3
GS-101	Physical Geography (NSP)	3
ED-325	Elementary Mathematics	3

LASC	LASC Elective (DIV)	3
Credits		15
Year Four		
Semester Seven		
MA-360	Number Theory	3
ED-330	Elementary Social Studies and Multiculturalism	3
ED-375	Prepracticum: Instruction, Classroom Management, and Family and Community Engagement in the Elementary School	3
SELECT	General Elective	3
SELECT	General Elective	3
Credits		15
Semester Eight		
ED-425	Sem: Applying Ed Principles	3
ED-435	Practicum in Teaching: Elementary School (Capstone)	9
Credits		12
Total Credits		122

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus section of this catalog.