

# ACADEMIC ROADMAP

Mathematics Education 7-12, B.S.

Fall 2024

## Freshman Year (32 credits)

### FIRST SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing I (3)	CWP 101	
Calculus I (4)	MAT 161	MAT 124 of HS equivalent
GE 23 Diversity: Equity, Inclusion, and Social Justice (3)	EXE 100	
GE 23 courses (6 credits)		

### SECOND SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing II (3)	CWP 102	CWP 101
Calculus II (4)	MAT 162	MAT 161
Introduction to Linear Algebra (3)	MAT 202	MAT 161
GE 23 courses (3 credits)		
GE 23 Natural Sciences & Scientific Reasoning (3)		

#### Notes and recommendations:

Both semesters need 16 credit hours each.

Attend at least one faculty office hour; visit Academic Commons (Math & Writing Centers, free tutoring); view your degree audit sheet in Degree Works.

## Sophomore Year (60 credits)

### THIRD SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Calculus III (4)	MAT 263	MAT 162
GE 23 courses (9 credits)		

### FOURTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Probability and Statistics (3)	MAT 325	MAT 162 and MAT 270
Learning and Teaching Problem Solving (3)	MED 383	MAT 162, MAT 270 and CWP 102
Foundations of Teaching Mathematics 7-12 and Field Experience (3)	MED 200	MAT 161
Techniques of Proof (3)	MAT 300	MAT 270
GE 23 Any category (3 credits)		

#### Notes and recommendations:

MAT 325, MED 383, and MED 200 are spring only.

Form a study group; consider enrolling in a minor or certificate program.

**Junior Year (90 credits)**

FIFTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Modern Geometry (3)	MAT 322	MAT 270
Number Theory (3)	MAT 351	
Educational Psychology (3)	SPF 303	
Teaching Literacy (3)	EDU 416	
Open Elective (3)		

SIXTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Fundamentals of Abstract Algebra (3)	MAT 301	MAT 300
Uses of Technology in Teaching Mathematics (3)	MED 307	Upper division status
Upper division Mathematics Elective (3)		Check for pre-requisites
Adolescent Literacy (3)	EDU 417	EDU 416
GE 23 course (3 credits)		

**Notes and recommendations:**

MAT 322 offered Fall only; MAT 301 and MED 307 offered Spring only.

Visit the Career and Professional Education Center; talk to your faculty advisor about graduate school options.

**Senior Year (120 credits)**

SEVENTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Field Experience: Methods of Teaching Secondary Mathematics (3)	MED 300	MAT GPA of 2.75+ MED 307
Methods of Teaching Secondary Mathematics (3)	MED 308	MAT GPA of 2.75+ MED 307
Introduction to Real Analysis (3)	MAT 417	MAT 300
Upper division Mathematics Elective (3)		Check pre-requisites
Historical & Philosophical Forces in Secondary Education (3)	SPF 403	SPF 303

EIGHTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Student Teaching in Junior HS or MS (6)	MED 406	MED 308
Student Teaching in Senior HS (6)	MED 407	MED 308

**Notes and recommendations:**

MED 300 and MED 308 are taken concurrently and only offered in fall semesters. Email instructor to enroll in courses. MAT 417 offered in fall semesters only.

Apply for graduation; apply to graduate school, if applicable; visit the Career and Professional Education Center to have your resume reviewed