



2024-2025

## **MATHEMATICS GRADES 8-12 MAJOR, B.S.**

Mathematics & Computer Science Department; Shaw School of Sciences

The program content of the MATHEMATICS GRADES 8-12 MAJOR follows the recommendations of the Association of Mathematics Teacher Educators, the National Council of Teachers of Mathematics, and the Mathematical Association of America, and meets teacher certification requirements in most states. Teachers of mathematics in both public and private middle and high schools are very much in high demand.

*To graduate must complete all major requirements, foundational requirements, and additional electives needed for 124 hour minimum degree requirement.*

[Education majors must choose COM130 in the Foundations Communication pool due to state certification requirements.]

### **MAJOR REQUIREMENTS (75)**

__ 2	ED	200	Intro to Education
__ 2	ED	220	Tech for Education
__ 2	ED	230	Human Growth/Development
__ 1	ED	301	Guided Inquiry Clinical
__ 3	ED	320	Exceptional Learner
__ 3	ED	385	Read/Writ Across Curriculum
__ 1	ED	401	Open Inquiry Clinical
__ 3	ED	405	Learning/Perform Assess
__ 3	ED	410	Classroom Management
__ 3	ED	420	Content Methods
__ 1	ED	424	Content Methods Lab
__ 3	ED	428	Interventions/Differentiation
__ 12	ED	499	Student Teaching
__ 3	MAT	130	Modeling Your World
__ 4	MAT	181	Calculus I            __ Lab
__ 4	MAT	182	Calculus II            __ Lab
__ 3	MAT	241	Logic & Sets
__ 3	MAT	271	Linear Algebra
__ 4	MAT	361	Probability & Stats
__ 4	MAT	362	Modern Geometry
__ 4	MAT	371	Algebraic Structures
__ 3	MAT	462	Topics in Sec Math

Choose one:

__ 4	MAT	183	Calculus III            __ Lab
	MAT	463	Topics in Elem & MS Math

### **PLUS FOUNDATIONS REQUIREMENTS (44)**

(3 hours Math satisfied by required major courses; Foreign Language not required for B.S. MATE majors. Degree becomes B.A. with completion of Foreign Language.)

### **Plus electives needed for the 124 hour degree requirement (5)**