



2024-2025

## **MATHEMATICS MAJOR, B.A.**

Mathematics & Computer Science Department; Shaw School of Sciences

The Mathematics major prepares students for graduate study in mathematics, mathematical physics, or a related area that relies heavily upon theoretical mathematics. Eventual employment opportunities for persons with this background include teaching and research at the college or university level or being a member of a research team in government or industry. The Department has a rich history of graduates who have been successful in graduate school and subsequent academic and research careers.

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

### **MAJOR REQUIREMENTS (55)**

__ 4	CSC	121	Computer Programming I	__ Lab
__ 4	CSC	122	Computer Programming II	__ Lab
__ 4	MAT	181	Calculus I	__ Lab
__ 4	MAT	182	Calculus II	__ Lab
__ 4	MAT	183	Calculus III	__ Lab
__ 3	MAT	241	Logic & Sets	
__ 3	MAT	252	Differential Equations	
__ 3	MAT	271	Linear Algebra	
__ 3	MAT	281	Probability	
__ 3	MAT	350	Mathematical Modeling	
__ 3	MAT	442	Numerical Analysis	
__ 3	MAT	471	Abstract Algebra	
__ 1	MAT	475	Senior Seminar	
__ 3	MAT	482	Complex Analysis	
__ 5	PHY	211	Gen Physics I	__ Lab __ Recitation
__ 5	PHY	212	Gen Physics II	__ Lab __ Recitation

### **PLUS FOUNDATIONS REQUIREMENTS (49)**

(3 hours Math and 4 hours Science satisfied by required major courses.)

### **Plus electives needed for the 124 hour degree requirement (20)**