MATHEMATICS EDUCATION (B.S.ED.)

The Bachelor of Science in Mathematics Education program is a Council for the Accreditation for Educators Preparation (CAEP) nationally recognized program that grants initial certification as a secondary mathematics teacher. Students who earn the BSED degree are also prepared to enter graduate programs in mathematics-based programs having completed upper-level mathematics courses equivalent to a Bachelor of Science degree in mathematics. To receive the BSED degree, a student must be admitted to the Teacher Education Program which is sought through the College of Education and Human Development.

Major Requirements

Code	Title	Hours
MATH 241	CALCULUS I WITH LABORATORY	3
MATH 242	CALCULUS II WITH LABORATORY	3
MATH 243	CALCULUS III WITH LABORATORY	3
MATH 244	CALCULUS IV WITH LABORATORY	3
MATH 303	INT TO SET THEO & LOGC I	3
MATH 311	ABSTRACT ALGEBRA I	3
MATH 321	MODERN GEOMETRY I	3
MATH 331	LINEAR ALGEBRA & MATRIX THEORY	3
MATH 355	PROBABILITY&STATISTICS I	3
MATH 368	DIFFERENTIAL EQUATIONS	3
MATH 402	MTHDS OF TCHNG MATH IN SECD SC	3
MATH 403	SEMINAR IN MATHEMATICS	3
MATH 493	HIST IN MATH CLASSROOM I	3
EDCI 100	INTRODUCTION TO EDUCATION	3
SPED 311	EXCEP CHILD &YOUTH IN THE SCHO	3
SS 203	HISTORICAL&CULTURAL FOUNDATNS	3
COUN 315	Human Growth and Development	3
EDCI 301	CLASSROOM MANAGEMENT AND EFFECTIVE LEARNING ENVIRONMENTS	3
ETEC 367	INTRO TO ASSMNT MSRMT & EVALTN	3
RE 310	TCHNG READING IN CONTENT AREAS	3
EDCI 401	Unit Planning, Assessment, and Classroom Management	3
SS 301	INQRY-BASED INSTRN N GEOG & CE	3
EDCI 402	CLINICAL INTERNSHIP IN STD TCH	12
Total Hours		**78**

Note: Students must complete MATH 399 PROBLM SLVG FOR PRE S MATH TEA before enrolling in MATH 402 MTHDS OF TCHNG MATH IN SECD SC.

Curriculum Map

Course	Title	Hours
Freshman		
Fall		
ENG 104 or ENG 103 or ENG 111	COMPOSITION I or English Composition I with Co-requisite Support or COMPOSITION & LITERATURE FOR L	3
MATH 241	CALCULUS I WITH LABORATORY	3
UNIV 100	UNIVERSITY SUCCESS	2
Humanities & Fine Arts Option		3
Natural Science Option		3
Social & Behavioral Science Option		3
	Hours	**17**
Spring		
ENG 105 or ENG 112	COMPOSITION II or COMPOSITION	3
MATH 242	CALCULUS II WITH LABORATORY	3
Humanities & Fine Arts Option		3
Pathway Option		3
General Elective		3
	Hours	**15**
Sophomore		
Fall		
EDCI 100	INTRODUCTION TO EDUCATION	3
MATH 243	CALCULUS III WITH LABORATORY	3
Humanities & Fine Arts Option		3
Social & Behavioral Science Option		3
Pathway Option		3
	Hours	**15**
Spring		
MATH 244	CALCULUS IV WITH LABORATORY	3
MATH 303	INT TO SET THEO & LOGC I (W)	3
SPED 311	EXCEP CHILD &YOUTH IN THE SCHO	3
UNIV 200	CIVIC ENGAGEMENT	1
Pathway Option		3
General Elective		3
	Hours	**16**
Junior		
Fall		
EDCI 301	CLASSROOM MANAGEMENT AND EFFECTIVE LEARNING ENVIRONMENTS	3
MATH 311	ABSTRACT ALGEBRA I (W)	3
MATH 368	DIFFERENTIAL EQUATIONS	3
MATH 399	PROBLM SLVG FOR PRE S MATH TEA	0
PHY 201 & PHYL 201 or PHY 211 ***and*** PHYL 211	BASIC PHYSICS I or General Physics I ***and*** GENERAL PHYSICS LAB I	4
Mathematics Elective		3
	Hours	**16**
Spring		
ETEC 367	INTRO TO ASSMNT MSRMT & EVALTN	3
MATH 331	LINEAR ALGEBRA & MATRIX THEORY	3
MATH 321	MODERN GEOMETRY I (W)	3
MATH 355	PROBABILITY&STATISTICS I	3
MATH 493	HIST IN MATH CLASSROOM I (W)	3
	Hours	**15**
Senior		
Fall		
EDCI 401	Unit Planning, Assessment, and Classroom Management	3
MATH 402	MTHDS OF TCHNG MATH IN SECD SC (W)	3
MATH 403	SEMINAR IN MATHEMATICS	3
RE 310	TCHNG READING IN CONTENT AREAS	3
Mathematics Elective		3
Mathematics Elective		3
	Hours	**18**
Spring		
EDCI 402	CLINICAL INTERNSHIP IN STD TCH	12
	Hours	**12**
	Total Hours	**124**

Notes:

- Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100 UNIVERSITY SUCCESS; however, the student must take 2 hours of general electives to replace the UNIV course.
- Online Graduation Clearance (**to be completed during the graduating semester only**).

Specialization Courses

Code	Title	Hours
Pure Mathematics		
MATH 311	ABSTRACT ALGEBRA I	3
MATH 431	REAL ANALYSIS I	3
MATH 441	COMPLEX ANALYSIS I	3
MATH 321	MODERN GEOMETRY I	3
MATH 451	GENERAL TOPOLOGY I	3
Applied Mathematics		
MATH 415	PARTIAL DIFF EQUATIONS I	3
MATH 466	OPERATIONS RESEARCH	3
Applied Statistics (See Advisor)		

Student Learning Outcomes

Upon Completing the BSED Degree requirements in the secondary mathematics teaching curriculum, recipients will be able to:

- Use content knowledge to explain mathematical concepts and procedures.
- Design lesson plans that effectively utilize research-based pedagogical strategies, and
- Design instruction that supports current state and national standards for teaching and learning.