# ACCELERATED B.S. IN MATHEMATICS (4-8 MATHEMATICS CERTIFICATION) / M.S. IN MATHEMATICS

Web Site: https://twu.edu/mathematics/undergraduate-programs/

# **Degree Requirements**

Total Semester Credit Hours (SCH): 120

Major: 45 SCH Required Minor: 29 SCH

Program Code: MATH.BS.4-8EDUC CIP Code: 27.0101.00

### **Texas Core Curriculum**

Code	Title	SCHs
ENG 1013	Composition I (10)	3
ENG 1023	Composition II (10)	3
Mathematics (20)		3
Life & Physical Sciences (30)		
Language, Philosophy, & Culture (40)		
Creative Arts (50)		3
HIST 1013	History of the United States, 1492-1865 (60)	3
HIST 1023	History of the United States, 1865 to the Present (60)	3
POLS 2013	U.S. National Government (70)	3
POLS 2023	Texas Government (70)	3
Social & Behavioral Sciences (80)		
CAO: Multicultural-Women's Studies (90)		
CAO: First Year Seminar, Wellness or Mathematics (91)		
Total SCHs		

# **Courses Required for Major**

Code	Title	SCHs		
Required Mathematics Courses				
MATH 1523	Mathematics Concepts I	3		
MATH 1533	Mathematics Concepts II	3		
MATH 2014	Calculus I	4		
MATH 2024	Calculus II	4		
MATH 3104	Calculus III	4		
MATH 3013	Discrete Mathematics	3		
MATH 3053	Abstract Algebra	3		
MATH 4003	Mathematical Concepts in the Educational Setting	3		
MATH 4203	Problem Solving in the Secondary STEM Classroom	3		
MATH 4303	Algebra in the Mathematics Classroom	3		
<b>Graduate Courses</b>				
MATH 5483	Theory of Probability and Statistics I	3		
or MATH 4013	Probability and Statistics			

Total SCHs		45
or MATH 3083	Elementary Number Theory	
MATH 5523	Introduction to Number Theory	3
or MATH 3073	Matrix Methods	
MATH 5513	Matrix Algebra	3
or MATH 3003	A Survey of Geometry	
MATH 5323	Euclidean Geometry	3

# **Departmental Requirements**

Total SCHs 3			
CSCI 3013	Applied Computational Thinking	3	
Code	riue	SURS	

## **Professional Education Studies**

Admission to the Educator Preparation Program is required. Students must apply for admission into the Educator Preparation Program prior to enrolling in EDUC 3003/EDUC 3482, EDUC 4113/EDUC 4243, and EDUC 4946. Information is available from the Office of Educator Preparation Services (https://twu.edu/teacher-certification/).

Code	Title	SCHs		
Pedagogical and Professional Responsibility				
EDUC 2003	Schools and Society	3		
EDUC 3003	Learning Theory and Development	3		
EDUC 3482	Teaching Diverse Learners Through Technology Integration	2		
EDUC 4113	Design and Implementation of Instruction and Assessment	3		
EDUC 4243	Classroom Environment and Management	3		
EDUC 4946	Clinical Student Teaching			
Related Studies in Education				
EDSP 3203	Learners with Exceptionalities	3		
READ 3013	Literacy and Learning across the Curriculum	3		
READ 3423	Literacy Foundations: 4-8	3		
Total SCHs		29		

### Notes:

- Six SCH of clinical teaching are required. Students typically take one semester of EDUC 4946 to fulfill this requirement. With permission from the component and the Educator Preparation Program (EPP), students may be eligible to take two semesters of EDUC 4943.
- EDUC 2003 may be taken at a community college. Check with the Office of Educator Preparation Services (https://twu.edu/teachercertification/) to make sure the course has the equivalent number.
- 3. EDUC 4113 and EDUC 4243 must be taken during the same semester.