BACHELOR OF ARTS IN MATHEMATICS (7-12 MATHEMATICS CERTIFICATION)

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

The Division of Mathematics at Texas Woman's University offers a Bachelor of Arts degree in Mathematics with 7-12 certification which will prepare you to become an exceptional mathematics teacher in secondary schools. You will be taught the mathematics required for the degree along with activities and strategies that support teaching mathematics to secondary students. In addition, the Bachelor of Arts degree is designed so that you take either a foreign language or courses in bilingual education to better prepare you for the classroom. The need for quality 7-12 mathematics teachers in our schools is great and abundant career opportunities exist for qualified individuals. At TWU, small class sizes provide quality learning environments and active engagement with an outstanding and energized university faculty.

Marketable Skills

Marketable skills prepare students for success in a variety of professional settings. Developed through academic coursework, co-curricular engagement, and extracurricular involvement, these skills include communication, critical thinking, teamwork, ethical reasoning, adaptability, and digital literacy. Whether directly related to a student's major or serving as complementary strengths, marketable skills enhance career readiness and reflect TWU's commitment to producing graduates who are prepared to thrive in today's dynamic workforce.

Degree Skills

1. Apply mathematical theories and techniques to the solution of practical problems in business, engineering, the sciences, or other fields.
2. Develop mathematical or statistical models of phenomena to be used for analysis or for computational simulation.
3. Determine appropriate methods for data analysis.
4. Perform computations and apply methods of numerical analysis to data.
5. Demonstrate personal accountability and work habits, integrity, and ethical behavior.
6. Assemble sets of assumptions and explore the consequences of each set.
7. Proficient in the software tools to achieve the skills listed, such as Matlab and R, SAS, SPSS, modeling software.

Teacher Certification Skills

1. Appropriately explain the impact of effective planning and communication (within the chosen area of concentration) to relevant internal and external stakeholders in an education or community setting.
2. Identify, select, and implement entry-level instructional plans when serving as an instructor in the school setting.
3. Successfully manage organizational and student behavior when teaching in the school setting.
4. Efficiently and accurately assess student progress and use data to develop and modify instruction for K-12 students.
5. Work effectively and collaboratively with students and families from diverse backgrounds.

Admissions

Teacher Certification

Application Deadlines

There are three application periods per year (Fall, Spring, and Summer). Students must have their applications in by the deadline the semester before they intend to take ECE 3223 (EC-3 only), EDUC 3003, EDUC 3482, or READ 4223 (EC-3 only). (see schedule below).

Spring Application Deadlines* (Admission to the EDUC 3000s Summer)

- May 1 - Deadline to apply for Summer admission
- May 31 - Deadline for Transfer Grades, Grade Changes, or Any Other Requirement

Summer Application Deadlines (Admission to the EDUC 3000s Fall)

- July 1 - Deadline to apply for Fall admission
- July 31 - Deadline for Transfer Grades, Grade Changes, or Any Other Requirement

Fall Application Deadlines* (Admission to the EDUC 3000s Spring)

- December 1 - Deadline to apply for Spring admission
- December 21 - Deadline for Transfer Grades, Grade Changes, or Any Other Requirement

Guidelines

Please adhere to the following guidelines:

- We recommend preparing your application well in advance of the deadline. That way you will be able to identify and resolve any potential issues before the deadline date.
- If you intend to register early for ECE 3223 (EC-3 only), EDUC 3003, EDUC 3482, or READ 4223 (EC-3 only) for the Summer or Fall semesters and have met all admission requirements, it is recommended that you apply to the EPP by December 1.
- If you apply for admission to the Educator Preparation Program while enrolled in EDUC 2003 or are taking coursework to increase your GPA to a 2.75, the Office of Educator Preparation Services will process your application. If the GPA requirement, along with all other admission requirements are met at the end of the semester, an admission decision will be made at that time.
- No late applications will be accepted. If the deadline date falls on a weekend or a day that TWU is closed, applications will be accepted until 5 p.m. on the next day that TWU is open after the deadline day.

Requirements

In addition to the general undergraduate admissions requirements (https://catalog.twu.edu/undergraduate/admission-information/), to obtain acceptance into the undergraduate Educator Preparation Program (https://twu.edu/epp/) (and prior to taking ECE 3223 (EC-3 only), EDUC 3003, EDUC 3482, EDUC 4113, EDUC 4243, READ 4223 (EC-3 only), and Clinical Student Teaching) students must have:

- A cumulative GPA of 2.75 (includes **all** courses, whether posted to TWU transcript or used on a degree plan. Excludes developmental and repeated courses);

- Demonstrated basic skills in reading, written communication, and mathematics by meeting the requirements of the Texas Success Initiative;
- A minimum of 12 to 15 semester credit hours in the subject-specific content area for the certification sought;
- Completed EDUC 2003 with a C or higher;
- Completed department application for admission to the Educator Preparation Program in Tk2***0;***
  - ***Important:*** Purchase and creation of a Tk20 account is required (https://twu.edu/epp/tk20/)
- Completed the Digital Literacy Pre-assessment;
- Submitted a non-refundable Texas Education Agency Fee;
- Completed a Commitment Contract acknowledging awareness and understanding of the Professional Dispositions Policy and Educators' Code of Ethics;
- Successfully completed a pre-admission departmental interview with an interview panel; and
- Acknowledged and accepted admission to the Educator Preparation Program.

Please note:

- All accepted students must maintain the admission requirements to remain in the TWU Education Preparation Program.
- Admission requirements are determined by Texas Education Agency policies and are subject to change without notice.
- Students seeking Bilingual certification must meet minimum proficiency in Spanish.
- Students seeking Deaf/Hard of Hearing certification must meet minimum proficiency in sign.

All admission decisions are based on the successful completion of the above requirements. Conviction of a felony or misdemeanor other than a minor traffic violation may affect certification. Additional information may be obtained by contacting the Texas Education Agency (http://www.tea.texas.gov/). Any previous or current issues of academic dishonesty, disruptive behavior, or professional dispositions infractions at TWU, another university, or another Educator Preparation Program may result in denial of admission. Any decision may be appealed by contacting the Office of Educator Preparation Services at 940-898-2829.

Contact the Office of Educator Preparation Services (https://twu.edu/epp/) (OEPS) at copeadvising@twu.edu or 940-898-2829 with any questions.

Texas Administrative Code (*TAC*) Requirements

- Candidates must undergo a criminal history background check prior to employment as an educator. [19 TAC §227.1(b)(1)]
- Candidates must undergo a criminal history background check prior to clinical teaching. [19 TAC §227.1(b)(2)]
- The potential ineligibility of an individual who has been convicted of an offense for issuance of a certificate. [19 TAC §227.1(d)(1)]
- The right to request a preliminary criminal history evaluation from TEA. [19 TAC §227.1(d)(3)]

Degree Requirements

Total Semester Credit Hours (SCH): 120

Major: 39 SCH **Required Minor:** 26 SCH

Program Code: MATH.BA.7-12EDUC; **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)		6
Language, Philosophy, & Culture (40)		3
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)		3
CAO: Multicultural-Women's Studies (90)		3
CAO: First Year Seminar, Wellness or Mathematics (91)		3
Total SCHs		**42**

Courses Required for Major

Code	Title	SCHs
Required Mathematics Courses		
MATH 2024	Calculus II	4
MATH 3003	A Survey of Geometry	3
MATH 3013	Discrete Mathematics	3
MATH 3053	Abstract Algebra	3
MATH 3104	Calculus III	4
MATH 3073	Matrix Methods	3
MATH 4003	Mathematical Concepts in the Educational Setting	3
MATH 4013	Probability and Statistics	3
MATH 4203	Problem Solving in the Secondary STEM Classroom	3
MATH 4303	Algebra in the Mathematics Classroom	3
MATH 3083	Elementary Number Theory	3
Total SCHs		**35**

Departmental Requirements

Code	Title	SCHs
CSCI 3013	Applied Computational Thinking	3
SPAN 1013	Elementary Spanish I	3
or EDBE 3453	Teaching English As a Second Language	
SPAN 1023	Elementary Spanish II	3
or EDBE 3053	Theories of Second Language Acquisition for ESL and Bilingual Teachers	
Electives		9

MATH 2014	Calculus I	4
Total SCHs		**22**

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	6
Related Studies in Education		
READ 3013	Literacy and Learning across the Curriculum	3
EDSP 3203	Learners with Exceptionalities	3
Total SCHs		**26**

Notes:

1. 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.
2. EDUC 2003 may be taken at a community college. Check with the Office of Educator Preparation Services (https://twu.edu/teacher-certification/) to make sure the course has the equivalent number.
3. EDUC 4113 and EDUC 4243 must be taken during the same semester.

Recommended Plan of Study

First Year			
Fall		**TCCN**	**SCHs**
ENG 1013	Composition I	ENGL 1301	3
HIST 1013	History of the United States, 1492-1865	HIST 1301	3
POLS 2013	U.S. National Government	GOVT 2305	3
UNIV 1231	Learning Frameworks: the First-Year Seminar	EDUC 1100, EDUC 1200, EDUC 1300	1
MATH 2014	Calculus I	MATH 2413	4
Life & Physical Sciences Core			3
	SCHs		**17**
Spring		**TCCN**	
ENG 1023	Composition II	ENGL 1302	3
HIST 1023	History of the United States, 1865 to the Present	HIST 1302	3
POLS 2023	Texas Government	GOVT 2306	3
SPAN 1013 or EDBE 3453	Elementary Spanish I or Teaching English As a Second Language	SPAN 1411	3
MATH 2024	Calculus II	MATH 2414	4
	SCHs		**16**
Second Year			
Fall		**TCCN**	
MATH 4303	Algebra in the Mathematics Classroom		3
SPAN 1023 or EDBE 3053	Elementary Spanish II or Theories of Second Language Acquisition for ESL and Bilingual Teachers	SPAN 1412	3
Life/Physical Science Core			3
Elective			3
MATH 3104	Calculus III		4
	SCHs		**16**
Spring		**TCCN**	
EDSP 3203	Learners with Exceptionalities		3
READ 3013	Literacy and Learning across the Curriculum		3
MATH 3013	Discrete Mathematics		3
Language, Philosophy, & Culture Core			3
CAO: Women's Studies (Recommended - MATH 2053)			3
Elective (Recommended - MATH 1703)			3
	SCHs		**18**
Third Year			
Fall		**TCCN**	
EDUC 2003	Schools and Society	EDUC 1301	3
MATH 3053	Abstract Algebra		3
Creative Arts Core			3
Elective			3
CSCI 3013	Applied Computational Thinking		3
	SCHs		**15**
Spring		**TCCN**	
MATH 3073	Matrix Methods		3
MATH 4003	Mathematical Concepts in the Educational Setting		3
MATH 4203	Problem Solving in the Secondary STEM Classroom		3
EDUC 3003	Learning Theory and Development		3
EDUC 3482	Teaching Diverse Learners Through Technology Integration		2
MATH 3083	Elementary Number Theory		3
	SCHs		**17**
Fourth Year			
Fall		**TCCN**	
MATH 4013	Probability and Statistics		3
EDUC 4113	Design and Implementation of Instruction and Assessment		3
EDUC 4243	Classroom Environment and Management		3
Social/Behavioral Science Core			3

MATH 3003	A Survey of Geometry	3
	SCHs	**15**
Spring	**TCCN**	
EDUC 4946	Clinical Student Teaching	6
	SCHs	**6**
	Total SCHs:	**120**