This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001 This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.

Mathematics Majors with Teacher Certification are attractive to the growing demand for teachers in middle schools and elementary schools. A BIS in Middle School Mathematics will prepare the graduate for an exciting and rewarding teaching position and provide the necessary preparation for graduate studies in Mathematics Education.

A – GENERAL EDUCATION CORE – 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

Required

020 - Mathematics – 3 hours

MATH 2412 Pre-Calculus three-hour lecture

Recommended

030 - Life and Physical Sciences – 6 hours

PHYS 2425 Physics for Scientists and Engineers I three-hour lecture
PHYS 2426 Physics for Scientists and Engineers II three-hour lecture

080 - Social and Behavioral Sciences – 3 hours

Choose one:

ECON 1301 Introduction to Economics
ECON 2301 Principles of Macroeconomics

090 - Integrative and Experiential Learning – 5 hours

PHYS 2425 Physics for Scientists and Engineers I one-hour lab
PHYS 2426 Physics for Scientists and Engineers II one-hour lab
CSCI 1380 Computer Science I

B – MAJOR REQUIREMENTS – 53 HOURS (42 advanced)

1 – Mathematics Core – 38 hours (33 advanced)

MATH 2412 Pre-Calculus one-hour lecture
MATH 2413 Calculus I (or MATH 2487 Honors)
MATE 3301 Fundamentals of Middle School Mathematics
MATE 3302 Fundamentals of Measurement and Geometry I
MATE 3303 Fundamentals of Measurement and Geometry II
MATE 3304 Fundamentals of Algebraic Structures
MATE 3305 Fundamentals of Statistics and Probability
MATE 3306 Middle School Mathematics in a Technological Environment
MATE 3307 Fundamentals of Problem Solving
MATE 3311 Fundamentals of Discrete Mathematics
MATE 3312 Fundamentals of Number Theory
MATE 3313 Fundamentals of Mathematics History
MATE 3314 Fundamentals of Mathematical Structures and Processes

2 – Interdisciplinary Component – 15 hours (9 advanced)

MATH 1350 Fundamentals of Mathematics I
MATH 1351 Fundamentals of Mathematics II
MATE 3317 Perspectives in Mathematics and Science
MATE 3321 Functions and Modeling
MATE 4319 Research Methods in Middle School Mathematics

C – UTEACH CERTIFICATION – 21 HOURS (19 advanced)

Area of Certification: Mathematics (4-8)

UTCH 1101 Inquiry Approaches to Teaching

UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science
UTCH 3302 Classroom Interactions
UTCH 3303 Project-Based Instruction
UTCH 4601 Apprentice Teaching
UTCH 4101 Apprentice Teaching Seminar
READ 4305 Disciplinary Literacy in Content Area Classrooms

D – SUPPORT COURSES – 4 HOURS

Choose 4 hours of Life and Physical Science beyond the core.

TOTAL CREDIT HOURS FOR GRADUATION – 120 HOURS
TOTAL ADVANCED HOURS – 61 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Progression requirements

Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 7 advanced hours, as recommended by advisor.

Graduation requirements

1. A grade of 'C' or better with a GPA of 2.75 or greater is required in all MATH and MATE.