# EAST CENTRAL UNIVERSITY MATHEMATICS – TEACHER CERTIFICATION CONCENTRATION 0293

2025-26 Catalog Year

#### **Requirements for Bachelor's Degrees**

- 30 hours at ECU
- o 60 hours at senior level college
- o 40 hours upper level courses
- o OSRHE computer proficiency requirement

#### I. General Education

40 hours

A maximum of 12 hours may be counted in both the major/related work and general education.

# II. Major in Teacher Cert Mathematics 45-51 hours

A. Required Mathematics Core

22-28 hours

- o MATH 1513 College Algebra\*
- o MATH 1223 Intro to Prob & Statistics
- o MATH 1713 Trigonometry\*
- o MATH 2825 Calculus & Analytical Geometry I
- o MATH 3025 Calculus & Analytical Geometry II
- o MATH 3033 Calculus & Analytical Geometry III
- o MATH 3713 Linear Algebra
- o MATH 4923 Perspectives in Mathematics
- B. Required for Teacher Certification Concentration 17 hours
- o CPSMA 3913 Discrete Mathematics
- o MATH 3093 Intro to Theorem Prob & Number Theory
- o MATH 3213 College Geometry
- o MATH 3263 Meth of Teaching Mid-Level Math
- o MATH 3813 Modern Algebra
- MATH 4922 Meth of Teaching Secondary Math
- C. Electives 6 hours
- o Six hours of upper level Mathematics courses

#### III. Related Work

12 hours

- o CMPSC 1113 Computer Programming I OR
- o Other computer programming course in a high level language
- o COMM 1133 Fundamentals of Human Comm

o PSYCH 1113 General Psychology

# **IV.** Minor (Not Required)

# V. Professional Education

30 hours

- EDUC 2402 Survey of Excep Child
- PSYCH 3463 Child & Adolescent Psychology
- o EDUC 2012 Diversity in American Education
- o EDUC 2211 Field Experience I
- o EDUC 2631 Foundations of Education Technology
- o EDPSY 3513 Educational Psychology
- o EDUC 3001 Field Experience II
- o EDUC 4052 Effective Teaching in Secondary Education
- o EDUC 4632 Education Technology Integration Strategies
- o EDUC 4611 Field Experience III
- EDUC 4262 Student Teaching Seminar I
- o EDUC 4282 Student Teaching Seminar II
- EDUC 4974 Supervised Student Teaching Secondary Schools
- o EDUC 4974 Supervised Student Teaching Secondary Schools

#### VI. Electives

**7-13 hours** 

### VII. Total Hours Required

120 hours

# **VIII. Special Requirements**

Math 1413 will not be counted in the major

\*With departmental approval, students may omit MATH 1513 and MATH 1713 and begin with MATH 2825