

Program: **Mathematics Education**
 Major: **Mathematics Education**
 Degree: **Bachelor of Science in Education (B.S.Ed.)**

Dept: **Mathematics and Statistics**
 College: **Mathematics and Science**
 Major Code: **6180**

University Core (Total Listed 42-44)

Specific courses within the University Core are listed on pages 95-96.

• Courses from the major may apply to the areas marked in the University Core.

• **Written and Oral Communication..... 9**

Quantitative Reasoning/Scientific Method 10-11

- Math..... 3
- Life Science 4
- Physical Science..... 3-4

Critical Inquiry and Aesthetic Analysis..... 6

- Aesthetic Analysis 3
- Critical Inquiry..... 3

American Historical and Political Analysis 6

- American National Government 3
- American History..... 3

Cultural and Language Analysis 3-4

- Second Language..... 4
- OR
- Cultural Analysis..... 3

Social and Behavioral Analysis..... 3

Life Skills 5

- Required Health Course..... 2
- Elective Life Skills..... 3

**Minimum
Required Hours**

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Required Hours**

Support and Prerequisite Courses

Support Courses.....9

- MCOM 1113 Fundamentals of Speech
- ENG 1113 English Composition
- ENG 1213 English Composition and Research

Prerequisite Courses0-6

- *MATH 1533 Precalculus-Algebra **OR**
- MATH 1513 College Algebra **OR** Placement Score **AND**
- *MATH 1593 Plane Trigonometry **OR** Placement Score

*A grade of 'C' or better is required for either MATH 1513 or MATH 1533 and MATH 1593 to take MATH 2313.

Major Requirements

Mathematics Education.....41-42

Required courses 36

- MATH 2123 Survey of Discrete for Math Education
- MATH 2313 Calculus 1
- MATH 2323 Calculus 2
- MATH 2333 Calculus 3
- MATH 2343 Calculus 4
- MATH 2743 Technology and Mathematics Education
- MATH 3113 Foundations of Advanced Mathematics
- MATH 3123 College Geometry
- MATH 3143 Linear Algebra
- MATH 3163 Elementary Number Theory **OR**
- MATH 3183 Introduction to Modern Algebra
- MATH 4483 History of Mathematics
- STAT 2113 Statistical Methods

Mathematics Electives 5-6

Select at least two of the following:

- MATH 2023 Foundations of Geometry and Measurement
- MATH 3103 Differential Equations
- MATH 3163 Elementary Number Theory
- MATH 3183 Introduction to Modern Algebra
- MATH 4143 Introduction to Analysis 1
- MATH 4960 Institute in Mathematics (2 hours)
- STAT 4113 Mathematical Statistics 1

Professional Education 32

- PTE 1010 Introduction to Teacher Education
- PTE 3023 Foundations of American Education/Clinical Exp
- PTE 3153 Adolescent Psychology
- SPED 4123 Teaching Individuals with Disabilities
- MATH 3323 Teaching Middle School Math
- ^MATH 4843 Teaching Secondary Mathematics
- ^PTE 4172 Educational Assessment
- ^PTE 4533 Contemporary Learning Sciences
- ^#PTE 4811 Contemporary Issues
- ^#PTE 4838 Internship/Student Teaching Secondary
- ^#PTE 4853 Classroom Management & Instruction

^ Admission to Teacher Education required

#To be taken the same semester

Electives to bring total to..... 124

It is strongly recommended PHY 1114 General Physics I and Lab be taken in the general education core. Students planning to do graduate work should take MATH 3183, Introduction to Modern Algebra and MATH 4143, Introduction to Analysis 1.

Minimum Graduation Requirements

1. Overall GPA in all college course work 2.50
2. Average in course work at UCO 2.00
3. Courses in English Composition, Fundamentals of Speech, Professional Education, and area of specialization (major)..... "C"
4. Proficiency in foreign language Novice 4 level

For other regulations pertaining to graduation, see pages 66-67 of the 2019-2020 catalog.