Program: Mathematics
Major: Mathematics - Applied Mathematics
Degree: Bachelor of Science (B.S.)

Dept: Mathematics and Statistics
College: Mathematics and Science
Major Code: 6161

Minimum Required Hours
University of Central Oklahoma Undergraduate Catalog 2020-2021
University Core (Total Listed 42-44)

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

Prerequisite Courses
Prerequisite Courses ................................................................. 0-6

  *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.

Upon completion of the above courses, corresponding general education requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred.)

Mathematics - Applied Mathematics .................. 48

Required courses .............................................................................. 27
  MATH 2313 Calculus 1
  MATH 2323 Calculus 2
  MATH 2333 Calculus 3
  MATH 2343 Calculus 4
  MATH 2753 Technology for Professional Math and Statistics
  MATH 3113 Foundations of Advanced Math
  MATH 3143 Linear Algebra
  MATH 3183 Introduction to Modern Algebra
  MATH 4143 Introduction to Analysis 1

Applied Mathematics ........................................................................ 21

Required courses:
  STAT 2113 Statistical Methods
  MATH 3103 Differential Equations
  MATH 4113 Operations Research 1
  STAT 4113 Mathematical Statistics 1
  MATH 4263 Numerical Linear Algebra OR
  MATH 4363 Applied Numerical Analysis

Any 3000 and 4000 level MATH or STAT course to bring the total to 21.

Electives to bring total to ......................................................... 124

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

It is strongly recommended that PHY 1114 General Physics I and Lab be taken in the general education pattern.

Minimum Grade Requirements
1. Average in (a) all college course work, (b) course work at UCO, and (c) major courses ......................................................... 2.50
2. A minimum grade of “C” must be earned in all courses in the major to count toward meeting degree requirements.

For other regulations pertaining to graduation, see Academic Degree Requirements.