Program:	Mathematics	Dept:	Mathematics and Statistics
Major:	Mathematics - Applied Mathematics	College:	Mathematics and Science
Degree:	Bachelor of Science (B.S.)	Major Code:	6161

University Core (Total Listed 42-44)

Specific courses within the University Core are listed on pages 96-97.
• 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

Prerequisite Courses

Prerequisite Courses 0-6

MATH	1533	Algebra for STEM **OR** Placement Score **AND**
MATH	1593	Plane Trigonometry **OR** Placement Score

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.)

Major Requirements

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

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 pages 67-68 of the 2017-2018 catalog.