

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

Dept: **Mathematics and Statistics**
 College: **Mathematics and Science**
 Major Code: **6162**

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

- Sd 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 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.)

Major Requirements

Mathematics - Statistics..... 54

Mathematics 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 3103 Differential Equations
- MATH 3113 Foundations of Advanced Math
- MATH 3143 Linear Algebra
- MATH 3183 Introduction to Modern Algebra **OR**
- MATH 4143 Introduction to Analysis 1

Statistics 27

Required Courses..... 18

- STAT 2113 Statistical Methods
- STAT 4103 Applied Experimental Design
- STAT 4113 Mathematical Statistics 1
- STAT 4123 Mathematical Statistics 2
- STAT 4213 Applied Regression Analysis
- STAT 4513 Statistical Consulting

Electives..... 9

Selected from the following:

- STAT 3213 Fundamentals of Data Science
- STAT 4253 Computer Applications in Statistics

**Minimum
Required Hours**

- STAT 4313 Nonparametric Statistics
- STAT 4533 Data Mining and Statistical Learning
- STAT 4413 Data Visualization and Exploration

Electives to bring total to..... 124

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 66-67 of the 2019-2020 catalog.