

# APPLIED STATISTICS

## BACHELOR OF SCIENCE IN APPLIED STATISTICS DATA SCIENCE OPTION

*Student interested in Mathematics for Teacher Licensure, [click here.](#)*

### Curriculum

The matrix below is a sample plan for all coursework required for this program.

#### Freshman

Fall	Credits
ENGL 1013 Composition I <sup>1</sup>	3
USHG 1XXX U.S. History and Government <sup>1</sup>	3
MATH 1001 Orientation to Mathematics	1
MATH 2914 Calculus I	4
BUAD 2003 Business Information Systems	3
<b>Total Hours</b>	<b>14</b>

Spring	Credits
ENGL 1023 Composition II <sup>1</sup>	3
FAH 1XXX Fine Arts and Humanities Courses <sup>1</sup>	3
BDA 2003 Business Problem Solving	3
MATH 2924 Calculus II	4
STAT 2163 Introduction to Statistical Methods	3
<b>Total Hours</b>	<b>16</b>

#### Sophomore

Fall	Credits
SS 1XXX Social Science Courses <sup>1</sup>	3
MATH 2703 Discrete Mathematics	3
MATH 2934 Calculus III	4
STAT 2304 Programming Languages for Data Science	4
<b>Total Hours</b>	<b>14</b>

Spring	Credits
BDA 3053 Business Data Analysis	3
COMS 1011 Programming Foundations I Lab and COMS 1013 Programming Foundations I	4
STAT 3113 Regression Analysis	3
STAT 3153 Applied Statistics	3

Spring	Credits
Math/STAT Elective <sup>3</sup>	3
<b>Total Hours</b>	<b>16</b>

**Junior**

Fall	Credits
FAH 1XXX Fine Arts and Humanities Courses <sup>1</sup>	3
SCIL 1XXX Science with Laboratory <sup>1</sup>	4
COMS 2203 Programming Foundations II	3
MATH 4003 Linear Algebra I	3
STAT 4163 Mathematical Statistics	3
<b>Total Hours</b>	<b>16</b>

Spring	Credits
COMM 2173 Business and Professional Speaking	3
SCIL 1XXX Science with Laboratory <sup>1</sup>	4
COMS 2213 Data Structures	3
STAT 4153 Experimental Design and Analysis	3
MATH/STAT Elective <sup>3</sup>	3
<b>Total Hours</b>	<b>16</b>

**Senior**

Fall	Credits
SS 1XXX Social Science Courses <sup>1</sup>	3
STAT 4113 Categorical Data Analysis	3
STAT 4383 Machine Learning	3
COMS Elective <sup>4</sup>	3
Elective <sup>2</sup>	3
<b>Total Hours</b>	<b>15</b>

Spring	Credits
MATH 4971 Mathematics Senior Seminar	1
COMS Elective <sup>4</sup>	3
MATH/STAT Elective <sup>3</sup>	6
Elective <sup>2</sup>	3
<b>Total Hours</b>	<b>13</b>

<sup>1</sup>See appropriate alternatives or substitutions in "[General Education Requirements](#)".

<sup>2</sup>A minimum of 40 credit hours of the 120 total hours required for the B.S. degree must be 3000-4000 level courses.

<sup>3</sup>See catalog to assure pre-requisites are met. See advisor to select courses from: STAT 3183 Statistical Process Control, STAT 4393 Statistical Learning, MATH 4123 Mathematical Modeling, or a MATH/STAT course at the 3000-4000 level approved by advisor.

<sup>4</sup>See catalog to assure pre-requisites are met. See advisor to select courses from: COMS 3233 Database Design and Implementation, COMS 3243 Data Mining, COMS 4353 Artificial Intelligence, or a COMS course at the 3000-4000 level approved by advisor.