California State University, Long Beach Policy Statement

Policy Statement

20-07

August 26, 2020

# Bachelor of Science in Applied Statistics (120 units)

This new program was recommended by the Academic Senate on 3/12/20 and concurred by the President on 3/19/20. The California State University Chancellor granted approval on 8/12/20.

# Program Description

This degree program provides a foundation in statistical methods. The courses required ensure that the student understands how the techniques are mathematically derived and how they are applied. Statistical analysis is an essential part of any scientific investigation and is a vital tool in monitoring the quality of products and services and in forecasting.

**Requirements**

**Lower Division:**

***Take all the following courses:***

* [*MATH 122 - Calculus I*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(4 units)*
* [*MATH 123 - Calculus II*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(4 units)*
* [*MATH 224 - Calculus III*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(4 units)*
* [*MATH 247 - Introduction to Linear Algebra*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*
* [*CECS 174 - Introduction to Programming and Problem Solving*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*

***Take the following course:***

* [*ENGL 317 - Technical Communication*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*

**Upper Division:**

Take a minimum of 34 units of MATH or STAT courses to include the following (but not [MATH 303,](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search#tt3143) [MATH 309,](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search#tt1200) [MATH 370A,](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search#tt838) [MATH 370B,](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search#tt3628) or [MATH 409)](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search#tt6665):

Three units of the elective upper-division MATH or STAT courses may be replaced by [MATH 233.](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search#tt4272)

* [*MATH 323 - Introduction to Numerical Analysis*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(4 units)*
* [*MATH 361A - Introduction to Mathematical Analysis I*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*

 1

* [*MATH 380 - Probability and Statistics*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*
* [*STAT 381 – Mathematical Statistics*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*
* [*STAT 410 - Regression Analysis*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*
* [*STAT 450 - Multivariate Statistical Analysis*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*
* [*STAT 475 - Data Analysis with SAS*](http://catalog.csulb.edu/preview_program.php?catoid=1&poid=290&hl=statistics&returnto=search) *(3 units)*

EFFECTIVE: Fall 2021

Campus Code: MATHBS04U1

College: 65 - Natural Science and Mathematics

Career: UNGR CIP Code: 27.0501

CSU Code: 17021

Department: Mathematics and Statistics Degree Program Delivery Type: Face-to-Face

Major Pathway, (STEM or non-STEM): STEM

 2