

# BACHELOR OF SCIENCE IN MATHEMATICS (IMPACTED)

## Option in Statistics Major Requirements Worksheet 2014-2015 Catalog

Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

This option 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.

*NOTE: This checklist is not intended to replace advising from the major department. Students should consult with the major advisor to determine the appropriate sequence of courses. This checklist is to inform students of major requirements and course prerequisites only. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification. **Pre-Mathematics** majors must complete their GE Foundation courses, and the highlighted areas below all with a "C" or better and a cumulative GPA of 2.5, by 60 units to be considered for the major.*

Semester	Grade	Course #	Course Title	Prerequisites
		MATH 122	Calculus I (4)	Appropriate MDPT placement or MATH 111* and 113*
		MATH 123	Calculus II (4)	MATH 122*
		MATH 224	Calculus III (4)	MATH 123*
		MATH 247	Introduction to Linear Algebra ( 3)	MATH 123
		ENGL 101 ENGL 317	Composition (3) <b>OR</b> Technical Communication (3)	ENGL 100 GE Foundation requirements, upper-division standing, and a previous composition course**
		CECS 174	Introduction to Programming and Problem Solving (3)	CECS 100 and MATH 113 (or equivalent)

### UPPER DIVISION COURSES (See major faculty advisor)

**Take a minimum of 34 UNITS of MATH or STAT courses to include the following:**

*(excludes MATH 303, MATH 370A or MATH 370B; can use MATH 233 to meet UD elective)*

		MATH 323	Introduction to Numerical Analysis (4)	MATH 224, and a course in computer programming
		MATH 361A	Introduction to Mathematical Analysis I (3)	MATH 224, and MATH 233 or 247
		MATH 380	Probability and Statistics (3)	MATH 224
		STAT 381	Mathematical Statistics (3)	MATH 247 and MATH 380
		STAT 410	Regression Analysis (3)	STAT 381
		STAT 450	Multivariate Statistical Analysis (3)	STAT 381; Pre/corequisite: STAT 410
		STAT 475	Data Analysis with SAS (3)	STAT 381 or consent of the instructor

\*Requires a "C" or better

\*\* See Catalog for more detail