# BACHELOR OF SCIENCE IN MATHEMATICS (IMPACTED) Option in Statistics <br> Major Requirements Worksheet 2016-2017 Catalog 

Name: $\qquad$ Student ID:

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.

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.

Many prerequisites require a" C" or better, please check the catalog for grade requirements.

| Semester | Grade | Course \# | Course Title | Prerequisites |
| :--- | :--- | :--- | :--- | :--- |
|  |  | MATH 122 | Calculus I (4) | Appropriate MDPT placement or MATH <br> 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 317 | Technical Communication (3) | GE foundation requirements, upper- <br> division standing, and a previous <br> composition course* |
|  |  |  | Introduction to Programming and Problem <br> Solving (3) | MATH 113 (or equivalent) |

*See catalog for more detail
UPPER DIVISION COURSES (See major faculty advisor)
Take a minimum of $\mathbf{3 4}$ units of MATH or STAT courses to include the following:

| Semester | Grade | Course \# | Course Title | Prerequisites |
| :--- | :--- | :--- | :--- | :--- |
|  |  | MATH 323 | Introduction to Numerical Analysis (4) | MATH 224, and a course in computer <br> programing |
|  |  | MATH 361A | Introduction to Mathematical Analysis I <br> (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 475 | Data Analysis with SAS (3) | STAT 381; Pre/corequisite: STAT 410 |
|  |  |  |  | STAT 381 or consent of the instructor |
|  |  |  |  |  |
|  |  |  |  |  |

The following upper-division units are excluded: MATH 303, 309, 370A, 370B, 409. Can use MATH 233 to replace to meet 3 units of UD elective.

