## **BACHELOR OF SCIENCE IN MATHEMATICS (IMPACTED)**

## Option in Statistics Major Requirements Worksheet 2013-2014 Catalog

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.

| Grade                             | Course #        | Course Title                            | Semester | Prerequisites (All prerequisite   |  |  |  |
|-----------------------------------|-----------------|---|----------|---|--|--|--|
|                                   |                 |   |          | courses must have a "C" or better)  |  |  |  |
| Take ALL of the following courses |                 |   |          |   |  |  |  |
|                                   | <b>MATH 122</b> | Calculus I (4)                          |          | Appropriate MDPT placement or   |  |  |  |
|                                   |                 |   |          | MATH 111* and 113* or MATH  |  |  |  |
|                                   |                 |   |          | 117*  |  |  |  |
|                                   | <b>MATH 123</b> | Calculus II (4)                         |          | MATH 122*   |  |  |  |
|                                   | MATH 224        | Calculus III (4)                        |          | MATH 123*   |  |  |  |
|                                   | MATH 247        | Introduction to Linear Algebra (3)      |          | MATH 123  |  |  |  |
|                                   | CECS 174        | Introduction to Programming and Problem |          | CECS 100 and MATH 113 (or   |  |  |  |
|                                   |                 | Solving (3)                             |          | equivalent)   |  |  |  |
|                                   |                 | <u> </u>                                |          |   |  |  |  |
| Take ONE of the following         |                 |   |          |   |  |  |  |
|                                   | ENGL 101        | Composition (3) OR                      |          | ENGL 100  |  |  |  |
|                                   | ENGL 317        | Technical Communication (3)             |          | GE foundation requirements, upper-division standing, and a previous composition course, |  |  |  |

**Upper Division:** A minimum of **34 units** of MATH or STAT courses to include the following (but not MATH 303, 370A or 370B):

Take ALL of the following courses:

| <br>Tune Till of the Tono wing courses. |   |                                    |  |  |  |  |
|---|---|------------------------------------|--|--|--|--|
| MATH 323                                | Introduction to Numerical Analysis (4)      | MATH 224, and a course in          |  |  |  |  |
|   |   | computer programing                |  |  |  |  |
| MATH 361A                               | Introduction to Mathematical Analysis I (3) | MATH 224, and MATH 233 or          |  |  |  |  |
|   |   | 247                                |  |  |  |  |
| STAT 380                                | Probability and Statistics (3)              | MATH 224                           |  |  |  |  |
| STAT 381                                | Mathematical Statistics (3)                 | MATH 247, and MATH 380 or          |  |  |  |  |
|   |   | STAT 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                         |  |  |  |  |

Three units of the elective upper-division MATH or STAT courses may be replaced by MATH 233

The remaining **12 units** (to meet the 34 unit requirement):

<sup>\*</sup>Requires a "C" or better

i.e. ENGL 100, 101, 102, 300, or

equivalents\*\*

<sup>\*\*</sup> See Catalog for more detail