BACHELOR OF SCIENCE IN MATHEMATICS (IMPACTED)
Option in Applied Mathematics (*Suboption II: Application in Economics and Management*)
Major Requirements Worksheet
2014-2015 Catalog

*Name:*_____ *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.*

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	Composition (3) *OR*	ENGL 100
		ENGL 317	Technical Communication (3)	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)

Take ONE of the following groups:

		ECON 100	Principles of Macroeconomics (3) *AND*	MATH 103 or higher and one GE Foundation course
		ECON 101	Principles of Microeconomics (3)	MATH 103 or higher

OR

		ECON 300	Fundamentals of Economics (3)	GE Foundation requirements

UPPER DIVISION COURSES (See major faculty advisor)

Take ALL of the following courses:

		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 361B	Introduction to Mathematical Analysis II (3)	MATH 361A
		MATH 364A	Ordinary Differential Equations I (3)	MATH 224, *and Pre/corequisite*: MATH 247
		MATH 380	Probability and Statistics (3)	MATH 224
		STAT 381	Mathematical Statistics (3)	MATH 247 *and* MATH 380
		STAT 482	Random Processes (3)	MATH 247 *and* MATH 380
		MATH 485	Mathematical Optimization (3)	MATH 247 and at least one of MATH 323, 347 *or* 380.

A minimum of 6 units from the following: MATH 364B, 423, 463, 470, 473, 474, 479; STAT 410

A minimum of 15 units from ONE of the following groups**

GROUP A:	GROUP B:
Take BOTH of the following courses:	**Take BOTH of the following courses:**
ECON 310 Microeconomic Theory (3) *AND*	ECON 333 Managerial Economics (3) *AND*
ECON 311 Macroeconomic Theory (3)	SCM 410 Logistics Management (3)
Take 9 units selected from the following:	**Take 9 units selected from the following:**
ECON 333, 410, 411, 420, 485, 486	MGMT 412, 413, 426; SCM 411, 414