BACHELOR OF SCIENCE IN MATHEMATICS (IMPACTED)

Major Requirements Worksheet

2014-2015 Catalog

*Name:*_____ *Student ID:*_____

This program requires a selection of fundamental courses in algebra, statistics, and analysis be taken. It is the most flexible program, in which the greatest number of electives may be chosen. Elective upper division mathematics courses are available which meet the needs of students preparing careers in industry and government, secondary teaching, and graduate study. Students who do not wish to complete the requirements for a declared option in applied mathematics or statistics may wish to elect courses in one or both of these areas as part of this degree program.

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 233	Fundamental Concepts for Advanced Mathematics (3)	MATH 123
		MATH 247	Introduction to Linear Algebra (3)	MATH 123
		ENGL 101 ENGL 317	Composition (3) ***OR*** 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)
		PHYS 151	Mechanics and Heat (4)	*Pre/corequisite*: MATH 122

UPPER DIVISION COURSES (See major faculty advisor)

Take ONE of the following courses:

		MATH 341 MATH 347	Number Theory (3) ***OR*** Linear Algebra (3)	MATH 233 MATH 233 *and* 247

Take ALL of the following courses:

		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 (3)	MATH 224; *Pre/corequisite*: MATH 247
		MATH 380	Probability and Statistics (3)	MATH 224
		MATH 444	Introduction to Abstract Algebra (3)	MATH 233 *and* 247, *and* at least one of MATH 341 *or* 347

Students should choose the remaining 12 UNITS after discussing career goals and interests with an advisor.

May not include MATH 303, MATH 370A, MATH 370B, or MATH 409.

*Requires a "C" or better

**See catalog for more details

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