

BACHELOR OF SCIENCE IN MATHEMATICS (IMPACTED)

Major Requirements Worksheet

2016-2017 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.**

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.

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 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 317	Technical Communication (3)	GE foundation requirements, upper-division standing, and a previous composition course*
		CECS 174	Introduction to Programming and Problem Solving (3)	MATH 113 (or equivalent)
		PHYS 151	Mechanics and Heat (4)	<i>Pre/corequisite:</i> MATH 122

*See catalog for more detail

UPPER DIVISION COURSES (See major faculty advisor)

Choose ONE of the following courses:

Semester	Grade	Course #	Course Title	Prerequisites
		MATH 341	Number Theory (3) OR	MATH 233
		MATH 347	Linear Algebra (3)	MATH 233 and 247

Take ALL of the following courses:

Semester	Grade	Course #	Course Title	Prerequisites
		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; <i>Pre/corequisite:</i> 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

Choose remaining 12 UNITS after discussing career goals and interests with an advisor:

The following upper-division units are excluded: MATH 303, 309, 370A, 370B, 409

Semester	Grade	Course #	Course Title	Prerequisites