

BACHELOR OF SCIENCE IN MATHEMATICS

Major Requirements Worksheet

2018-2019 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; the [CSULB Course Catalog](#) takes precedence in any conflict. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification.

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

Take ALL of the following courses:

Semester	Grade	Course #	Course Title	Prerequisites
		CECS 174	Introduction to Programming and Problem Solving (3)	CECS 100 and MATH 113
		ENGL 317	Technical Communication (3)	GE Foundation requirements, upper-division standing, and a previous composition course
		MATH 122	Calculus I (4)	Appropriate algebra/calculus placement; or MATH 111 and either MATH 112B or 113
		MATH 123	Calculus II (4)	MATH 122
		MATH 224	Calculus III (4)	MATH 123 or 222
		MATH 233	Fundamental Concepts for Advanced Mathematics (3)	MATH 123
		MATH 247	Introduction to Linear Algebra (3)	MATH 123
		PHYS 151	Mechanics and Heat (4)	<i>Pre/Corequisite:</i> MATH 122 or 123 or 224

UPPER DIVISION COURSES (see major faculty advisor)

Take ALL of the following courses:

Semester	Grade	Course #	Course Title	Prerequisites
		MATH 361A	Introduction to Mathematical Analysis I (3)	MATH 224; 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; MATH 341 or 347

Take ONE of the following courses:

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

Take TWELVE units after discussing career goals and interests with an advisor*:

Semester	Grade	Course #	Course Title	Prerequisites

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