

**BACHELOR OF SCIENCE IN MATHEMATICS
 OPTION IN APPLIED MATHEMATICS
 (SUBOPTION I: APPLICATION IN SCIENCE AND ENGINEERING)
 FOUR YEAR DEGREE WORKSHEET
 2017-2018 Catalog**

This degree worksheet is intended to help you develop a balanced course schedule while completing your degree within 4 years. The same sequence of courses (with fewer courses each semester) is also recommended for students completing their degree in 5 or 6 years. This worksheet is not intended to replace academic advising with your assigned advisor. Students should consult with their assigned advisor to determine the appropriate sequence of required courses and electives based on their academic goals.

CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification.

Year 1

Semester	Course #	Course Title (Units)	Prerequisites	Notes
1	MATH 122	Calculus I (4)	MATH 111 and 113	
	GE (area A1)	Written Communication (3)		
	GE (area C,D,E)	Other Explorations (3)		
	GE (area C,D,E)	Other Explorations (3)		
	NSCI 190A	Experience Success Program 1 (1)		Fall only
2	MATH 123	Calculus II (4)	MATH 122	
	PHYS 151	Mechanics and Heat (4)	MATH 122	
	GE (area A2)	Oral Communication (3)		
	GE (area A3)	Critical Thinking (3)		

Year 2

Semester	Course #	Course Title (Units)	Prerequisites	Notes
3	MATH 224	Calculus III (4)	MATH 123	
	PHYS 152	Electricity and Magnetism (4)	PHYS 151 and MATH 123	
	CECS 174	Intro Programming and Problems Solving (3)		
	GE (area C,D,E)	Other Explorations (3)		
	GE (area C,D,E)	Other Explorations (3)		
4	MATH 247	Introduction to Linear Algebra (3)	MATH 123	
	MATH 364A	Ordinary Differential Equations I (3)	MATH 224; <i>Corequisite: 247</i>	
	PHYS 254; OR EE 211; OR CE 205	Applied Modern Physics (3); OR Electric and Electronic Circuits (3); OR Analytical Mechanics I (3)	PHYS 152; OR PHYS 152 and MATH 123; OR PHYS 151	
	GE (area C,D,E)	Other Explorations (3)		
	GE (area C,D,E)	Other Explorations (3)		

Year 3

Semester	Course #	Course Title (Units)	Prerequisites	Notes
5	MATH 380	Probability and Statistics (3)	MATH 224	
	MATH 323	Introduction to Numerical Analysis (4)	MATH 224	
	Upper Division Elective	MATH/STAT (3)		
	GE (area B1a)	Life Science (3)		B1aNL is okay
	GE (area C,D,E)	Other Explorations (3)		

Semester	Course #	Course Title (Units)	Prerequisites	Notes
6	MATH 361A	Intro. to Mathematical Analysis I (3)	MATH 224 and 247	
	MATH 364B	Ordinary Differential Equations II (3)	MATH 364A	
	ENGL 101; OR ENGL 317	Composition (3); OR Technical Communication (3)	GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and MATH 122 (B2)	101 not offered
	Elective	Science or Engineering (3)	Keep with theme (PHYS, EE, or CE)	
	GE (area F)	Capstone (3)	GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and MATH 122 (B2)	

Year 4

Semester	Course #	Course Title (Units)	Prerequisites	Notes
7	MATH 361B	Introduction to Mathematical Analysis II (3)	MATH 361A	
	MATH 470	Introduction to Partial Differential Equations (3)	MATH 364A	Fall only
	Elective	Science or Engineering Elective (3)	Keep with theme (PHYS, EE, or CE)	
	GE (area F)	Capstone (3)	GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and MATH 122 (B2)	
	Elective	Elective (3)		
8	Upper Division Elective	MATH/STAT (3)		
	Upper Division Elective	MATH/STAT (3)		
	Elective	Science or Engineering (3)	Keep with theme (PHYS, EE, or CE)	
	GE (area F)	Capstone (3)	GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and MATH 122 (B2)	
	Elective	Elective (2)		