



**BACHELOR OF SCIENCE IN MATHEMATICS  
OPTION IN MATHEMATICS EDUCATION  
FOUR YEAR DEGREE WORKSHEET  
2019-2020 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. Please note that your Major Specific Requirements (MSRs) are **bolded** in the document and are also listed as an “MSR” in the notes column. These courses must be completed in order to declare your major. **All students must have a GPA of 2.5 or higher in the STEM MSR suite.**

Pre-Mathematics first-time freshmen must complete MATH 122 and MATH 123 with a cumulative GPA of 2.5 or higher.

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

**Year 1**

Semester	Course #	Course Title (Units)	Prerequisites	Notes
1	<b>MATH 122 (area B4)</b>	<b>Calculus I (4)</b>	<b>Appropriate placement; MATH 111 and either 112B or 113</b>	<b>MSR</b>
	<b>GE (area A2)</b>	<b>Written Communication (3)</b>		<b>MSR</b>
	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	<b>MATH 123 (area B4)</b>	<b>Calculus II (4)</b>	<b>MATH 122</b>	<b>MSR</b>
	<b>GE (area A1)</b>	<b>Oral Communication (3)</b>		<b>MSR</b>
	<b>GE (area A3)</b>	<b>Critical Thinking (3)</b>		<b>MSR</b>
	GE (area C,D,E)	Other Explorations (3)		
	GE (area B2)	Life Science (3-4)	<i>Corequisite:</i> GE (area B3) Life Science Lab	B2 or B1 with lab

## Year 2

Semester	Course #	Course Title (Units)	Prerequisites	Notes
3	MATH 224	Calculus III (4)	MATH 123	
	MATH 233	Fundamental Concepts for Advanced Mathematics (3)	MATH 123	
	PHYS 151; <b>OR</b> PHIL 170; <b>OR</b> GE (Area C2)	Mechanics and Heat (4); <b>OR</b> Critical Reasoning (3); <b>OR</b> Foreign Language I (4)	MATH 122, 123, or 224; <b>OR</b> GE Written Communication (A2); <b>OR</b> varies	
	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 310	History of Early Mathematics (3)	<i>Pre/Corequisite:</i> MATH 224, 233, or 247	
	PHYS 152 (if PHYS 151 taken); <b>OR</b> PHIL 270 (if PHIL 170 taken); <b>OR</b> GE (area C2)	Electricity and Magnetism (4); <b>OR</b> Symbolic Logic I (3); <b>OR</b> Foreign Language II (4)	PHYS 151, <i>Pre/Corequisite:</i> MATH 123; <b>OR</b> PHIL 170; <b>OR</b> varies	
	MTED 301	Computer Applications in Mathematics for Teachers (3)	MATH 122	
	Elective	Elective (3)		

## Year 3

Semester	Course #	Course Title (Units)	Prerequisites	Notes
5	MATH 380	Probability and Statistics (3)	MATH 224	
	MATH 355	College Geometry (3)	MATH 247	
	ENGL 300; <b>OR</b> ENGL 317	Advanced Composition (3); <b>OR</b> Technical Communication (3)	GE Foundation	
	GE (area C,D,E)	Other Explorations (3)		
	Elective	Elective (3)		

Semester	Course #	Course Title (Units)	Prerequisites	Notes
6	MATH 341	Number Theory (3)	MATH 233	
	STAT 381	Mathematical Statistics (3)	MATH 247 and 380	
	EDSS 300M	Introduction to Teaching-Mathematics (3)	Required: TB test, Certificate of Clearance, 40 Observation hours	
	GE (area B1); <b>OR</b> Elective	GE (area B1) Physical Science (3-4); <b>OR</b> Elective (if PHYS 151 taken) (3)		
	GE (area C,D,E)	Other Explorations (3)		

## Year 4

Semester	Course #	Course Title (Units)	Prerequisites	Notes
7	MATH 444	Introduction to Abstract Algebra (3)	MATH 233, 247, and 341	
	MTED 371	Mathematical Modeling for Secondary Mathematics Teachers (3)	MATH 224, 233, and 247	
	GE Upper Division (area B-UD, C-UD, D-UD)	Upper Division (3)	GE Foundation	
	GE Upper Division (area B-UD, C-UD, D-UD)	Upper Division (3)	GE Foundation	
	Elective	Elective (3)		
8	MATH 361A	Intro. to Mathematical Analysis I (3)	MATH 224 and 247	
	MTED 411	Topics and Issues in Secondary School Mathematics (3)	MATH 310, 341, 355, 380, 444, and EDSS 300M	
	Upper Division Elective	MATH (3)		
	GE Upper Division (area B-UD, C-UD, D-UD)	Upper Division (3)	GE Foundation	
	Elective	Elective (1)		