

SINGLE-SUBJECT MATTER PREPARATION PROGRAM IN MATHEMATICS

- The SSMP is NOT a major. Students must also satisfy the requirements of a major to receive a bachelor’s degree.
- Students interested in the SSMP should consult the Mathematics SSMP Coordinator as soon as possible to obtain detailed information on GPA requirements and the portfolio of work that must be compiled, as well as advice on how to best coordinate completion of the SSMP and the Bachelor of Science in Mathematics.
- For more information on the SSMP, visit: www.csusm.edu/math.

COURSEWORK REQUIREMENTS:

✓	Course	Units
<input type="checkbox"/>	CS 111: Computer Science I (^MATH 160)	4
<input type="checkbox"/>	EDUC 350: Foundations of Teaching as a Profession	3
<input type="checkbox"/>	PHYS 201: Physics of Mechanics and Sound (*MATH 160)	4
<input type="checkbox"/>	MATH 160: Calculus with Applications I (*MATH 125, 126 or pass MATH Placement Exam)	5
<input type="checkbox"/>	MATH 162: Calculus with Applications II (*MATH 160)	4
<input type="checkbox"/>	MATH 260: Calculus with Applications III (*MATH 162)	4
<input type="checkbox"/>	MATH 314: Workshop for Future Mathematics Educators (*MATH 162; ~EDUC 350)	2
<input type="checkbox"/>	MATH 330: Introduction to the History of Mathematics (*MATH 160)	3
<input type="checkbox"/>	MATH 350: Foundations for Theoretical Mathematics (*MATH 160 with an A- or higher or MATH 162)	3
<input type="checkbox"/>	MATH 374: Linear Algebra (*MATH 160) (MATH 264 accepted for MATH 374 in Fall 22 and Spring 23)	3
<input type="checkbox"/>	MATH 378: Number Systems (*MATH 350)	3
<input type="checkbox"/>	MATH 410: Modern Geometry (*MATH 350)	3
<input type="checkbox"/>	MATH 430: Foundations of Analysis (*MATH 378)	3
<input type="checkbox"/>	MATH 441: Introduction to Probability (*MATH 260; spring only)	3
<input type="checkbox"/>	MATH 442 [†] : Introduction to Mathematical Statistics (*MATH 441; fall only)	3
<input type="checkbox"/>	MATH 470: Introduction to Abstract Algebra (*MATH 378)	3

Elective Courses (6 units)

Choose 6 units from the following courses:

MATH 346: Mathematical Methods for Physics (3) (*MATH 162; fall only)

MATH 362: Differential Equations (3) (*MATH 162; spring only)

Or, any other MATH courses numbered 411-599 approved for the MATH major and not already used to fulfill a requirement.

✓	Course	Units
<input type="checkbox"/>		3
<input type="checkbox"/>		3

*prerequisite; ^co/prerequisite; ~corequisite

[†]Students may choose to substitute MATH 242 AND an additional 3 units of Electives for MATH 442.

SINGLE-SUBJECT MATTER PREPARATION PROGRAM IN MATHEMATICS

OPTIMAL COORDINATION OF THE BACHELOR OF SCIENCE IN MATHEMATICS AND THE SINGLE SUBJECT MATTER PREPARATION PROGRAM IN MATHEMATICS

Requirements for the Bachelor of Science Degree:	Requirements for Subject Matter Preparation Program:	What you should take to complete BOTH programs most efficiently:
Two lower-division non-mathematics science courses (see list)		Two lower-division non-mathematics science courses (see list)
CS 111: Computer Science I	CS 111: Computer Science I	CS 111: Computer Science I
PHYS 201: Physics of Mechanics & Sound	PHYS 201: Physics of Mechanics & Sound	PHYS 201: Physics of Mechanics & Sound
MATH 160: Calculus with Applications, I	MATH 160: Calculus with Applications, I	MATH 160: Calculus with Applications, I
MATH 162: Calculus with Applications, II	MATH 162: Calculus with Applications, II	MATH 162: Calculus with Applications, II
MATH 260: Calculus with Applications, III	MATH 260: Calculus with Applications, III	MATH 260: Calculus with Applications, III
First 3 units of approved upper-division Mathematics major elective	MATH 330: Intro to the History of Mathematics	MATH 330: Intro to the History of Mathematics
MATH 350: Foundation for Theoretical Mathematics	MATH 350: Foundation for Theoretical Mathematics	MATH 350: Foundation for Theoretical Mathematics
MATH 374: Linear Algebra	MATH 374: Linear Algebra	MATH 374: Linear Algebra
MATH 378: Number Systems	MATH 378: Number Systems	MATH 378: Number Systems
Second 3 units of approved upper-division Mathematics major elective	MATH 410: Modern Geometry	MATH 410: Modern Geometry
MATH 422 Intro to Number Theory or MATH 472 Intro to Graph Theory or MATH 474 Intro to Combinatorics	First 3 units of approved upper-division Mathematics SSMP elective	MATH 422 Intro to Number Theory or MATH 472 Intro to Graph Theory or MATH 474 Intro to Combinatorics
MATH 430: Foundations of Analysis	MATH 430: Foundations of Analysis	MATH 430: Foundations of Analysis
MATH 441: Intro to Probability	MATH 441: Intro to Probability	MATH 441: Intro to Probability
Third 3 units of approved upper-division Mathematics major elective	MATH 442: Intro to Mathematical Stats	MATH 442: Intro to Mathematical Stats
MATH 470: Intro to Abstract Algebra	MATH 470: Intro to Abstract Algebra	MATH 470: Intro to Abstract Algebra
MATH 490 Senior Seminar or MATH 491 Senior Seminar w/ Lab or Approved 500-level MATH	Second 3 units of approved upper-division Mathematics SSMP elective	MATH 490 Senior Seminar or MATH 491 Senior Seminar w/ Lab or Approved 500-level MATH
Fourth 3 units approved upper-division Mathematics major elective		Approved upper-division Mathematics major elective (3 units)
	EDUC 350: Foundations of Teaching as a Profession	EDUC 350: Foundations of Teaching as a Profession
	MATH 314: Workshop for Future Mathematics Educators	MATH 314: Workshop for Future Mathematics Educators

Students planning to enroll in the CSUSM Credential Program should be aware that although only EDUC 350 is required for the SSMP Program in Mathematics, the three courses EDUC 350, EDUC 364 (The Role of Cultural Diversity in Schooling), and EDUC 422 (Technology Tools for Teaching and Learning) are all part of the admission requirement to the CSUSM Credential Program. These students are advised to take EDUC 364 and EDUC 422 as elective courses.