

## Optimal Coordination of the Bachelor of Science and Single Subject Matter Program in Mathematics

Requirements for the Bachelor of Science Degree	Requirements for Single Subject Matter Preparation Program <sup>1</sup>	What you should take to complete BOTH programs most efficiently <sup>1</sup>
Two (2) Lower-division Non-Mathematics science courses- see list		Two (2) 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
*	Math 330 Intro to the History of Mathematics	Math 330 Intro to the History of Mathematics
Math 350 - Foundations for Theoretical Mathematics or Math 370 - Discrete Mathematics	Math 350 - Foundations for Theoretical Mathematics or Math 370 - Discrete Mathematics	Math 350 - Foundations for Theoretical Mathematics or Math 370 - Discrete 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
*	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	*	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 440 Intro to Probability and Statistics	Math 440 Intro to Probability and Statistics	Math 440 Intro to Probability and Statistics
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 course	*	Math 490 Senior Seminar or Math 491 Senior Seminar w/ Lab or Approved 500 level Math
Approved upper-division Math electives (12 units) (Above courses marked * count as electives)	Approved upper-division Math electives (9 units) (Above courses marked * count as electives)	Approved upper-division Math electives (6 units)
	EDUC 350 Foundations of Teaching as a Profession	EDUC 350 Foundations of Teaching as a Profession
	Math 314 Workshop for Future Math Educators	Math 314 Workshop for Future Math Educators

Students planning to enroll in the CSUSM College of Education's Credential Program should be aware that even though only EDUC 350 is required for the Subject Matter Preparation Program in Mathematics, EDUC 350, EDUC 364, and EDUC 422 are all part of the admission requirement to the CSUSM Credential Program. **Please contact the College of Education (University Hall 2nd floor) for further admission requirements.**

<sup>1</sup> The single subject matter preparation program is **not a degree program**. Admission to a Credential program requires a Bachelor's degree as well as subject matter competence. Candidates that don't already have a Bachelor's degree are advised to follow the **right-most** column.