CATALOG TERM: 2023-2024 **TOTAL UNITS REQUIRED = 120**

MATHEMATICS

Mathematics Education Option

- This worksheet is intended for supplemental use only. The University will use your Academic Requirements Report (ARR) to track your graduation requirements, including those for your major. Please continue to check your ARR for accuracy.
- If your ARR requires a correction, please submit an ARR Correction Form.
- Your Degree Planner (in mycsusm.edu) will display the following requirements in the University's recommended sequence.
- All courses used for the major, including preparation for the major must be completed with a grade of C (2.0) or better.
- A minimum of 21 upper-division units in MATH must be completed at CSUSM.
- No more than 3 units of either MATH 498 or 499 may be applied toward the major.
- No more than 3 units of MATH 495 may be applied toward the major.
- All non-articulated courses MUST be reviewed and approved in advanced by a Mathematics faculty advisor.

MATHEMATICS CORE COURSEWORK (33 UNITS)

Lower-division Calculus Courses (13 units):

✓	Course	Units
	MATH 160: Calculus with Applications I (*MATH 125, 126 or pass MATH Placement Exam)	5
	MATH 162: Calculus with Applications II (*MATH 160)	4
	MATH 260: Calculus with Applications III (*MATH 162)	4

Non-mathematics Supporting Courses (8 units):

✓	Course	Units
	CS 111: Computer Science I (^MATH 125 or 160)	4
	PHYS 201: Physics of Mechanics & Sound (*MATH 160)	4

Core Courses (12 units)

✓	Course	Units
	MATH 264: Introduction to Linear Algebra (*MATH 162)	3
	MATH 350: Foundations for Theoretical Mathematics (*MATH 160 with an A- or higher or MATH 162)	3
	MATH 378: Number Systems (*MATH 350)	3
	MATH 441: Introduction to Probability (*MATH 260)	3

MATHEMATICS EDUCATION OPTION REQUIREMENTS (32 UNITS)

Education Requirement (11 units):

✓	Course	Units
	EDUC 350: Foundations of Teaching as a Profession	3
	EDUC 364: The Role of Cultural Diversity in Schooling	3
	EDUC 422: Teaching, Learning, and Technology	3
	MATH 314: Workshop for Future Mathematics Educators (*MATH 162; ~EDUC 350)	2

Upper-division Option Requirements (15 units):

✓	Course	Units
	MATH 330: Introduction to the History of Mathematics (*MATH 160)	3
	MATH 410: Modern Geometry (*MATH 350)	3
	MATH 430: Foundations of Analysis (*MATH 378)	3
	MATH 470: Introduction to Abstract Algebra (*MATH 378)	3

**prerequisite; ^co/prerequisite; ~corequisite; [C] Score above 50% on the Chemistry Placement Exam*

MATHEMATICS

Mathematics Education Option

Select one of the following options:

MATH 442: Introduction to Mathematical Statistics (*MATH 441)
MATH 444: Regression Analysis (*MATH 264, 441)
MATH 242 **and** any MATH course numbered 411-499 or 505+ not already used to fulfill a major requirement.

✓	Course	Units
		3

Upper-division Electives (6 units):

Select 6 units from the following:

MATH/CS 464: Numerical Analysis & Computing (*CS 111, MATH 162)
MATH/CS 480: Introduction to Optimization (*MATH 264 or 374)
Any MATH course numbered 350-399, 410-499 or 505+ not already used to fulfill a major requirement.

✓	Course	Units
		3
		3