MATHEMATICS

General 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 <u>ARR Correction Form</u>.
- Your <u>Degree Planner</u> (in <u>mycsusm.edu</u>) 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)		
		MATH 162: Calculus with Applications II (*MATH 160)	4	
		MATH 260: Calculus with Applications III (*MATH 162)	4	

Non-mathematics Supporting Courses (8 units):

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		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

GENERAL OPTION REQUIREMENTS (28-29 UNITS)

Select 1 of the following courses (4-5 units):

CHEM 150/150L: General Chemistry (5) (*MATH 101, 105 or MATH Cat 1 or 2) CS 211: Computer Science II (4) (*CS 111, ^MATH 160) PHYS 202: Physics of Electromagnetism and Optics (4) (*PHYS 201 or 205 and MATH 162)

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Upper-division Option Requirements (12 units):

✓	_	Course	Units		
		MATH 364: Intermediate Linear Algebra (*MATH 264, 350)			
		MATH 430: Foundations of Analysis (*MATH 378)	3		
		MATH 470: Introduction to Abstract Algebra (*MATH 378)	3		

Units 4-5

MATHEMATICS

General Option

Select 1 course from the following:

MATH 490: Senior Seminar MATH 491: Senior Seminar with Lab Approved MATH course numbered 505 or above

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Upper-division Electives (12 units):

Select 12 units from the following:

MATH/CS 464: Numerical Analysis & Computing (*CS 111, MATH 162) MATH/CS 480: Introduction to Optimization (*MATH 264 or 374) MATH 330: Introduction to the History of Mathematics (*MATH 160) MATH 362: Differential Equations (*MATH 162) Any MATH course numbered 410-499 or 505+ not already used to fulfill a major requirement.

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