CATALOG TERM: 2023-2027 **TOTAL UNITS REQUIRED = 120**

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 ARR Correction Form.
- Your Degree Planner 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 Calculus Readiness Diagnostic)	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, 126, or 160)	4
☐	PHYS 201: Physics of Mechanics & Sound (*MATH 160)	4

Mathematics Core Courses (12 units)

✓	Course	Units
☐	MATH 264: Introduction to Linear Algebra (*MATH 162)	3
☐	MATH 350: Foundations for Theoretical Math (*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 Category 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)

✓	Course	Units
☐		4-5

Upper-division Option Requirements (12 units):

✓	Course	Units
☐	MATH 364: Intermediate Linear Algebra (*MATH 264 and MATH 270 with a B or higher or MATH 350)	3
☐	MATH 430: Foundations of Analysis (*MATH 378)	3
☐	MATH 470: Introduction to Abstract Algebra (*MATH 378)	3

Select 1 course from the following:

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

MATHEMATICS

General Option

✓	Course	Units
☐		3

Upper-division Electives (12 units):

Select 12 units from the following:

MATH/CS 464: Numerical Analysis and 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.

✓	Course	Units
☐		
☐		
☐		
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