MATHEMATICS BS DEGREE REQUIREMENTS 2024 - 2025

OPTION IV - MATHEMATICS OF COMPUTATION

Student name: _____ UNM ID: _____

Concentration: **Mathematics of Computation** Minor (req): COMPUTER SCIENCE Admitted

to program on: _____ as a (circle one of) FR / SO / JR / SR .

Expected date of graduation: _____

Student's interests: _____

Completed Courses	Sem	Grade	Instructor	Pre-approved substitutions
Math 1512 (162) Calc 1				
Math 1522 (163) Calc 2				
Math 2531 (264) Calc 3				
MATH 321 Linear Algebra				
Four from 312, 316, 317, 319, 322 #1				
#2				
#3				
#4				
One from MATH 441 or STAT 345 #1				
MATH 375 Intro Num Computing				
MATH 464 Appl Matrix				
MATH 471 Intro Scient Comp				
Computing course at the level of ENG130L, CS 152L, PHYS 2415, or ECE 131L #1				

Concentration Requirements

- Complete all of the following
  - Complete the following:
    - MATH375 - Introduction to Numerical Computing (3)
    - MATH464 - Applied Matrix Theory (3)
    - MATH471 - Introduction to Scientific Computing (3)
  - Complete at least 1 of the following:
    - MATH441 - Probability (3)

- STAT345 - Elements of Mathematical Statistics and Probability Theory (3)
    - Complete at least 4 of the following:
        - MATH312 - Partial Differential Equations for Engineering (3)
        - MATH316 - Applied Ordinary Differential Equations (3)
        - MATH317 - Elementary Combinatorics (3)
        - MATH319 - Theory of Numbers (3)
        - MATH322 - Modern Algebra I (3)
    - Note that MATH 401 is not required for this concentration, but is recommended for students contemplating advanced study in mathematics.
    - A minor in Computer Science is required.

Reference: https://catalog.unm.edu/catalogs/2023-2024/#/programs/r1mTQeXqs5/BytU7_sj9?bc=true&bcCurrent=Bachelor%20of%20Science%20in%20Mathematics&bcGroup=Mathematics%20%26%20Statistics&bcItemType=programs

Notes: Fall only: Math 322, 441, 462, 464, 471.

Advisement History:

Date	Advised by	Semester	Recommended courses for semester

Minor Study Requirements, https://catalog.unm.edu/catalogs/2023-2024/#/programs/SysNNI-0c?bc=true&bcCurrent=Minor%20in%20Mathematics&bcGroup=Mathematics%20%26%20Statistics&bcItemType=programs

Minor in Mathematics
MATH 2530; 12 credit hours in Mathematics and Statistics courses numbered above 300. At least 6 of the 12 credit hours must be in courses labeled MATH. The Credit/No Credit grade option may not be used for minor study and the grades in all mathematics and statistics courses must be "C" (not "C-") or better. Courses required for a major may not be used to fulfill a minor requirement.

Minor in Statistics: Requirements for the Mathematics Major
MATH 1350 and 2530; STAT **345, 427, 428; an additional 3 credit hours of Statistics in courses numbered 300 and above. All 12 credit hours in courses 300-level and above must be in courses labeled STAT. The Credit/No Credit grade option may not be used for minor study and the grades in all statistics courses must be a "C" (not "C-") or better.