

**MATHEMATICS BS DEGREE REQUIREMENTS 2024 - 2025**

**OPTION I - PURE MATHEMATICS**

Student name: \_\_\_\_\_ UNM ID: \_\_\_\_\_

Concentration: **Pure Mathematics** Minor (req): \_\_\_\_\_

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 327 Intro Math thinking and Disc Structures				
MATH 321 Linear Algebra				
MATH 313 Complex Variable				
MATH 322 Modern Algebra I				
MATH 401 Advanced Calculus I				
Two from 319, 421, 431, 439, 441, 462, 472 #1				
#2				
MATH 402 (Spring) Adv Calc II				
Additional 300-level or above MATH 300 – 699 course #1				
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:
    - [MATH313](#) - Complex Variables (3)
    - [MATH322](#) - Modern Algebra I (3)
    - [MATH327](#) - Introduction to Mathematical Thinking and Discrete Structures (3)

- [MATH402](#) - Advanced Calculus II (3)
- Earn at least 6 credits from the following:
  - [MATH319](#) - Theory of Numbers (3)
  - [MATH431](#) - Introduction to Topology (3)
  - [MATH439](#) - Topics in Mathematics (1 - 3)
  - [MATH441](#) - Probability (3)
  - [MATH462](#) - Introduction to Ordinary Differential Equations (3)
  - [MATH472](#) - Fourier Analysis and Wavelets (3)
  - [MATH421](#) - Modern Algebra II (3)
- Earned at least 3 credits from MATH 300 - 699
- Students who are unfamiliar with mathematical abstraction are encouraged to take \*\*327 as early in their program as possible.

Reference: [https://catalog.unm.edu/catalogs/2023-2024/#/programs/r1mTQeXqs5/Bk7KIQ\\_jjq?bc=true&bcCurrent=Bachelor%20of%20Science%20in%20Mathematics&bcGroup=Mathematics%20%26%20Statistics&bcItemType=programs](https://catalog.unm.edu/catalogs/2023-2024/#/programs/r1mTQeXqs5/Bk7KIQ_jjq?bc=true&bcCurrent=Bachelor%20of%20Science%20in%20Mathematics&bcGroup=Mathematics%20%26%20Statistics&bcItemType=programs)

Notes: *Fall* only: Math 322, 431, 441, 462, 464, 471; *Spring* only: Math 319, 402, 421, 463, 472 {Alternate Springs}; Offered upon demand: **MATH 439**.

### Advisement History:

Date	Advised by	Semester	Recommended courses for semester

**Minor Study Requirements**, <https://catalog.unm.edu/catalogs/2023-2024/#/programs/SysNNI-oc?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.