

## MATHEMATICS BS DEGREE REQUIREMENTS 2023-2024

### OPTION II - APPLIED MATHEMATICS

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

Concentration: **Applied 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				
Computing course at the level of ENG130L, CS 152L, PHYS 2415, or ECE 131L #1				
MATH 316 ODEs				
MATH 321 Lin Algebra				
At least 3 credits from MATH or STAT 300 - 699 #1				
MATH311 or MATH402				
MATH 312 PDEs				
MATH 313 Complex Variables				
MATH 375 Num Computing				
MATH 401 Adv Calculus I				
One from 412, 441, 462, 463, 464, *471, 472 (if MATH402 is not taken) #1				

Concentration Requirements, Reference: <https://catalog.unm.edu/catalogs/2023-2024/#/programs/r1mTQeXqs5/HyXKUQuss9?bc=true&bcCurrent=Bachelor%20of%20Science%20in%20Mathematics&bcGroup=Mathematics%20%26%20Statistics&bcItemType=programs>

- Complete all of the following
  - Complete at least 1 of the following:
    - [MATH311](#) - Vector Analysis (3)
    - [MATH402](#) - Advanced Calculus II (3)

- Complete the following:
  - [MATH312](#) - Partial Differential Equations for Engineering (3)
  - [MATH313](#) - Complex Variables (3)
  - [MATH316](#) - Applied Ordinary Differential Equations (3)
  - [MATH375](#) - Introduction to Numerical Computing (3)
- Earn at least 3 credits from the following types of courses:

Both 311 and 402 can be taken for credit. If 402 is not chosen, then the concentration must include one course from: \*\*412, 441, 462, 463, 464, \*471, 472.

- Earned at least 3 credits from MATH or STAT 300 - 699

*Notes: Fall only: Math 322, 431, 441, 462, 464, 471; Spring only: Math 319, 402, 412, 421, 463, 472 {Alternate Springs}; Offered upon demand: MATH 439. For graduation, students must have 27 upper level math/stats credit hours.*

### 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.