

## Mathematical Sciences BA Requirement Checklist

(For students declaring the specialization on or after Fall 2025)

Each line represents a major or correlate requirement for the Mathematical Sciences BA. Please check off the requirements as completed and indicate which courses are satisfying them. Please note that these requirements do not include TCNJ's liberal learning and language requirements.

### 1. Required Core Courses:

- a. \_\_\_\_ MAT 127: Calculus A
- b. \_\_\_\_ MAT 128: Calculus B
- c. \_\_\_\_ MAT 200: Proof Writing Through Discrete Mathematics
- d. \_\_\_\_ MAT 205: Linear Algebra
- e. \_\_\_\_ MAT 275: Sophomore Seminar
- f. Core Option (one course unit, check one)
  - i. \_\_\_\_ MAT 305: Abstract Algebra
  - ii. \_\_\_\_ MAT 310: Real Analysis
  - iii. \_\_\_\_ MAT 316: Probability
- g. \_\_\_\_ MAT 498 Capstone

### 2. MAT/STA Options: Four additional course units

- a. \_\_\_\_ MAT/STA: Course with number 300 or above\* Course taken: \_\_\_\_\_
- b. \_\_\_\_ MAT/STA: Course with number 300 or above\* Course taken: \_\_\_\_\_
- c. \_\_\_\_ MAT/STA: Course with number 300 or above\* Course taken: \_\_\_\_\_
- d. \_\_\_\_ MAT/STA: Course with number 300 or above\*, or one of Course taken: \_\_\_\_\_  
MAT 229, STA 215, STA 216

\* The MAT 3xx or STA 3xx courses must have a number between 300 and 380. The MAT 4xx or STA 4xx courses must have a number between 400 and 480. Students may not count independent study, guided study, or independent research course units towards these options.

### 3. Correlate requirements:

- a. Computer Science Requirement:
  - i. \_\_\_\_ CSC 120 or MAT 203
- b. Lab Science Requirement (one course unit, check one):
  - i. \_\_\_\_ BIO 201 Foundations of Biological Inquiry
  - ii. \_\_\_\_ CHE 201 General Chemistry I
  - iii. \_\_\_\_ PHY 201 General Physics I