

Data Science Specialization Requirement Checklist

(For students declaring the specialization on or after Fall 2020)

Each line represents a major or correlate requirement for the Data Science specialization. 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 128: Calculus B
- b. ___ MAT 200: Proof Writing Through Discrete Mathematics
- c. ___ MAT 205: Linear Algebra
- d. ___ MAT 229: Multivariable Calculus
- e. ___ MAT 275: Sophomore Seminar
- f. ___ MAT 341: Computational Mathematics
- g. ___ STA 215: Statistical Inference
- h. ___ STA 305: Regression Analysis
- i. ___ STA 306: Multivariate Statistics
- j. ___ STA 307: Data Mining
- k. ___ STA 370: Statistical Software Development
- l. ___ STA 404: Computational and Bayesian Statistics
- m. ___ STA 498 Capstone

2. MAT/STA Options: Two 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: _____

*At most one course unit of courses numbered 39x or 49x (not counting the Capstone) may be counted towards the major.

3. Correlate requirements:

- a. Computer Science Requirements:
 - i. ___ CSC 220
 - ii. ___ CSC 230
- 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

* Or any lab course in Biology, Chemistry, or Physics numbered 200 or higher approved by the department