Applied Mathematics Specialization Checklist
(for students declaring the specialization on or after Fall 2018)

1. **Choose one of the following options for the computer science correlate:**
   - ____________CSC 220 Computer Science I **AND** CSC 230 Computer Science II
   - ____________CSC 250 Accelerated Computer Science I and II
   - ____________CSC 220 Computer Science I **AND** MAT 341 Computational Mathematics
     (for any option: grade of C- or better in CSC220)

2. **Choose one of the following options for the lab science correlate:**
   - ____________BIO 201 Foundations of Biological Inquiry
   - ____________CHE 201 General Chemistry I
   - ____________PHY 201 General Physics I

3. **Required Core Courses:**
   - ____________MAT 127 Calculus A
   - ____________MAT 128 Calculus B
   - ____________MAT 229 Multivariable Calculus
   - ____________MAT 200 Proof Writing Through Discrete Mathematics
   - ____________MAT 205 Linear Algebra
     (Average GPA of MAT 127, 128, 200, 205, 229 must be at least 2.5)
   - ____________MAT 275 Sophomore Seminar
   - ____________MAT 310 Real Analysis
   - ____________MAT 326 Differential Equations
   - ____________STA 215 Statistical Inference
   - ____________MAT 498 Capstone (must be the Applied Mathematics section of Capstone)
     (Capstone Prerequisite: attendance to 4 seminars in junior/senior year)
4. MAT/STA Options (6 course units required)

At most two of the six courses may have an STA prefix. At most one of the six courses may have a non-MAT or STA prefix.

_____________ 400 level course from the Applied Math Options list
_____________ 300 or 400 level course from the Applied Math Options list
_____________ 300 or 400 level course from the Applied Math Options list
_____________ Any course at the 300 or 400 level with MAT or STA prefix
_____________ Any course at the 300 or 400 level with MAT or STA prefix
_____________ Any course at the 300 or 400 level with MAT prefix, OR
            BIO 471/CSC 471, PHY 401, CSC 335, or CSC 445

Applied Math Options List:

MAT 303 Cryptography
MAT 315 Topics in Linear Algebra
MAT 316 Probability
MAT 317 Linear Programming
MAT 330 Mathematical Biology
MAT 331 Numerical Analysis
MAT 341 Computational Mathematics
MAT 426 Partial Differential Equations
MAT 454 Seminar in Applied Mathematics
STA 318 Operations Research