Applied Math Major Requirements

The Applied Mathematics Major is open to NCAS students, and to all non-UCN students as a second major. Students may not double major in both Mathematics and Applied Mathematics. A total of 59 credits is required for the Applied Mathematics Major.

Required Courses:
21:198:101 – Computers & Programming I (3 credits)
21:198:102 – Computers & Programming II (3 credits)
21:640:135 – Calculus I (4 credits)
21:640:136 – Calculus II (4 credits)
21:640:235 – Calculus III (4 credits)
21:640:314 – Elementary Differential Equations (3 credits)
21:640:327 – Probability & Statistics (3 credits)
21:640:350 – Linear Algebra (3 credits)
21:640:423 – Elementary Partial Differential Equations (3 credits)
21:640:473 – Numerical Analysis (3 credits)
21:640:475 – Applied Mathematics I (3 credits)
21:640:476 – Applied Mathematics II (3 credits)
21:750:213 – University Physics I (4 credits)**
21:750:214 – University Physics II (4 credits)**

Additional Required Math Electives:
9 credits at the 300-400 course level.

Recommended Electives:
21:640:311 – Advanced Calculus I (3 credits)
21:640:312 – Advanced Calculus II (3 credits)

*The Math Department recommends Foundations of Modern Math. 21:640:238 should be taken as soon as possible following the completion of 21:640:136 and before most 300 and 400 level courses.

**Students wishing to fulfill the lab science requirement using University Physics MUST TAKE 750:205 and 750:206 IN ADDITION to 750:213 and 750:214.

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Prerequisite Flow Diagram for the Applied Mathematics Major

- Corequisite

21:640:238 is preferred.