

Department of Mathematics, University of California, San Diego

PRELIMINARY DEGREE CHECK MAJOR in MATHEMATICS-APPLIED SCIENCE (MA31)

Name: _____ PID: _____

Admit quarter: _____ Graduating Quarter: _____ Major GPA: _____

Lower-Division Requirements

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| <ul style="list-style-type: none"> 1. Math 20A Calc for Sci & Eng 2. Math 20B Calc for Sci & Eng 3. Math 20C/31BH Calc & AnalyGeom 4. Math 20D Intro to Differential Eqns 5. Math 20E/31CH Vector Calculus 6. Math 20F/31AH Linear Algebra | <ul style="list-style-type: none"> 7. Programming: One of the following is required MAE 9 C/C++ Programming CSE 8A-AL-B Intro to Comp Sci: Java CSE 11 Intro to Comp Sci: Java (Accelerated Pace) |
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Upper-Division Requirements

Requires at least 7 upper-division mathematics courses (certain courses must be included - see below) and 7 additional upper-division courses selected from one or two of the following departments: Physics, Biology, Chemistry, Biochemistry, Cognitive Science, Computer Science, Economics, Management Science or Engineering. At least 3 of the 7 non-math courses must have a prereq of 3 quarters of calculus.

Mathematics

- 1. Math 109 Mathematical Reasoning (should be taken sophomore year)
- 2. One of the following:
 - Math 102 Applied Linear Algebra OR
 - Math 170A Numerical Linear Algebra
- 3. Math 140A-B or Math 142A-B Analysis
- 4. Any two-quarter upper-division Math sequence
- 5. Any three other upper-division Math courses for a total of at least 7 upper-division Math courses

Applied Science

Seven additional upper-division courses selected from one or two other departments, of which at least three require 3 quarters of calculus as a prerequisite(*).

Mathematics Course Selections

- 1. Math _____ 109 (4 units)
- 2. Math _____ (4 units)
- 3. Math _____ (4 units)
- Math _____ (4 units)
- 4. Math _____ (4 units)
- Math _____ (4 units)
- Math _____ (4 units)

Applied Science Course Selections

- 5. _____ (4 units)
- _____ (4 units)
- _____ (4 units)
- _____ (4 units)
- _____ (4 units) *
- _____ (4 units) *
- _____ (4 units) *

Mathematics Department Evaluation

Comments:

Advisor: _____

Date: _____