

# Mathematics - Applied Math Option, B.S.

## DEPARTMENT

MN in Mathematics, Minor  
BS in Mathematics - General Math Option, B.S.  
BS in Mathematics - Pure Math Option, B.S.  
BS in Mathematics - Applied Math Option, B.S.  
BS in Mathematics - Statistics Option, B.S.  
BS in Mathematics - Teaching Option, B.S.  
BS in Mathematics - Integrated Credential Option, B.S.  
MS in Mathematics, M.S.  
CRED in Single Subject Credential - Mathematics

## REQUIREMENTS

Department

### Bachelor of Science Degree Requirements

#### Applied Mathematics Option

The requirement for entrance to the major and minor programs is completion of two years of algebra as well as courses in geometry and trigonometry, or a sequence of courses containing their equivalents, such as MATH 3 and 5. It is strongly recommended that such study be completed before entrance to the university.

#### 1. Major requirements (61-62 units)

Core curriculum (34-35 units)  
MATH 75 (or 75A and B), 76, 77, 81 (15 units)  
MATH 101 or 107 (3-4 units)  
MATH 111 (4 units)  
MATH 151, 152 (8 units)  
MATH 171 (4 units)

#### Option specific electives (16 units)

Four courses from the following list (12 units): MATH 109, 121, 122, 123, 128, 181, 182

And the following two courses:

MATH 191T (1 unit)  
MATH 198 (3 units)

#### Additional requirements (11 units)

CSCI 40 (4 units)  
CSCI 41 (4 units)  
PHYS 4A (see note 1) (3 units)

#### 2. General Education requirements (49 units) (see notes 1 and 2)

#### 3. Other requirements (6 units)

Upper-division writing and Multicultural and International (MI)

#### 4. Sufficient elective units to meet required total units (varies)

#### 5. Total units (120)\*

\* G.E. and MI courses can be double-counted with major requirements. The writing requirement may be met by taking the upper-division writing exam. See advisor for details.

The Culminating Experience for the Applied Mathematics Option consists of the following:

- A Junior Seminar (MATH 191T) in Applied Mathematics in the spring semester of the year prior to graduation, and
- A Senior Project (MATH 198) in Applied Mathematics which will include a report and a presentation in the Junior Seminar in the spring semester of student's graduating year.

### **Major Advising Notes**

1. PHYS 4AL is not required for the math major. If students wish to include PHYS 4A as a General Education Breadth course, they must also take PHYS 4AL.
2. Three units of MATH 75 (or MATH 75A) also will satisfy the G.E. Foundation B4 requirement.
3. See Mathematics Road Map at <http://www.fresnostate.edu/degreeroadmap/>

**Advising Requirements.** It is strongly recommended, to all math majors, to have an advising session at least once a semester. See the department chair for assignment to an advisor.

**Grade Requirements.** All courses required as prerequisites for a mathematics course must be completed with a grade of C or better before registration will be permitted. All courses taken to fulfill major or minor requirements must be completed with a grade of C or better.

## **FACULTY**

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the faculty pages.

The faculty pages are updated by the department or program.