

# Mathematics - Integrated Credential 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

#### Integrated Teaching 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 (35 units)  
MATH 75 (or 75A and B), 76, 77, 81 (15 units)  
MATH 101 (4 units)  
MATH 111 (4 units)  
MATH 151, 152 (8 units)  
MATH 171 (4 units)

#### Option specific electives (17-18 units)

MATH 143 (4 units)  
MATH 145 (3 units)  
MATH 149S (4 units)  
MATH 161 (3 units)  
MATH Elective/Any three seminars (see note 1) (3-4 units)

#### Additional requirements (9 units)

MATH 191T (1 unit)  
CSCI 40 (4 units)  
PHYS 4A (3 units)  
PHYS 4AL (see note 2) (1 unit)

#### 2. General Education requirements (49 units) (see notes 2, 3, 4 and 5)

#### 3. Credential requirements (34 units)

CI 151 (3 units)  
CI 152 (3 units)  
CI 161 (3 units)  
LEE 157 (3 units)  
EHD 154A (1 unit)  
EHD 155A (4 units)  
EHD 155B (10 units)  
SPED 158 (3 units)  
LEE 156 (3 units)

EHD 154B (1 unit)

**4. Other requirements (6 units)**

Upper-division writing and Multicultural and International (MI)

**5. Sufficient elective units to meet required total units** (varies)

**6. Total (134-135 units)**

\* 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 Integrated Teaching Option is MATH 149S.

**Major Advising Notes**

1. The fifth MATH elective can be any 3-4 unit mathematics course, upper division or graduate, excluding MATH 100, 133, 134, 137, 138, 139, or any combination of seminars totaling 3 units. MATH 191T as Additional Requirement cannot be used for double counting of the requirements. Special conditions apply for graduate courses; see department advisor.
2. PHYS 4AL is required for the Integrated Teaching Option. PHYS 4A and 4AL will satisfy the General Education (G.E.) Breadth requirement.
3. Students in the Integrated Teaching Option are required to take ANTH 105W as a writing course that also satisfies the Multicultural/International Requirement.
4. Three units of MATH 75 (or MATH 75A) also will satisfy the G.E. Foundation B4 requirement.
5. Six units of G.E. courses are double counted (B1/3 and B4), and 6 units of G.E. requirements are waived (A3 and ID) for the Integrated Teaching Option.
6. 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.