

MATHEMATICS DEGREE REQUIREMENTS

**• Core Requirements for
All Mathematics •**

A. Math 2A ___ 2B ___ 2D/H2D ___
3A ___ 3D ___ 13 ___

B. Math 9 ___

C. One of the following sequences:

- Chem 1A ___ B ___ C ___; or
- Physics 7C ___ D ___ E ___

Upper-div: Math 120A ___ 121A ___
130A ___ 140A ___ 140B ___

**• No specialization/concentration
(Pure Mathematics) •**

*Core requirements for all Mathematics
Majors plus:*

Math 2E/H2E ___
Math 120B ___ 121B ___ 147 ___

*Five additional 4-unit math courses
(100-189):*

**• Specialization in
Mathematical Biology¹ •**

*Core requirements for all Mathematics
Majors plus:*

Math 2E/H2E ___

*Replace Item C in the Core Requirements with
the following:*

- Bio Sci 93 ___ 94 ___ **AND**
- Two courses selected from:
Chem 1A ___ 1B ___
Bio Sci 97 ___
Physics 2 ___ 7C ___ 7D ___

A. All of the following:

Math 105A/LA ___ 105B/LB ___
112A ___ 112B ___ 113A ___ 113B ___
113C ___ **OR** 115 ___

B. Two elective courses (at least one from
Math (100-189). The second may be either
upper-division Math or a 4-unit upper-division
Biological Sciences course with advanced
approval from the advisor for this
specialization.

Elec. #1. _____ Elec. #2. _____

• Concentration in Data Science¹ •

*Core requirements for all Mathematics
Majors plus:*

Math 2E/H2E ___

*Replace Item C in the Core Requirements with
the following:*

Math 10 ___ Stats 7 ___ Physics 7C ___

A. All of the following:

Math 105A ___ 105B ___ 121B ___
130B ___ 110A ___ 110B ___

B. Three elective courses from²:

Stats 110 ___
I&C Sci 105 ___
Math 115 ___ 117 ___ 118 ___ 130C ___
133A ___ 133B ___ 140C ___
162A ___ 162B ___ 173A ___ 173B ___
175 ___ 176 ___
CompSci 171 ___ 172B ___ 177 ___
178 ___ 179 ___ 183 ___
184A ___ 184C ___

**• Specialization in Applied and
Computational Mathematics¹ •**

*Core requirements for all Mathematics
Majors plus:*

Math 2E/H2E ___

A. All of the following:

Math 105A/LA ___ 105B/LB ___
112A ___ 112B ___ 115 ___ 121B ___

B. Three elective courses from:

Math 107/107L ___ 112C ___ 117 ___
118 ___ 130B ___ 130C ___
133A ___ 133B ___ 140C ___ 176 ___

*Two approved upper-division courses in an
area of application outside of Mathematics.
Approval must be obtained in advance from the
advisor for this specialization. The student is
responsible for satisfying any prerequisites for
these courses.*

Elec. #1. _____ Elec. #2. _____

**• Specialization in
Mathematics for Education¹ •**

*Core requirements for all Mathematics
Majors plus:*

Math 8 ___
Math 105A/LA ___ 120B ___

130B ___ 150 ___ 161 ___
180A ___ 184 ___ 184L ___ **AND**

*One additional math course numbered 100-
189: _____*

Physical Sciences 5 ___ 105 ___

• Concentration in Mathematical Finance¹ •

*Core requirements for all Mathematics
Majors plus:*

A. All of the following:

Math 2E/H2E ___
Math 130B ___ 133A ___ 133B ___

B. Three elective courses from:

Math 105A/LA ___ 105B/LB ___ 107/L ___
112A ___ 112B ___ 112C ___
115 ___ 117 ___ 118 ___ 121B ___
130C ___ 133C ___ 140C ___ 176 ___

C. Eight required economics courses:

Econ 20A ___ 20B ___
Econ 105A ___ 105B ___ 105C ___
Econ 122A ___ **OR** 123A ___
Econ 132A ___
Econ 134A ___

**• Concentration in Mathematics for
Education/Secondary Teaching
Certification •**

*Admission requires approval in advance. The
admission process begins with completing an
Intent form at the CalTeach Resource and
Advising Center.*

*Core requirements for all Mathematics
Majors plus:*

Math 8 ___

A. All of the following:

Math 105A/LA ___ 120B ___
130B ___ 150 ___ 161 ___ 180A ___
184 ___ 184L ___ **AND**

*One additional math course numbered 100-
189: _____*

B. Three elective courses from:

Phy Sci 5 ___ 105 ___

Chem/Physics 193 ___

Educ 55 ___ 109 ___ 143A ___ 143B ___
148 ___ **AND**
two quarters of Educ 158 ___

This **concentration** allows students to earn a
bachelor's degree and complete the required
coursework and field experience for a
California Preliminary Single Subject Teaching
Credential at the same time.

NOTE: Students may pursue either the
concentration in Mathematics for
Education/Secondary Teaching Certification
OR the specialization in Mathematics for
Education, but not both.

• ¹For ALL Specializations/Concentrations EXCEPT CalTeach •

<http://www.math.uci.edu/undergraduate-studies/concentrations-and-specializations>

An application should be completed at least 3 quarters prior to graduation. **Admission into a concentration or specialization is not guaranteed.** The department may limit the number of students admitted into this concentration during impacted years.

• ²Three elective courses from list provided. At least one of the electives must be from outside the Mathematics department.