

# MATHEMATICS DEGREE REQUIREMENTS

## • Core Requirements for All Math Majors •

**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\_\_\_\_; **or**
- Physics 2\_\_\_\_ 7C\_\_\_\_ 7D\_\_\_\_; **or**
- Physics 2\_\_\_\_ 7C\_\_\_\_ 7E\_\_\_\_

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 Biology •

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

An application should be completed at least 3 quarters prior to graduation.

*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\_\_\_\_

All of the following:

Math: 105A/LA\_\_\_\_ 105B/LB\_\_\_\_  
112A\_\_\_\_ 112B\_\_\_\_ 113A\_\_\_\_ 113B\_\_\_\_;  
113C\_\_\_\_ **OR** 115\_\_\_\_

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 Mathematical Finance •

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

An application should be completed at least 3 quarters prior to graduation.

*Core requirements for all Mathematics Majors **plus**:*

Math 2E/H2E\_\_\_\_

Math 130B\_\_\_\_ 133A\_\_\_\_ 176\_\_\_\_

**A.** Three elective courses from:

Math:

105A/LA\_\_\_\_ 105B/LB\_\_\_\_ 107/L\_\_\_\_

112A\_\_\_\_ 112B\_\_\_\_ 112C\_\_\_\_

115\_\_\_\_ 117\_\_\_\_ 118\_\_\_\_ 119\_\_\_\_

121B\_\_\_\_ 130C\_\_\_\_ 133B\_\_\_\_ 140C\_\_\_\_

**B.** Eight required economics courses:

Econ 20A\_\_\_\_ 20B\_\_\_\_

Econ 105A\_\_\_\_ 105B\_\_\_\_ 105C\_\_\_\_

Econ 122A\_\_\_\_ **OR** 123A\_\_\_\_

Econ 132A\_\_\_\_

Econ 134A\_\_\_\_

## • Specialization in Applied and Computational Mathematics •

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

An application should be completed at least 3 quarters prior to graduation.

*Core requirements for all Mathematics Majors **plus**:*

Math 2E/H2E\_\_\_\_

All of the following:

Math 105A/LA\_\_\_\_ 105B/LB\_\_\_\_

112A\_\_\_\_ 112B\_\_\_\_ 115\_\_\_\_ 121B\_\_\_\_

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 Education •

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

An application should be completed at least 3 quarters prior to graduation.

*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 Mathematics for Education/Secondary Teaching Certification •

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

*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\_\_\_\_

Chemistry/Physics 193\_\_\_\_

Education 55\_\_\_\_ 109\_\_\_\_ 143A\_\_\_\_

143B\_\_\_\_ 148\_\_\_\_ **AND**

two quarters of Education 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.