### 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

### Concentration in Data Science

Core requirements for all Mathematics Majors plus:
Math 2E/H2E

### Concentration in Mathematical Finance

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

### 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

### Concentration in Applied and Computational Mathematics

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  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.  Elec. #3.

### Concentration in Mathematics for Education

Core requirements for all Mathematics Majors plus:
Math 8

A. All of the following:  
   - Math 105A/LA  120B  
   - 130B  150  161  180A  184  

B. Three elective courses from:  
   - Math Sci 105  112  117  118  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.  Elec. #3.

### Concentration in Mathematical Biology

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  98  99  100  
    - 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 Science

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

### Concentration in Applied and Computational Mathematics

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  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.  Elec. #3.

### Concentration in Electrical Engineering

Core requirements for all Mathematics Majors plus:
Math 8

A. All of the following:  
   - Math 105A/LA  120B  
   - 130B  150  161  180A  184  

B. Three elective courses from:  
   - Math 115  117  118  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.  Elec. #3.

### Concentration in Mathematical Finance

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 143A

### 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  

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.

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1 For 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.

Effective Fall 2018