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____

- **Concentration in Mathematical Finance**
  
  
  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____133B____

  **A. Three elective courses from:**

  Math:
  - 105A/LA____105B/LB____107/L____
  - 112A___112B___112C____
  - 115____117____118____121B____
  - 130C___133C___140C____176____

  **B. Eight required economics courses:**

  Econ 20A____20B____
  Econ 105A____105B____105C____
  Econ 122A____OR 123A____
  Econ 132A____
  Econ 134A____

- **Specialization 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____184L____AND
  
  **One additional math course numbered 100-189:**

  Physical Sciences 5____105____

- **No specialization/concentration (Pure Mathematics)**
  
  **Core requirements for all Mathematics Majors plus:**

  **Math** 2E/H2E____
  
  Math120B____121B____147____
  
  Five additional 4-unit math courses (100-189):

  ________ _______ _______ _______

- **Specialization in Applied and Computational Mathematics**
  
  
  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**
  
  
  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____184L____AND

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

  Physical Sciences 5____105____

- **Specialization in Mathematical Biology**
  
  
  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._______

Effective Fall 2017