INTRODUCTORY REQUIREMENTS

Calculus: MATH 19A (FWS) ___ or MATH 20A (F) ___
       MATH 19B (FWS) ___ or MATH 20B (W) ___
Linear Algebra: MATH 21 (FWS) ___
Multivariable Calculus: MATH 23A (FWS) ___ + MATH 23B (FWS) ___

ADVANCED REQUIREMENTS

Math: MATH 24 Ordinary Differential Equations (S) ___
      MATH 100 Introduction to Proof and Problem Solving (FWS) ___
      MATH 110 Introduction to Number Theory (FW) ___
      MATH 111A Algebra (FW) ___
Analysis: ONE from the following...
      MATH 103A Complex Analysis (FS) ___
      MATH 105A Real Analysis (FW) ___
Computational: ONE from the following...
      MATH 145/L Introduction to Chaos Theory (W) ___
      (cannot receive credit for both MATH 145 and AMS 114)
      AMS 114 Introduction to Dynamical Systems (formerly AMS 146) (W) ___
      (cannot receive credit for both AMS 114 and MATH 145)
      AMS 147 Computational Methods and Applications (W) ___
Electives: TWO from the following...
      AMS 114 Introduction to Dynamical Systems (formerly AMS 146) (W) ___
      (cannot receive credit for both AMS 114 and MATH 145)
      AMS 131 Introduction to Probability Theory (S) ___
      AMS 147 Computational Methods and Applications (W) ___
      BME 110 Computational Biology Tools (FW) ___
      CMPE 107 Probability and Statistics for Engineers (FW) ___
      CMPE 108 Data Compression (*) ___
      CMPE 153 Digital Signal Processing (*) ___
      CMPE 177 Applied Graph Theory and Algorithms (*) ___
      CMPS 101 Algorithms and Abstract Data Types (FWS) ___
      CMPS 102 Introduction to Analysis of Algorithms (S) ___
      CMPS 104A Fundamental of Compiler Design I (F) ___
      CMPS 109 Advanced Programming (WS) ___
      CMPS 112 Comparative Programming Languages (W) ___
      CMPS 122 Computer Security (*) ___
      CMPS 130 Computational Models (F) ___
      CMPS 132 Computability & Computational Complexity (W) ___
      CMPS 142 Machine Learning and Data Mining (F) ___
      ECON 113 Introduction to Econometrics (FWS) ___
      EE 103 Signals and Systems (FS) ___
      EE 130/L Introduction to Optoelectronocs and Photonics / Laboratory (F) ___
      EE 135/L Electromagnetic Fields and Waves / Laboratory (W) ___
      EE 151 Communications Systems (W) ___
      EE 154 Feedback Control Systems (F) ___
Other upper division courses with heavy emphasis on computational mathematics may occasionnally be accepted with permission of department

COMPREHENSIVE REQUIREMENT

MATH 194 Senior Seminar (WS) ___ OR MATH 195 Senior Thesis (IS) ___

Disciplinary Communication: Students satisfy this requirement by successfully completing courses MATH 100 and either MATH 194 or MATH 195. The DC course requirement must be taken at UCSC.