2011-13 Cal Poly Catalog

Mathematics Department

Mathematics Minor
Students may earn a minor in mathematics by completing a coordinated course of study. The program consists of a core of required courses, followed by two tracks of advanced work, to be chosen in concert with a student's career objectives. Interested students should contact the Mathematics Department for individual advisement.

I. Required courses .................................................. 8
   MATH 206 Linear Algebra I (4) or
   MATH 244 Linear Analysis I (4)
   MATH 248 Methods of Proof in Mathematics (4)

II. Complete two tracks ............................................. 16
   A track consists of two courses from one of the groups A-L. Completion of four courses in either group A or L is considered two tracks. Some tracks have additional mathematics prerequisites.
      A. MATH 304 Vector Analysis (4) MATH 344 Linear Analysis II (4) MATH 350
         Mathematical Software (4) MATH 416
         Differential Equations II (4)
         MATH 418 Partial Differential Equations (4)
      B. MATH 304 Vector Analysis (4)
         MATH 404 Intro to Differential Geometry (4)
      C. MATH 306 Linear Algebra II (4)
         MATH 406 Linear Algebra III (4)
      D. MATH 335 Graph Theory (4)
         MATH 336 Combinatorial Mathematics (4)
         MATH 437 Game Theory (4)
      E. MATH 408 Complex Analysis I (4)
         MATH 409 Complex Analysis II (4)
      F. MATH 412 Introduction to Analysis I (4)
         MATH 413 Introduction to Analysis II (4)
      G. MATH 435 Discrete Math with Apps. I (4)
         MATH 436 Discrete Math with Apps. II (4)
      H. MATH 437 Game Theory (4)
         MATH 453 Numerical Optimization (4)
      I. MATH 440 Topology I (4)
         MATH 441 Topology II (4)
      J. MATH 442 Euclidean Geometry (4)
         MATH 443 Modern Geometries (4)
      K. MATH 451 Numerical Analysis I (4)
         MATH 452 Numerical Analysis II (4)
      L. MATH 341 Theory of Numbers (4)
         MATH 419 Intro. to History of Mathematics (4)
         MATH 481 Abstract Algebra I (4)
         MATH 482 Abstract Algebra II (4)

III. Mathematics electives ........................................... 6
     MATH 142 and MATH 143, or other course(s)
     as approved by advisor

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