

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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