

**Curriculum Requirements for the Major in
Mathematics (effective Fall 2005)**

Course	Hours	Prerequisites and Advice
Math 180, 181, 210 Calculus I, II, III	13	C or higher in each to continue
Math 215 Intro to Adv Math	3	C or higher in Math 181
Math 300 Writing in Mathematics	1	C or higher in Math 210 Open only to declared majors
Math 313 Analysis I	3	C or higher in Math 210 and 215
Math 320 Linear Algebra I	3	C or higher in Math 210 and 215
Math 330 Abstract Algebra	3	C or higher in Math 320
Electives chosen from mathematics, statistics, and mathematical computer science courses numbered 200 or higher, with the exception of Math 310 and Math 410. At least six hours must be at the 400 level.	15	Some suggested elective options are listed below.

Suggested Elective Options

Pure Mathematics - choose from: Math 414 (Analysis II), Math 417 (Complex Analysis), Math 430 (Logic), Math 431 (Algebra II), Math 442 (Curves and Surfaces), Math 435 (Number Theory), Math 445 (Topology I) and Math 446 (Topology II).

Applied Mathematics - choose from: Math 220 (Differential Equations), Math 417 (Complex Analysis), Math 419 (Modeling), Math 480 (Applied Differential Equations), and Math 481 (Applied PDE).

Computational and Industrial Mathematics - choose from: MCS 260 (Computer Science), MCS 320 (Symbolic Computation), MCS 471 (Numerical Analysis), and MCS 472 (Industrial Math).

Probability and Statistics - choose from: Stat 381 (Applied Statistics), Stat 401 (Probability), Stat 411 (Statistical Theory), Stat 461 (Probability Models), or any other 400 level Stat course.

The above options provide a guide to designing a program that is useful for graduate school or job placement. Students are *not* restricted in their choice of electives.