

MATHEMATICS MAJOR

Bachelor of Science Degree in Mathematics

Applied Mathematics Track

This track requires a minimum of 36 hours in courses or seminars numbered 200 or above, one course being an approved complimentary out-of-department course, the balance being mathematics courses.

Code	Title	Credits
MATH 226	Calculus IV: Vector Calculus	
MATH 212	Discrete Mathematics	
One conceptual mathematics course numbered 300 or above		4
MATH 345	Modern Geometry	
MATH 430	Modern Algebra	
MATH 435	Real Analysis	
MATH 445	Topology	
MATH 470	Senior Thesis	
MATH 475	Seminar in Mathematics	
Three applied mathematics courses numbered 300 or above		12
MATH 302	Differential Equations	
MATH 310	Probability and Statistics	
MATH 325	Linear Algebra	
MATH 415	Numerical Analysis	
MATH 470	Senior Thesis	
MATH 475	Seminar in Mathematics	
One approved out-of-department course emphasizing mathematics ¹		4
ACCT 301	Intermediate Accounting I	
CHEM 337	Elements of Physical Chemistry	
ECON 422	Inter. Micro. Econ. Theory	
PHIL 292	Formal Logic	
PHYS 223	Classical and Modern Physics III	
Two other MATH courses numbered above 200 – minimum 8 credit hours		
Total Credits		20

Conceptual Mathematics Track

This track requires a minimum of 36 hours in courses or seminars numbered 200 or above, one course being an approved complimentary out-of-department course, the balance being mathematics courses.

Code	Title	Credits
MATH 226	Calculus IV: Vector Calculus	
MATH 231	Foundations of Mathematics	
One applied mathematics course numbered 300 or above		4
MATH 302	Differential Equations	
MATH 310	Probability and Statistics	
MATH 325	Linear Algebra	
MATH 415	Numerical Analysis	
MATH 470	Senior Thesis	
MATH 475	Seminar in Mathematics	
Three conceptual mathematics courses numbered 300 or above		12
MATH 345	Modern Geometry	

MATH 430 Modern Algebra

MATH 435 Real Analysis

MATH 445 Topology

MATH 470 Senior Thesis

MATH 475 Seminar in Mathematics

One approved out-of-department course emphasizing mathematics ²

ACCT 301 Intermediate Accounting I

CHEM 337 Elements of Physical Chemistry

ECON 422 Inter. Micro. Econ. Theory

PHIL 292 Formal Logic

PHYS 223 Classical and Modern Physics III

Two other mathematics courses numbered above 200-minimum 8 credit hours

¹ others may be proposed for approval by Department

² others may be proposed for approval by Department

Total credit hours required for B.S. degree in mathematics is 36 credits

Many majors emphasize a particular area of mathematics in their coursework. Those emphasizing conceptual mathematics have been notably successful in graduate study at respected universities; majors who wish to prepare for graduate school should take MATH 430 Modern Algebra, MATH 435 Real Analysis and MATH 445 Topology.

Other students emphasize applied mathematics in preparation for advanced study in areas other than mathematics; such majors should include, MATH 310 Probability and Statistics, and an advanced seminar MATH 475 Seminar in Mathematics on an applied topic of interest in their programs.

Students preparing to teach mathematics in secondary schools should take MATH 310 Probability and Statistics, MATH 345 Modern Geometry, and MATH 430 Modern Algebra.

Mathematics majors are frequently double majors. Such majors that allow students to pursue other strong interests in any other discipline and relate them to mathematics are encouraged by the department. The most frequent double major with mathematics is physics; students pursuing this option should take MATH 302 and an advanced seminar MATH 475 on further topics in mathematical physics.