Oberlin College

Mathematics Major

The mathematics major at Oberlin emphasizes rigorous proof, creative problem-solving, and interdisciplinary applications.

- MATH 220 Discrete Mathematics
- MATH 231 Multivariable Calculus
- MATH 232 Linear Algebra
- MATH 301 Foundations of Analysis
- MATH 327 Algebra I: Group Theory
- One Full Modeling Course
- Two Full 300-Level Mathematics Elective Courses
- One Full Introductory Computer Science Course

Nine courses required for the major; five for the minor

Mathematics Major Flow Chart

By End of Year 2	MATH 220* MATH 231* MATH 232*
By End of Year 3	MATH 301* MATH 327* CSCI 150*
By End of Year 4	Additional 300s & Electives

* Offered every semester
MATH 234 Differential Equations is recommended

300-Level Electives

335 & 353 offered every year
Other 300s generally offered in alternate years

Without a 300-level prerequisite

317 Number Theory
318 Cryptography*
320 Graph Theory*
328 Computational Algebra
331 Linear Optimization*
332 Nonlinear Optimization*
335 Probability*
342 Mathematics of Social Choice*
350 Geometry
359 Partial Differential Equations*
370 The History of Mathematics
397 Seminar in Mathematical Modeling*

With a 300-level prerequisite

329 Algebra II: Rings and Fields
338 Probability Models and Random Processes*
340 Mathematical Logic
343 Combinatorics*
353 Topology
354 Algebraic Topology
356 Complex Analysis
357 Harmonic Analysis
358 Real Analysis
DATA 336 Mathematical Statistics*

* Full Modeling course, as is MATH 234

Optional Areas of Emphasis within a Mathematics Major

Preparation for Graduate Studies in Mathematics

MATH 329, 353, & 356
Take as many additional 300s as possible

Operations Research & Industrial & Systems Engineering

MATH 331, 332, & 335
Recommended: CSCI 151 & 280

Connections to Computer Science

MATH 318, 331, 332, & 397
CSCI 151 & 280

Preparation for Actuarial Sciences

MATH 335, DATA 336, ECON 341 & 342

Connections to Economics

MATH 301, 331, 332, 335, & 342

Statistical Modeling Minor

Five courses in statistics & related departments
Recommended: MATH 335