

Oberlin College Mathematics Major Flow Chart

By End of Year 2

- ❶ 220 Discrete (F,S)
231 Multivariable (F,S)
- ❷ 232 Linear Algebra (F,S)

By End of Year 3

- ❸ 301 Analysis (F)
327 Group Theory (S)
- ❹ CS 150 (F,S) *

By End of Year 4

- ❺ Additional 300s
and electives

(F) offered every Fall, (S) offered every Spring
* Recommended by end of Year 2 if possible

Calculus I and II are required if not already taken elsewhere

301, 327, and 335 offered every year. Other 300s generally offered in alternate years

300s without a 300 level prerequisite:

- 302 Dynamical Systems
- 305 Mathematics of Climate Modeling
- 317 Number Theory
- 318 Cryptography
- 328 Computational Algebra
- 331 Linear Optimization
- 332 Nonlinear Optimization
- 335 Probability
- 350 Geometry
- 397 Seminar in Math. Modeling
- STAT 339 Probabilistic Modeling
and Machine Learning

300s with a 300 level prerequisite:

- 329 Algebra II: Rings and Fields
- 340 Mathematical Logic
- 343 Combinatorics
- 353 Topology
- 356 Complex Analysis
- 357 Harmonic Analysis
- 358 Real Analysis
- STAT 336 Mathematical Statistics

Additional Statistics Minor

By End of Year 2

- ❶ 205 Stat. & Modeling
- ❷ 209 Data Comp. & Visual.
or 237 Bayesian Comp.

By End of Year 3

- ❸ 335 Probability

By End of Year 4

- ❹ 336 Math. Stat.
339 Prob. Mod.
& Machine Learn.

Recommended: CS 151 and CS 280

For more information, see Statistical Modeling Minor in the Course Catalog

Optional Areas of Emphasis within a Mathematics Major

Preparation for Graduate Studies in Mathematics

329 Algebra II, 353 Topology, and 356 Complex Analysis.
Take as many additional 300s as possible.

Operations Research and Industrial and Systems Engineering

331 Linear Optimization, 332 Nonlinear Optimization, and 335 Probability.
Recommended: CS 151 and CS 280

Connections to Computer Science

Courses among MATH 318, 331, 332, 397, and STAT 339.
CS 151 and 280.

Preparation for Actuarial Work

MATH 335 to prepare for Exam P.
Recommended: ECON 206 and STAT 336.

Connections to Economics

MATH 332, 335, and 342.