

Ohio Northern University

Majors in the Department of Mathematics

The Common Core

MATH 000 – Orientation

MATH 163 – Calculus 1
MATH 164 – Calculus 2
MATH 165 – Calculus 3

MATH 263 – Calculus 4
MATH 272 – Linear Algebra
MATH 285 – Math Problem Solving
MATH 294 – Foundations of Math

MATH 370 – Junior Seminar

MATH 492 – Senior Research
MATH 493 – Senior Exposition

Core Hours = 29

MATHEMATICS (Track 1)

Stat 280 – Stat for Science/Engineering
Or

Math 480 – Probability Models

Math 275 – Differential Equations

Math 311 – Abstract Algebra 1

Math 312 – Abstract Algebra 2

Math 352 – Real Analysis 1

Math 353 – Real Analysis 2

Math 360 – Math Computing

Math 3xx - Elective

Math 3xx – Elective

Additional Hours = 36

Total Math/Stat Hours = 65

Students planning on graduate study in mathematics should fulfill the requirements in this track.

MATHEMATICS (Track 2)

Math 245 -History of Math

Stat 156 – Biostatistics 1

Or

Stat 280 – Stat for Science/Engineering

Math 301 – Math for Sec Teachers

Or

Math 3xx – Elective

Math 275 – Differential Equations

Or

Math 332 – Operations Research

Math 311 – Abstract Algebra 1

Math 336 – Discrete Math

Math 352 – Real Analysis 1

Math 360 – Math Computing

Math 421 – Found of Geometry

Additional Hours = 36

Total Math/Stat Hours = 65

Students completing this track (including Math 301) will have met the Ohio requirements for the grades 7 – 12 Integrated Mathematics Teaching License.

MATHEMATICS (Modified)

Math 311 – Abstract Algebra 1

Math 352 – Real Analysis 1

3 additional MATH courses numbered 275

Or higher, but not Math 301

1 STAT course numbered 280 or higher may be included as one of the three MATH courses

Additional Hours = 20

Total Math/Stat Hours = 49

MATHEMATICS/STATISTICS

Stat 156 – Biostatistics 1

Or

Stat 280 – Stat for Science/Engineering

Stat 256 – Biostatistics 2

Stat 281 – Applied Regression

Stat 350 – Statistical Computing

Stat 3xx – Elective

Stat 3xx - Elective

Math 352 – Real Analysis 1

Math 480 – Probability Models

Math 481 – Math Statistics 1

Math 482 – Math Statistics 2

Stat 491 – Statistics Practicum – may replace Math 492

Additional Hours = 40

Total Math/Stat Hours = 69

MATH/STAT majors are strongly encouraged to complete a minor or option in a cognate area.