Mathematics Major Requirements

Core Courses

CSCI 100: Scientific Computing (or CSCI 110)
MATH 111: Calculus I (or Math 108)
MATH 112: Calculus II
MATH 211: Linear Algebra
MATH 212: Multivariate Calculus
MATH 215: Transition to Advanced Mathematics
MATH 451/452: Senior Independent Study

Elective Courses

Five full-credit MATH courses above 215*
For class of 2020 & 2021, these must include at least two 3xx

* DATA 231 and DATA 325 may count toward the five electives

Mathematics Minor

MATH 111 (or 108), MATH 112, MATH 211, and three other full-credit MATH courses above 211*

* DATA 231 and DATA 325 may count toward the three electives

Offered EVERY semester

MATH 111: Calculus I
(or take MATH 107 fall & MATH 108 spring)

MATH 112: Calculus II
MATH 211: Linear Algebra
MATH 212: Multivariate Calculus
MATH 215: Transition to Advanced Mathematics

CSCI 100: Scientific Computing
CSCI 110: Imperative Problem Solving

FALL only

MATH 221: Differential Equations
DATA 231: Applied Stat Methods[#]
MATH 227: Operations Research
MATH 329: Probability & Statistics II*
MATH 334: Abstract Algebra

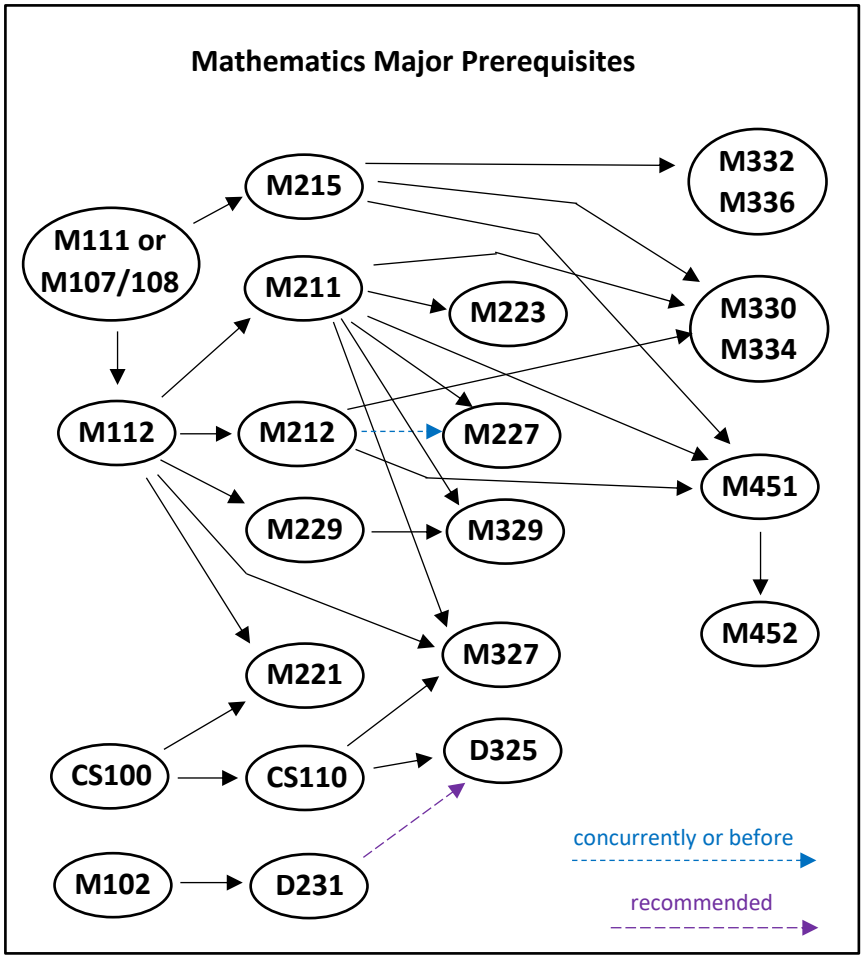
[#]Offered every fall starting F2020
*Offered fall of odd years only

SPRING only

MATH 223: Combinatorics and Graph Theory[#]
MATH 229: Probability & Statistics I
DATA 325: Applied Data Science[$@]
MATH 327: Numerical Analysis[%]
MATH 330: Topology**
MATH 332: Real Analysis
MATH 336: Functions of Complex Variables**

[#]Offered F2019, then spring of odd years (S2021, S2023)
[$]Equivalent to old MATH 225 (Math Modeling)
[@]Intended primarily for juniors
[%]Offered spring of even years only (S2020, S2022)
**Offered periodically on an as-needed basis.

- Mathematics majors may not double major in Statistical and Data Sciences, but may minor in it.
- Statistical and Data Sciences majors may minor in math, but extra math courses are required.
- A score of 3+ on the AP Calculus AB exam (or 3+ AB subscore on the BC exam) gives MATH 111 credit.
- A score of 4+ on the AP Calculus BC exam gives credit for both MATH 111 and MATH 112.


Mathematics Major Prerequisites
M111 or M107/108
M215
M211
M112
M212
M229
M221
CS100
CS110
M102
D231
M223
M227
M329
M327
D325
M332 M336
M330 M334
M451
M452
concurrently or before
recommended