Statistical & Data Sciences Major Requirements

Mathematics	**Computer Science**
MATH 102: Intro to Statistics MATH 111: Calculus I (or MATH 108) MATH 112: Calculus II MATH 211: Linear Algebra	CSCI 100: Scientific Computing (or CSCI 102) CSCI 110: Imperative Problem Solving CSCI 120: Data Structures & Algorithms CSCI 232: Software Engineering - Databases
Data Science	**Application & Research**
DATA 106: Intro to Data Science DATA 201: Data Visualization DATA 231: Applied Statistical Methods DATA 325: Applied Data Science (or CSCI 310)	Required minor or 2nd major (not MATH or CS) DATA 410 or IDPT 415: Internship (0.25+ cr.) DATA 451: Senior Independent Study DATA 452: Senior Independent Study

Statistical & Data Sciences Minor

MATH 102, CSCI 100 (or 102), CSCI 110, DATA 106, DATA 201, DATA 231

Offered EVERY semester

MATH 102: Intro to Statistics

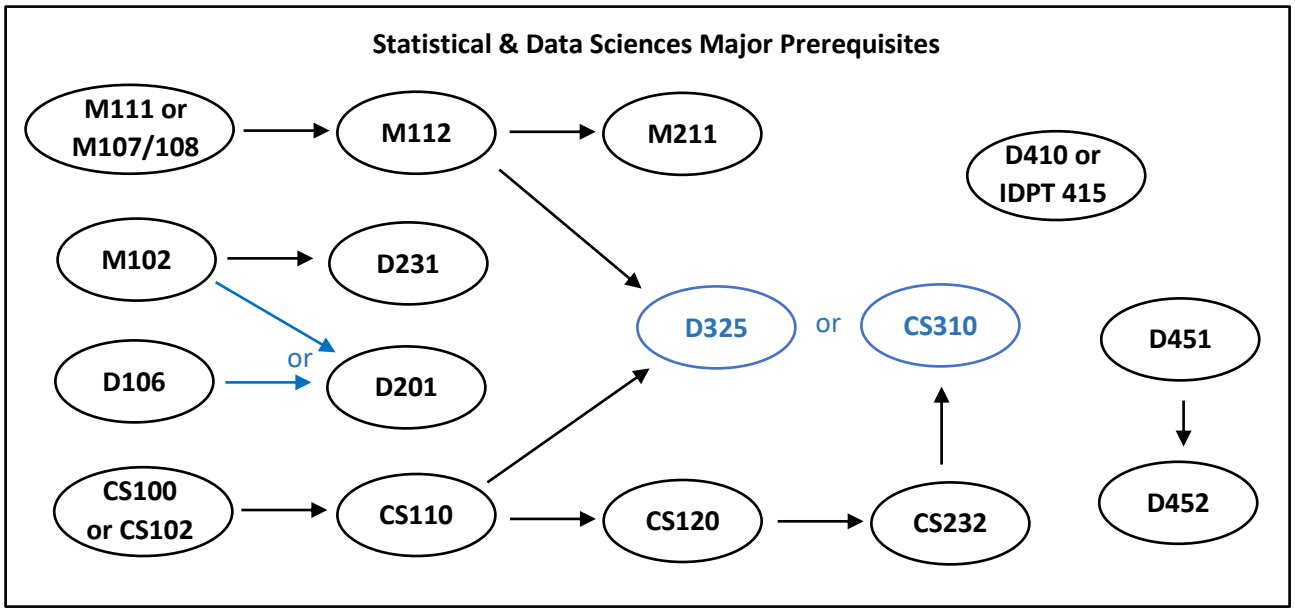
MATH 111: Calculus I (or Math 107 fall & Math 108 spring)
MATH 112: Calculus II
MATH 211: Linear Algebra

CSCI 100: Scientific Computing (or CSCI 102, fall only)
CSCI 110: Imperative Problem Solving
CSCI 120: Data Structures & Algorithms

FALL only	**SPRING only**
DATA 106: Intro to Data Science DATA 231: Applied Statistical Methods* *Offered every fall beginning F2020	DATA 201: Data Visualization DATA 325: Applied Data Science@ CSCI 232: Software Engineering – Databases* CSCI 310: Machine Intelligence** *Spring of even years only (S2020, S2022) **Spring of odd years only (S2021, S2023) @Intended primarily for juniors

- **The DATA major requires a minor or second major outside the department (not in math or CS).**
- **The DATA major requires an approved internship**, for 0.25-1.00 credits via DATA 410 or IDPT 415.
  Internship credit possibilities include AMRE, a relevant APEX Fellowship, a private internship, etc.
- DATA majors may not double major or minor in Computer Science.
- DATA majors may not double major in Mathematics, but may minor (extra math courses are required).
- Students majoring in Computer Science or Mathematics may minor in Statistical & Data Sciences.
- Other recommended courses include MATH 215, 223, and 229.
- The main software packages emphasized in the major/minor are R, Python, SQL, and C++.

- 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.
- A score of 3+ on the AP Statistics exam gives credit for MATH 102.
- A score of 4+ on the AP Computer Science A exam gives credit for CSCI 100.


Statistical & Data Sciences Major Prerequisites
M111 or M107/108
M112
M211
D410 or IDPT 415
M102
D231
D325
or
CS310
D451
D106
or
D201
CS100 or CS102
CS110
CS120
CS232
D452