I. PREREQUISITE KNOWLEDGE (choose one)

Mathematics: 408C Calculus I, 408L Integral Calculus, 408N Differential Calculus, 408R Calculus for Biologists, 408S Integral Calculus

II. MATHEMATICAL FOUNDATIONS OF STATISTICS (choose one)

Electrical Engineering: 351K Probability and Random Processes
Mathematics: 362K Probability I
Statistics & Data Sciences: 321 Intro to Probability & Statistics

III. APPLIED STATISTICS COURSE 1 (choose one)

Economics: 329 Economic Statistics
Educational Psychology: 371 Intro to Statistics
Mathematics: 358K Applied Statistics
Psychology: 418 Statistics & Research Design
Sociology: 317L Intro to Social Statistics
Statistics: 309 Elementary Business Statistics

IV. APPLIED STATISTICS COURSE 2 (choose one)

Economics: 341K Intro to Econometrics
Mathematics: 349R Applied Regression
Statistics (majors only): 371G/H Statistics & Modeling/Honors, 375/H Statistics and Modeling for Finance/Honors

V. ELECTIVES (choose three)

Students are encouraged to select courses within their own majors or colleges as appropriate. The Statistics and Data Sciences courses are available to students in all majors.

Advertising: 344K Advertising Research
Communication Studies: 348 Communication Research Methods
Computer Science: 343 Artificial Intelligence
Economics: 350K.4 Advanced Econometrics, 354K Intro to Game Theory
Electrical Engineering: 361M Intro to Data Mining
Geological Sciences: 325K Computational Methods, 365N Seismic Data Processing
Health Education: 343 Foundations of Epidemiology, 373 Evaluation & Research Design
Kinesiology: 376 Measurement in Kinesiology
Management Information Systems: 373.17 Data Mining for Business
Petroleum & Geosystems Engineering: 378 Applied Reservoir Characterization
Psychology: 325K Advanced Statistics
Public Health: 354 Epidemiology
Statistics: 372.5 Financial & Econometric Time Series Modeling
Statistics & Data Sciences: 322E Elements of Data Science, 323 Statistical Learning and Inference, 348 Computational Biology & Bioinformatics, 353 Advanced Multivariate Methods, 358 Special Topics in Statistics, 374E Visualization & Data Analysis, 375 Special Topics in Scientific Computation, 378Intro to Mathematical Statistics, 379R Undergraduate Research*

*Research Course: students must have a faculty supervisor and propose an original research project topic to be approved by the SDS Faculty Committee prior to enrollment. A final research paper is submitted at the end of the semester and reviewed to ensure it meets certificate requirements.