**BACHELOR OF SCIENCE IN STATISTICS AND DATA SCIENCE Catalog: 2024-2026**

**Four-year Degree Suggestion (for planning purposes only)**

Currently enrolled students should meet with their academic advisor

**FIRST-YEAR FALL 16 FIRST-YEAR SPRING 16**

SDS 313 Introduction to Data Science 3 SDS 315 Statistical Thinking 3

M 408C Differential & Integral Calculus 1 C, F 4 M 408D Seq, Series, & Multivar Calculus 1 4

RHE 306 Rhetoric & Writing C 3 C S 303E Elements of Computers and Prog C 3

UGS 302/303 First-year Signature C, \* 3 HIS Core Requirement C, \* 3

Elective 3 Science & Tech I Core Requirement C 3

**SECOND-YEAR FALL 16 SECOND-YEAR SPRING 15**

SDS 431 Probability & Statistical Inference 4 SDS 334 Intermediate Statistical Models 3

M 340L Matrices & Matrix Calculations 3 Major Breadth Requirement (LD) 3

 or 341 Linear Algebra and Matrix Theory HIS Core Requirement C, \* 3

Major Breadth Requirement (LD) 3 Science & Tech I Core Requirement C 3

GOV 310L American Government C, \* 3 C S 313E Elements of Software Design (Elective) 3

E 316L/M/N/P Literature C, \* 3

**THIRD-YEAR FALL 15 THIRD-YEAR SPRING 15**

SDS 336 Practical Machine Learning 3 Approved SDS Elective 3

C S 327E Elements of Databases 2 3 Major Breadth Requirement (UD) 3

Major Breadth Requirement (UD) 3 Visual & Performing Arts Core Requirement C 3

GOV 312L Issues & Policies in Amer Gov C, \* 3 Elective 3

Elective 3 Elective 3

**FOURTH-YEAR FALL 15 FOURTH-YEAR SPRING 12**

SDS 354 Advanced Statistical Methods 3 SDS 357 Case Studies in Data Science F 3

Social & Behavioral Sciences C 3 Elective 3

Approved SDS Elective 3 Elective 3

Elective 3 Elective 3

Elective 3

**SKILLS & EXPERIENCE FLAGS LEGEND**

Cultural Diversity in the U.S. C Core curriculum requirement

Ethics F Course carries skills and experience flag

Global Cultures \* Course may carry skills and experience flag

Independent Inquiry (SDS 357) LD Lower Division

Quantitative Reasoning (M 408C/K/N/L/S) UD Upper Division

Writing – 2 courses (SDS 357)

**APPROVED SDS ELECTIVES**

* SDS 364 Bayesian Statistics
* SDS 366 Data Visualization
* SDS 368 Statistical Theory
* STA 372.9 Time Series Forecasting

1 *M408C and M 408D may be replaced by one of the following three-semester calculus sequences: (1) M 408K, 408L, and 408M; or (2) M 408N, 408S, and 408M. In these sequences, the third calculus course may count as elective hours or breadth requirement if Mathematics is selected as breadth field of study.*

2 *C S 313E Elements of Software Design must be taken prior to C S 327E Elements of Databases and may count as elective hours or breadth requirement if Computer Science is selected as breadth field of study.*