College of Natural Sciences

BACHELOR OF SCIENCE IN STATISTICS AND DATA SCIENCE Suggested Arrangement of Courses

FIRST-YEAR FALL 16 FIRST-YEAR SPRING <u> 16</u> SDS 313 Introduction to Data Science 3 SDS 315 Statistical Thinking 3 M 408C Differential & Integral Calculus C, F 4 M 408D Seq, Series, & Multivar Calculus 4 or 408K Differential Calculus C, F or M 408L Integral Calculus F or 408N Differential Calc for Science C, F or M 408S Integral Calculus for Science F C S 303E Elements of Computers and Prog ^c 3 RHE 306 Rhetoric & Writing C 3 UGS 302/303 First-year Signature C, * 3 HIS Core Requirement C, * 3 3 Science & Tech I Core Requirement ^C 3 Elective **SECOND-YEAR FALL** 16 **SECOND-YEAR SPRING** 15 3 SDS 431 Probability & Statistical Inference SDS 334 Intermediate Statistical Models 4 3 M 340L Matrices & Matrix Calculations 3 Major Breadth Requirement (LD) 3 or 341 Linear Algebra and Matrix Theory HIS Core Requirement C, * 3 3 Major Breadth Requirement (LD) Science & Tech I Core Requirement c GOV 310L American Government c, * 3 Elective 3 E 316L/M/N/P Literature C, * 3 **THIRD-YEAR FALL** <u> 15</u> THIRD-YEAR SPRING <u> 15</u> SDS 336 Practical Machine Learning 3 SDS 354 Advanced Statistical Methods 3 3 3 C S 327E Elements of Databases 3 Major Breadth Requirement (UD) 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 **FOURTH-YEAR FALL** <u> 15</u> **FOURTH-YEAR SPRING** <u> 12</u> SDS 357 Case Studies in Data Science F 3 3 Approved SDS Elective 3 3 Social & Behavioral Sciences ^C Elective 3 3 Approved SDS Elective Elective 3 3 Elective Elective Elective

SKILLS & EXPERIENCE FLAGS

Cultural Diversity in the U.S. Ethics Global Cultures Independent Inquiry (SDS 357) Quantitative Reasoning (M 408C/K/N/L/S) Writing – 2 courses (SDS 357)

LEGEND

- ^c Core curriculum requirement
- F Course carries skills and experience flag
- * Course may carry skills and experience flag
- LD Lower-division
- **UD** Upper-division

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 C S is selected as breadth field of study

Catalog: 2022-2024