

Suggested Curriculum Guide for BS Data Science and Statistics

Freshman (1st Semester) 17-18 hrs

GSD 101- Foundations of Learning	3
STA 270- Applied Statistics I	4
(STA 270L recommended)- Applied Statistics I Lab	(1)
^G MAT 234 (fulfills Gen. Ed. 2)- Calculus I	4
Gen. Ed. 1A (ENG 101)	3
Gen. Ed. 1C (Oral Comm.)	3

Sophomore (1st Semester) 15-16 hrs

MAT 239- Linear Algebra and Matrices	3
DSC/STA Elective	3
Free Elective (MAT 254 -Calc III for Statistics Combination, CSC 189 -	3
Computing Concepts and Programming <u>or</u> CSC 190 -Object-Oriented	
Programming I for Data Science Combination)	
Gen. Ed. 4 (Nat. Sci.)	3-4
Free Elective	3

Junior (1st Semester) 15 hrs

Major Elective (STA 585-Experimental Design for Statistics	3
combination) <u>or</u> Free Elective (upper division) for Discrete Math or	
Data Science	
Domain Knowledge course #2 (upper division)	3
Gen. Ed. 3A (Arts)	3
Free Elective (upper division)	3
STA 575- Statistical Methods Using SAS	3

Senior (1st Semester) 15 hrs

STA 498- Statistics Capstone	3
Gen. Ed. 5B Course 2	3
Free Elective (upper division) (STA 520 - Mathematical Statistics I	3
recommended as pre-req for STA 521 for Statistics Combination)	
Free Elective	3
Free Elective	3

^G Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

General Education

Foundations in Learning (GSD 101; waived for transfers with 30+ hrs).

36 hours
3 hours

MAJOR REQUIREMENTS

Core Courses

MAT 239, MAT 244, STA 270, STA 340, STA 498, CSC 174 or 190, ENG 300, DSC 580 or STA 580, STA 575
PLUS, THREE (3) HOURS selected from (DSC/STA electives): DSC 390, STA 375, STA 380, STA 470, *STA 520, STA 521, STA 570, STA 585

- Only courses completed with a grade of at least a "C" will count toward the major requirements.
- Courses will not count in multiple categories.
- PLUS, THREE (3) HOURS of CSC/DSC/MAT/STA courses numbered 300 or above (excluding any 349 course). STA 480 will count for approved topics only.

Major Electives

Statistics Combination: STA 521, STA 585 – Recommended for students who want to attend graduate school.

Data Science Combination: CSC 210 and CSC 581

Discrete Math Combination: MAT 306 and STA 470

12 hours

SELECT TWO (2) COURSES from one of the following categories (*Domain Knowledge Course*):

Accounting: BUS 209 or ACC 200, ACC 350
Agriculture: AGR 374, AGR 501 or AGR 509
Anthropology and Sociology: *ANT 371, *SOC 232, *SOC 310, *SOC 395
Biology and Environmental Health Sciences: *BIO 315 and *BIO 533, *BIO 316 and *BIO 532, EHS 280 and *EHS 370
Computer Information Systems: *BUS 304, *CIS 335, *CIS 430
Computer Science and Informatics: *CSC 310, *CSC 313, *INF 314
Finance: FIN 201, FIN 304 or FIN 311 or FIN 324
Global Supply Chain Management: BUS 306, MGT 442 or MGT 444
Government: *POL 280, *POL 400, *POL 440
Geosciences: *GEO 351, *GEO 353, *GEO 453, *GEO 456, *GEO 458
Marketing: MKT 301, MKT 455 or MKT 457
Physics: *PHY 315, *PHY 406, *PHY 460
Psychology: *PSY 240, *PSY 315 or *PSY 315L, *PSY 340, *PSY 590
Risk Management and Insurance: RMI 378, RMI 370 or 374 or 376 or 382
Advisor Approved: Two advisor-approved courses from a department other than the Department of Mathematics and Statistics

Supporting Course Requirements ^GMAT 234, ^GPHI 130

Free Electives

Total Curriculum Requirements

7 hours
33 hours
120 hours