BACHELOR'S DEGREE REQUIREMENTS

To earn a BA in Statistics and Data Science, a student must complete the requirements of the College of Arts and Sciences.

Students must earn a grade of C- or better in all coursework applied to the major and have at least a C average for all attempted work for the major. APPM 1350 and APPM 1360 are considered introductory courses and are pre-requisites for the major.

Required Courses

Mathematical Foundations

APPM 2350	Calculus 3 for Engineers	4
or MATH 2400	Calculus 3	
APPM 3310	Matrix Methods and Applications	3

Computation

STAT 2600	Introduction to Data Science	4

Statistics Theory

STAT 3100	Applied Probability	3
STAT 4520	Mathematical Statistics	3
APPM 4560	Markov Processes, Queues, and Monte Carlo Simulations	3

Statistical Modeling

STAT 3400	Applied Regression	3
STAT 4400	Advanced Statistical Modeling	3
STAT 4610	Statistical Learning	3
STAT 4630	Computational Bayesian Statistics	3
APPM 4500	Statistical Collaboration	3

Any THREE of the following courses: [1]   9

APPM 4530	Stochastic Analysis for Finance	-
APPM 4510	Data Assimilation in High Dimensional Dynamical Systems	-
STAT 4430	Spatial Statistics	-
STAT 4540	Time Series	-
STAT 4700	Philosophy of Statistics	-

Total Credit Hours	44

[1] Any one of APPM's 3 credit special topics courses in Probability or Statistics may also be used to meet this requirement

Ancillary course work

CSCI 1300	Computer Science 1: Starting Computing	4
or CSCI 1320	Computer Science 1: Starting Computing-Engineering Application	
CSCI 2270	Computer Science 2: Data Structures	4

Outside Area of Emphasis course work (can be used to fulfill Gen. Ed. requirements when applicable)   18

Total Credit Hours	26

TOTAL CREDIT HOURS:
70