

# M.S. IN APPLIED STATISTICS - DATA SCIENCE CONCENTRATION

*College of the Sciences and Mathematics*

## Curriculum

Code	Title	Credits
<b>Required Courses</b>		
STA 502	Introduction to Python for Statistics and Data Science	1
STA 503	Introduction to R	1
STA 505 or STA 504	Mathematical Statistics I Mathematical Statistics I with Calculus Review	3-4
STA 506	Mathematical Statistics II	3
STA 507	Introduction to Categorical Data Analysis	3
STA 511	Intro Stat Computing & Data Management	3
STA 512	Principles of Experimental Analysis	4
STA 513	Intermediate Linear Models	4
STA 514	Modern Experimental Design	3
<b>Electives</b>		
Select 9 credits from the following list of electives (other STA electives may be substituted with permission of the Program Director):		9
STA 534	Time Series	
STA 536	Data Mining	
STA 537	Advanced Statistical Programming Using SAS	
STA 538	Statistical Programming Using R	
STA 543	Statistical Methods in Business and Finance	
STA 544	Applied Marketing Analytics	
STA 546	Foundations of Bioinformatics	
STA 551	Foundations of Data Science	
STA 552	Applied Statistical Machine Learning	
STA 553	Data Visualization	
STA 601	Internship In Applied Statistics	
STA 609	Thesis I	
STA 610	Thesis II	
CSC 545	Database Systems Concepts	
<b>Total Minimum Credits Required</b>		<b>34</b>