Graduate Certificate in Big Data Analytics

The Graduate Certificate in Big Data Analytics offers courses in data mining and analytics that provide the theory and application needed to effectively min· and describe large data sets. This certificate program is applicable to students from a broad variety of disciplines and does not require a degree in mathematics or statistics. Students who complete this certificate will build the skills necessary to apply data mining and analytics methods to real-life data and be able to communicate these results to non-statistical audiences.

Admission Requirements

Admission to the program requires admission to the graduate school. Prerequisites to admission include completion of an introductory level statistics course (equivalent to STAT 2480) with a minimum grade of "B" and calculus I (equivalent to MATH 1411 or MATH 2301) with a minimum grade of "B".

Degree Requirements

This certificate program requires completion of 4 courses for a total of 14-15 credits. This includes 2 required courses STAT 5474 Introduction to Data Mining and STAT 5428 Intro to Statistical Analysis) and 2 elective courses, to be selected from STAT 5494 Statistical Data Mining,STAT 5329 Statistical Programming, STAT 5385 Statistics in Research, STAT 5388 Multivariate Data Analysis or STAT 5354 Post-Genomic Analysis.

Degree Plan

Code	Title	Hours
Required Courses		
STAT 5474	Statistical Machine Learning I	4
STAT 5428	Intro to Statistical Analysis	4
STAT 5195	Graduate Seminar	1
Prescribed Elective Courses		
Select six hours of the following with graduate certificate advisor approval		6
STAT 5329	Statistical Programming	
STAT 5354	Post-Genomic Analysis	
STAT 5385	Applied Regression Models	
STAT 5388	Multivariate Data Analysis	
STAT 5494	Statistical Machine Learn. II	
MATH 5329	Numerical Analysis	
CS 5354	Topics/Intelligent Computing	
ECON 5370	Applied Econometrics	
ECON 5371	Econometric Forecasting	
ECON 5372	Panel Data & Discrt Chce Modls	
Total Hours		**15**