## **Graduate Certificate in Applied Statistics**

This certificate program will provide students with a foundation in applied statistics and experience utilizing statistical methodologies in real world settings. The coursework emphasizes modern statistical applications, but also provides a background in classical statistical methodology. Students will gain exposure to concepts of basic applied statistics, experimental design, statistical programming in the R and SAS packages, and data mining procedures. This program is appropriate for those trained in fields such as business, engineering, as well as in the natural and behavioral sciences. The program emphasizes applications of statistics to various fields and requires an introductory-level statistics background. Though the program does not require rigorous training in advanced mathematics, completion of calculus I is required.

## **Admission Requirements**

Admission to the program requires admission to the graduate school. Prerequisites to admission include STAT 2480 or equivalent with a minimum grade of "B" and MATH 1411 or MATH 2301 or equivalent with a minimum grade of "B".

## **Degree Requirements**

This certificate program requires completion of 5 courses for a total of 16 credits. This includes 3 required courses, including STAT 5428 (Introduction to Statistical Analysis), STAT 5329 (Statistical Programming), STAT 5335 (Applied Experimental Design) and 2 elective courses, to be selected from STAT 5474 (Introduction to Data Mining), STAT 5336 (Categorical Data Analysis), and STAT 5370 (Special Topics).

Code	Title	Hours
Three (3) Required Courses		10
STAT 5428	Intro to Statistical Analysis	
STAT 5329	Statistical Programming	
STAT 5335	Applied Experimental Design	
Two (2) Elective Courses		6
STAT 5474	Statistical Machine Learning I	
STAT 5336	Categorical Data Analysis	
STAT 5370	Special Topics	
Total Hours		16