

## Graduate Certificate Program in Applied Statistics

Department of Mathematics and Statistics offers a graduate certificate in applied statistics.

The Graduate Certificate program in Applied Statistics is a four-course program that can be completed in three to four semesters alongside a graduate degree program in another discipline or as a stand-alone program by working professionals interested in expanding their knowledge in analyzing and interpreting data. It will prepare students for the job market where data analyses skills are preferred.

### **Courses offered in HyFlex or Online mode.**

It is aimed to:

- Provide knowledge of designing studies for data collection in a variety of situations.
- Educate students about assumptions behind different statistical methods and how to check them.
- Prepare students to identify appropriate statistical analyses techniques for given situations.
- Prepare students to perform basic statistical data analysis needed for their research.

Pre-requisite: A bachelor's degree in any discipline.

Admission requirements: To be admitted to this Applied Statistics Certificate program, students must be admitted to the graduate school. GRE scores and letters of Recommendation are not required for admission into the graduate certificate program. Note that, students are not required to have a calculus background to be successful in these 4 courses. However, calculus may be required by master's degree programs.

Program requirements: Students will be required to complete 12 hours of class work, from which two courses (ST 540 and ST 545) are mandatory and the other two are to be chosen from the ST courses offered by department of mathematics & statistics. Twelve hours of course work must be completed with no grade lower than "B". A minimum 3.0 GPA is required to obtain the certificate.

Required:

- ST 540 Statistics in Research I (3 cr)
- ST 545 Statistics in Research II (3 cr)

Select two courses (total of six hours) from the list below based on students' professional goals:

- ST 525: Applied Statistics for Clinical Trails (3 cr)
- ST 550: Environmental Statistics (3 cr)
- ST 555: Categorical Data Analysis (3 cr)
- ST 560: Applied Design and Analysis of Experiments (3 cr)
- ST 570: Applied Multivariate Analysis (3 cr)
- ST 575: Statistical Computing and Graphics (3 cr)
- ST 580: Statistical Learning Techniques in Data Science (3 cr)
- ST 585: Nonparametric Modeling (3 cr)
- ST 590: Special Topic (3 cr)

For any more information, contact Dr. Chase Holcombe at [holcombe@southalabama.edu](mailto:holcombe@southalabama.edu) or Call the department of mathematics & statistics at (251) 460-6264.