CERTIFICATE IN SPORTS STATISTICS AND ANALYSIS

The Certificate in Sports Statistics and Analytics will provide students with the knowledge and skills needed to work in the expanding field of sports analytics. Students will be able to acquire sports data using data scraping techniques and use these sports data to create graphical visualizations, generate summary statistics, build probabilistic models, assess hypothesis using statistical methods, create and evaluate regression models, implement machine learning algorithms, and present research findings in person and on paper.

Learning Objectives

Upon successful completion, students will be able to:

1. Analyze the unique aspects of sports data and modeling sports data.
2. Acquire sports data using data scraping techniques and R packages.
3. Create graphical and visual summaries of sports data.
4. Utilize theory and methods from probability, statistics, and machine learning to analyze sports data.
5. Write summary and project reports related to unique sports datasets.
6. Orally present research findings related to sports analytics to a general audience.