## **University Scholars Program in Statistics**

Applications are welcome from undergraduate students majoring in the mathematical, biological, physical, biomedical, and social sciences as well as engineering, business, and education.

**Pre-requisites:** All applicants must have completed the following courses: MA 113, MA 114, MA 213, MA 214, and MA 322. All applicants must submit GRE scores by the end of their first year in the program.

## Sample Program:

## Senior Year:

Fall Semester STA 602 (4) Introduction to Statistical Methods

STA 605 (3) Computational Inference STA 623 (3) Theory of Probability

Spring Semester: STA 603 (4) Introduction to Linear Models and Experimental Design

STA 606 (3) Theory of Statistical Inference I

Elective (3) (Optional)

**Fifth Year:** Students will complete 15-18 hours of coursework and satisfy the requirements for either Mathematical Statistics Track or Biostatistics Track. <a href="https://stat.as.uky.edu/masters-program">https://stat.as.uky.edu/masters-program</a> Electives may be chosen from

- MA 471G (3) Advanced Calculus I
- STA 607 (3) Theory of Statistical Inference II
- STA 612 (3) Sequential Analysis
- STA 616 (3) Design and Analysis of Sample Surveys
- STA 621 (3) Nonparametric Inference
- STA 624 (3) Applied Stochastic Processes
- STA 626 (3) Time Series Analysis
- STA 630 (3) Bayesian Inference
- CPH 631 (3) Design and Analysis of Health Surveys
- STA 635 (3) Survivability and Life Testing
- CPH 636 (3) Data Mining in Public Health
- STA 643 (3) Advanced Experimental Design
- STA 644 (3) Advanced Linear and Nonlinear Models
- STA 653 (3)\* Clinical Trials
- STA 661 (3) Multivariate Analysis I
- STA 662 (3) Resampling and Related Methods
- CPH 664 (3)\* Design and Analysis of Clinical Trials
- STA 665 (3) Analysis of Categorical Data