OPPORTUNITIES FOR INTERDISCIPLINARY STUDY IN STATISTICS

The Department of Statistics, ranked ninth in the nation in the most recent study by the National Research Council, offers master's and doctoral degrees in statistics as well as a master of applied statistics degree. Our renowned and diverse faculty make it possible for our students to pursue a wide range of opportunities, from theoretical, methodological, and interdisciplinary research to a hands-on approach to developing consulting and teaching skills.

Students interested in the master of applied statistics degree program, which focuses on the applications of statistics and prepares students to work in government or industry, can apply for an in-residence or online program.

Our doctoral degree program offers advanced exploration and investigation of mathematics and statistics theory, methodology, and applications. Students have access to a variety of resources to facilitate cutting-edge statistical research, including our own statistical library, which supplements Penn State's extensive libraries system, as well as department-funded access to the University's high-performance computing system, the Institute for CyberScience Advanced Cyberinfrastructure (ICS-ACI). Our students' doctoral theses vary from research emphasizing theory and methodology to dissertations focused on applications, and graduates from our program go on to careers in research, teaching, government, and industry.

Students can obtain a master of science degree as a part of their doctoral studies or as a terminal degree.
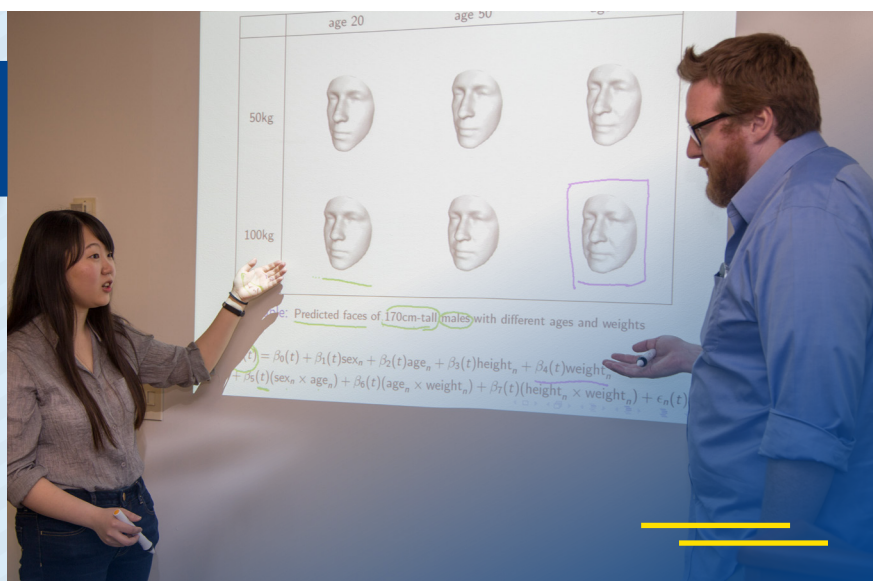
Penn State statistics faculty have wide-ranging research expertise, including in these areas:

- Computational statistics
- Functional data analysis
- High-dimensional data analysis
- Mixture models and latent variable models
- Network analysis and graphical models
- Non-parametric and semi-parametric methods
- Probability theory
- Spatial and spatiotemporal statistics
- Statistics education
- Time series and longitudinal data
- Numerous interdisciplinary areas, including astrostatistics, biostatistics, bioinformatics, data privacy and reproducibility, genomics, and statistical applications in industrial, environmental, and social sciences

CENTERS AND INSTITUTES

- Institute for CyberScience
- Huck Institutes of the Life Sciences
- Social Science Research Institute

FELLOWSHIP AND ASSISTANTSHIP OPPORTUNITIES

Statistics graduate students in the doctoral and master of science degree programs are eligible for University, college, and governmental fellowships, departmental teaching and research assistantships, and other forms of financial aid. The Eberly College of Science's assistantships and fellowships include a stipend, tuition, and subsidized health, dental, and vision insurance. There is no financial support for students in the master of applied statistics degree program.

DUAL-TITLE DEGREE PROGRAMS AND MINORS

We also offer dual-title master's and doctoral degrees in partnership with the College of Engineering's Operations Research program and the College of the Liberal Arts' Social Data Analytics program. Students in these degree programs are exposed to an interdisciplinary array of tools, techniques, and methodologies. Students can also earn graduate minors in these and other areas.

In addition, our department offers a graduate minor in Statistics, which can add a broad array of statistics fundamentals and depth to study in many disciplines.

A DIVERSE COMMUNITY OF SCHOLARS

The diverse representation of a population of scientifically trained leaders and innovators is one of the ways we are addressing the challenge of enhancing the global community of scholars. Through our faculty, staff, and students, the Eberly College of Science remains committed to the goal of excellence through diversity.