Big Demands. Big Data.

Ph.D. in Analytics and Data Science

Kennesaw State University
College of Science and Mathematics
datascience.kennesaw.edu
Kennesaw State University’s Ph.D. in Analytics and Data Science is an advanced degree that has been developed to meet the explosive growth in market demand for data scientists.

This degree will train individuals to translate large, structured and unstructured, complex datasets into information to improve decision-making. This curriculum includes heavy emphasis on programming, data mining, statistical modeling and the mathematical foundations to support these concepts. Importantly, the program also emphasizes communication skills – both oral and written – as well as application and ties results to business and research problems. Students are also required to take courses related to data security and ethics.

Graduates may either pursue positions in the private or public sectors as “practicing” data scientists – where continued demand is expected to greatly outpace the supply – or pursue positions within academia, where they would be uniquely qualified to teach these skills to the next generation.

Course work includes:
- Programming work in SAS, R, SQL, Python and Hadoop
- Data Mining 1 and 2
- Binary Classification
- Theory of Linear Modeling
- Graph Theory
- Discrete Mathematics
- Parallel and Distributed Computing
- Text Mining
- Algorithm Design for Big Data
- Data Warehousing
- Leadership and Ethics
- Project Management

Ph.D. students in Analytics and Data Science engage in research across a wide variety of disciplines, which are all characterized by Big Data, including consumer finance, healthcare, epidemiology, engineering and education. Ph.D. students are expected to become active in research and engage in project-based work beginning with their first year of study.

PRACTICAL EXPERIENCE
The Ph.D. in Analytics and Data Science is grounded in research that is practical and applied, rather than theoretical. Students will work with organizations in the public and private sectors to solve real problems using real data. They also will have the opportunity to work in the Center for Statistics and Analytical Services, providing analytical consulting support to both internal clients engaged in grants and scholarship as well as to external clients, locally and nationally.

FACULTY
Ph.D. in Analytics and Data Science faculty have educational and professional backgrounds from a wide variety of disciplines and domains, including epidemiology, quality control, engineering, consumer finance and biostatistics.

Their substantive work experience includes working with the following organizations:
- Accenture
- National Institutes of Health
- Ford
- AT&T
- The University of Texas MD Anderson Cancer Center
- Cincinnati Children’s Hospital Medical Center
- ChoicePoint
- Thomson Reuters
- MasterCard
- Visa EU

Experiences working with these world-class service providers allow faculty to create a dynamic learning environment for students in the classroom as they translate theory into real world applications.

PROGRAM COST
All accepted applicants receive stipends and tuition waivers. Stipends normally are offered at $30,000 per year.