DATA ANALYTICS, MASTER OF SCIENCE (MS)

The demand for data analysts is increasing at an annual growth rate of nearly 30%, and this trend is expected to continue for several years in the future. Data collection has increased significantly in recent years in almost all industries, and the need for data analysts with strong skills to derive actionable decisions from the massive amounts of data is currently unmet. Along with continued demand increase, data analysts' salaries are highly competitive.

The Master of Science in data analytics will provide the training and skills necessary to perform statistical analysis in any field. Types of data analysis include descriptive, diagnostic, predictive, and prescriptive, to answer the questions, "What is currently happening?", "Why did this happen?", "What do we expect to happen in the future?", and "What should we do now?", respectively. These questions can be answered through key program components of statistical modeling and visualization using software such as SAS, R, SQL, Python, Excel, and others. In addition to analytical and technical skills, highly sought soft skills are taught, such as problem solving, collaboration, communication, and presentation.

The MSDA program faculty are highly accomplished in the field and will provide 100% support from the start of the program to beyond graduation. The program is completely online with no set class times. Class recordings, resources, and assignments will be provided asynchronously with weekly due dates to help stay on track. The 33-credits of graduate work can be completed in 10 months full-time or 2 years part-time.

SRU partners with **SAS Institute, Inc.** to provide graduates with a Statistical Analysis System (SAS) Academic Specialization in Data Analytics. **SAS Institute, Inc.** is one of the most widely used software platforms in the world for performing data analytics and statistical analysis.

Program Learning Outcomes

Upon graduation, MSDA students should be able to :

- Apply quantitative modeling techniques, such as probability, statistics, optimization, and simulation, to the solution of business and health care problems.
- Use innovative methods and technologies to successfully extract, scrub, integrate, format, visualize, and analyze big data.
- Know how to query and analyze complex databases to provide real world, real-time solutions.
- Use predictive analytics and forecasting to improve decision making in business and health care.
- Effectively communicate analysis results to assist in strategic decision making.
- Analyze and optimize the delivery, quality, and costs of health care from a data-driven perspective.
- Analyze market data to provide a competitive edge for business and more agile management practices.

Related Links

Data Analytics, MS Program Page (https://www.sru.edu/academics/graduate-programs/data-analytics-master-of-science/)

Data Analytics Fact Sheet (https://www.sru.edu/documents/programs/factsheets/graduate/fs-data.pdf)

Professional Licensure/Certification Page (https://www.sru.edu/students/student-consumer-information/professional-licensures/)