Graduate Certificate in Data Science and Analytics

The objective of the Graduate Certificate in Data Science and Analytics is to enable students from multiple different graduate programs at the University of Missouri to receive education and training in the emerging field of Data Science. Data science skills are increasingly necessary for all fields of advanced study due to the emergence of large scale data and the incumbent challenges across academia and industry.

At the conclusion of the Graduate Certificate in Data Science and Analytics, students will:

1. Have experience in applying state-of-the-art data science tools and techniques to solve industry, academic, and/or business data and decision-making challenges.
2. Have a comprehensive understanding of modern data analytics, statistical analysis, and visualization tools that facilitate timely, large data analysis.
3. Be able to effectively communicate to a broad audience the relevant information derived from large data collections using a variety of visualization and presentation methods.
4. Understand the fundamental and advanced statistical and mathematical principles upon which advanced data analysis techniques are built.

Requirements

A total of 9 credit hours of core coursework is required. Total credit hours of 12 required.

Required coursework:		9
DATA_SCI 7010	Principles of Data Science and Analytics	3
DATA_SCI 7020	Statistical and Mathematical Foundations for Data Analytics	3
DATA_SCI 7040	Big Data Visualization	3
Total of 3 credit hours from the list below:		**3**
DATA_SCI 7030	Applied SQL for Database and Analytics	3
DATA_SCI 8010	Data Analytics with Applied AI and Machine Learning	3