

Justification for Advanced Data Science

The "Advanced Data Science" course serves as a continuation of the Introduction to Data Science courses, positioned as a linchpin within the BS in Data Science curriculum at Florida International University (FIU), and seeks to elevate students' proficiency beyond foundational concepts to the zenith of current and emerging data science paradigms. Focusing on data science and AI areas like neural networks, reinforcement learning, and natural language processing, this course ensures that students are equipped to tackle the nuanced challenges of modern-day data analytics. Furthermore, with the increasing magnitude of data in today's digital age, understanding NoSQL databases and big data management is of high importance. This course also provides a sense of responsibility by emphasizing fairness, biases, and the broader societal implications of AI. Students will not only be well-prepared to develop effective models and derive insights but will also be trained to do so ethically. As FIU endeavors to produce data science graduates who are industry leaders, incorporating such a rigorous and comprehensive course on advanced data science topics is both timely and imperative.