

Summer 2026

Registration Opens: March 09, 2026

Course Preview Week: May 19 - May 25, 2026 Semester Dates: May 26 - August 07, 2026

DS 701: Exploratory Data Analysis

3 Credits

This course introduces data science and highlights its importance in decision making. Students will learn how to analyze data using the R programming language. During the course, students will learn how to import data into R, tidy it, conduct exploratory data analysis, develop visualizations, and draw statistical inferences. The course aims to teach data wrangling, visualization and exploration with R.

DS701 Course Syllabus

DS 710: Programming for Data Science

3 Credits

Introduction to programming languages and packages used in data science. DS 710 Syllabus

DS 740: Data Mining & Machine Learning

3 Credits

Explore data mining methods and procedures for diagnostic and predictive analytics. Topics include association rules, clustering algorithms, tools for classification, and ensemble methods. Computer implementation and applications will be emphasized.

Prerequisites: DS 705 and DS 710.

DS 740 Syllabus

DS 750: Data Storytelling

3 Credits

Data storytelling involves using data to tell a compelling narrative that helps audiences understand, engage with, and act on the information. This course combines data analysis with communication techniques to present data in an informative and engaging way. This course is specifically designed as a graduate-level requirement for the MSDS degree, focusing on teaching students how to effectively communicate insights through data storytelling techniques. Participants will learn to craft engaging stories that resonate with various audiences and drive decision-making.

Prerequisites: DS 700 or 701. DS 705 OR DS 740 suggested but not required. DS750 Course Syllabus

DS 785: Capstone

3 Credits

Students will develop and execute a data science project using real-world data and communicate results to non-technical audiences.

Prerequisites: DS715 or DS716, DS730, DS740, DS750 or completion of 27 credits.

Sample Capstone Projects DS 785 Syllabus