

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**

Computer programming is an essential part of data science. When working with large data sets, it's especially important to be able to write effective, efficient code to help you organize and understand the data. In this course, we'll introduce you to one of the most widely-used programming languages for data science: Python. You'll gain experience working with real-world data, and leave the course with skills you can apply in other courses in the MS Data Science Program as well as on the job!

[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](#)