Data Science Graduate Course Chart

Undergraduate Background

- Computer Science
  - MA511: Applied Statistics for Engineers and Scientists
  - CS542: Database Management System
  - CS561: Advanced Topics in Database Systems
  - DS503: Big Data Management
- Math
  - MA543/DS502: Statistical Methods for Data Science
  - MA542: Regression Analysis
  - MA554: Applied Multivariate Analysis
- Business School
  - MIS581: Business Intelligence
  - MKT568: Data Mining Business Application
- Other
  - CS5007: Intro Prog Cncp Data Struc & Alg
  - DS501: Introduction to Data Science

Core Courses
5 courses required
- at least one from each category

Electives
3-5 courses required

Capstone
- DS598: Graduate Qualifying Project
- DS599: Master’s Thesis

Integrative Data Science

Data Access and Management

- CS504: Big Data Analytics
- DS598: Master’s Thesis

Mathematical Analytics

- MA543/DS502: Statistical Methods for Data Science
- MA542: Regression Analysis
- MA554: Applied Multivariate Analysis

Business Intelligence and Case Studies

- MIS581: Business Intelligence
- MKT568: Data Mining Business Application

Data Analytics and Mining

- CS504: Big Data Analytics
- DS598: Master’s Thesis

Prerequisite
- No

Arrow indicates background
- recommended background
- prerequisite

Border indicates course type
- No Prerequisite
- Advanced Courses

No more than 16 credits from Business School

11 courses required