

MASTER OF DATA SCIENCE: COURSERA

Collaborative program with the Department of Applied Mathematics

This professional master's degree program, offered through our partnership with Coursera, consists of 33 credit hours of coursework, including six credits awarded for relevant practical industry certificates. The program is designed primarily for those with some skills and experience in computer science, statistics, mathematics, science, or business and who are interested in preparing for a career as a data science professional in business and industry.

Examples of certifications that may be approved are the Coursera IBM Data Science Professional Certificate, the Google Data Analytics Professional Certificate, and the SAS Advanced Programmer Professional Certificate.

Admission

Admission to this program is fully **performance-based**; any student with a four-year bachelor's degree from an accredited institution who completes three courses with a grade of B or above, as follows, will be admitted to the full degree program.

- CS 725: Introduction to Relational Databases
- MATH 764: Linear Regression
- Either
 - CS 726: Relational Database Design
 - MATH 765: Model Diagnostics and Remedial Measures

Note that CS 725 and 726 count towards credit for CS 425 Database Organization, and MATH 764 and 765 count towards credit for MATH 564 Applied Statistics.

Curriculum

Code	Title	Credit Hours
CS 725	Introduction to Relational Databases	1
CS 726	Relational Database Design	1
CS 727	Relational Database Implementation and Application	1
MATH 764	Linear Regression	1
MATH 765	Model Diagnostics and Remedial Measures	1
MATH 766	Variable Selection, Model Validation, and Nonlinear Regression	1
MATH 569	Statistical Learning	3
CSP 554	Big Data Technologies	3
SCI 522	Public Engagement for Scientists	3
CSP 571	Data Preparation and Analysis	3
MATH 546	Introduction to Time Series	3
CS 577	Deep Learning	3
MATH 574	Bayesian Computational Statistics	3
Capstone Experience		6
Total Credit Hours		33

Capstone experience is 6 credits of approved industry-relevant certificates (normally 3 credits each). The program steering committee will determine a list of approved such certifications and update as needed.