The University of Texas at Austin
Master of Data Science Online

MSDS Program of Work Checklist

Program Overview

This is a 30-hour program consisting of 10 courses, each worth 3 credit hours. All courses are required.

Coursework Overview

The core requirement will be satisfied with three foundational courses which are intended to provide students with a broad understanding of the field and establish the basis for some of the prescribed additional courses. It is highly recommended that Probability & Simulation Based Inference for Data Science and Data Structures & Algorithms are taken as the first courses of the program.

Foundational Courses include:

- DSC 381: Probability & Simulation Based Inference for Data Science
- DSC 382: Foundations of Regression & Modeling (Recommend DSC 381 prior)
- DSC 395T: Data Structures & Algorithms

  Note: Those who matriculated in Spring 2021 & Fall 2021, Algorithms: Techniques and Theory or Data Structures & Algorithms may be used to fulfill the foundational requirement.

Additional Required Courses include:

- DSC 383: Advanced Predictive Models for Complex Data (Recommend DSC 382 prior)
- DSC 384: Design Principles & Causal Inference for Data-Based Decision Making (Recommend DSC 382 prior)
- DSC 385: Data Exploration, Visualization & Foundations of Unsupervised Learning
- DSC 391L: Principles of Machine Learning (Recommend DSC 382 and Data Structures prior)
- DSC 395T: Deep Learning (Recommend DSC 382 and DSC 391L prior)

Elective Courses (must complete two out of the three):

- DSC 395T: Natural Language Processing (Recommended DSC 391L prior)
- DSC 395T: Optimization (Recommended DSC 391L prior)
- DSC 395T: Reinforcement Learning: Theory and Practice (Recommended DSC 391L prior)

Degree Overview

Course # and Name	Semester	Grade	
			Foundational Course
			Foundational Course
			Foundational Course
			Addt'l Required Course
			Addt'l Required Course
			Addt'l Required Course
			Addt'l Required Course
			Addt'l Required Course
			Elective Course
			Elective Course

30 HOURS TOTAL REQUIRED