

20 Month Schedule - One to Two Courses Per Month - Sample 1						
UMSI MADS Program	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	
Month 1	Being a Data Scientist	SQL & Databases	Milestone I	Network Analysis	Experiment Design and Analysis	
	Data Manipulation	Supervised learning	Causal Inference	Milestone II	-	
	-	-	-	-	-	
Month 2	Math Methods for Data Science	Efficient Data Processing	Unsupervised Learning	Qualitative Inquiry for Data Scientists	Learning Analytics	
	Information Visualization I	Database Architectures and Technologies	Data Mining II	Information Visualization II	-	
	-	-	-	-	-	
Month 3	Data Science Ethics	Big Data: Scalable Data Processing	Machine Learning Pipelines	Social Media Analytics	Capstone	
	Visual Exploration of Data	Deep Learning	Information retrieval	-	-	
	-	-	-	-	-	
Month 4	Data Mining I	Milestone I	Applied Natural Language Processing	-	Capstone	
	Communicating Data Science Results	Presenting Uncertainty	Milestone II	-	Capstone	
	-	-	-	-	-	
Number of Credits	8	8	8	5	5	

24 Month Schedule - One to Two Courses Per Month - Sample 1						
UMSI MADS Program	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Month 1	Being a Data Scientist	SQL & Databases	Supervised learning	Causal Inference	Milestone II	Experiment Design and Analysis
	Data Manipulation	-	Milestone I	Network Analysis	-	-
	-	-	-	-	-	-
Month 2	Math Methods for Data Science	Efficient Data Processing	Database Architectures and Technologies	Data Mining II	Qualitative Inquiry for Data Scientists	Learning Analytics
	Information Visualization I	-	Unsupervised Learning	-	Information Visualization II	-
	-	-	-	-	-	-
Month 3	Visual Exploration of Data	Big Data: Scalable Data Processing	Deep Learning	Machine Learning Pipelines	Information Retrieval	Capstone
	-	Data Science Ethics	-	-	Social Media Analytics	-
	-	-	-	-	-	-
Month 4	Data Mining I	Communicating Data Science Results	Presenting Uncertainty	Applied Natural Language Processing	-	Capstone
	-	Milestone I	-	Milestone II	-	Capstone
	-	-	-	-	-	-
Number of Credits	6	6	6	6	5	5