



Major in Data Science Four-Year Academic Plan

Year	Course Number	Fall	Credit Hours	Earned
1		<i>Integrative Core - First-Year Seminar</i>	4	
	DSC 140	<i>Data Science Fundamentals</i>	4	
	MTH 141	Calculus I	4	
		Foreign Language (if needed) or Elective	4	
Total			16	

Course Number	Spring	Credit Hours	Earned
	<i>Integrative Core - Foundation</i>	4	
DSC 240	Data Analysis and Visualization	4	
MTH 142	Calculus II	4	
	Foreign Language (if needed) or Elective	4	
Total		16	

Year	Course Number	Fall	Credit Hours	Earned
2		<i>Integrative Core - Foundation</i>	4	
	DSC 340	Machine Learning and Neural Networks	4	
	MTH XXX	Introductory Statistics Requirement	4	
		Elective	4	
Total			16	

Course Number	Spring	Credit Hours	Earned
	<i>Integrative Core - Foundation</i>	4	
DSC 250	Scientific Modeling & Data Analysis	4	
BUS 100	Introduction to Business	4	
	Elective	4	
Total		16	

Year	Course Number	Fall	Credit Hours	Earned
3		<i>Integrative Core - Exploration</i>	4	
	MTH 223	Intermediate Statistics	4	
	BUS XXX	Ethics Requirement	2	
		Elective	4	
		Elective	4	
	Total			18

Course Number	Spring	Credit Hours	Earned
	<i>Integrative Core - Exploration</i>	4	
DSC 350	Data Mining	4	
	Elective	4	
	Elective	4	
Total		16	

Year	Course Number	Fall	Credit Hours	Earned
4	DSC 360	Big Data Analytics	4	
		Elective	4	
		Elective	4	
		Elective	4	
	Total			16

Course Number	Spring	Credit Hours	Earned
	<i>Integrative Core - Capstone</i>	4	
DSC 440	Data Science Practicum	2	
	Elective	4	
	Elective	4	
Total		14	
Total Credit Hours		128	

Required Core Data Science Courses

DSC 140	Data Science Fundamentals	4
DSC 240	Data Analysis and Visualization	4
DSC 250	Scientific Modeling and Data Analysis	4
DSC 340	Machine Learning and Neural Networks	4
DSC 350	Data Mining	4
DSC 360	Big Data Analytics	4
DSC 440	Data Science Practicum	2

Required Business Course

BUS 100	Introduction to Business	2
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Ethics Course (Choose One)

BUS 315	Ethical Issues in Business	2
BUS 335V	Business Ethics	4

Total Credits for Data Science Major	46-48
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Required Mathematics/Statistics Courses

MTH 141	Calculus I	4
MTH 142	Calculus II	4
MTH 223	Intermediate Statistics	4

Introductory Statistics Course (Choose One)

MTH 123	Elementary Statistics	4
MTH 206	Prob. and Stat. for Engineering and Science	4

Requirements for a Minor in Data Science:

DSC 140	4
DSC 240 or DSC 250	4
MTH 123 or MTH 206	4
Electives (see Catalog)	8
Minor Total:	20