

Providence College - Data Science Major
Class of 2029

Core Requirements	Credits
Development of Western Civilization (4)	16
Ethics	3
Philosophy	3
Fine Arts	3
Quantitative Reasoning	3
Natural Science	3
Social Science	3
Theology 200 Level	3
Theology 300 Level	3
Intensive Writing I Proficiency	3
Intensive Writing II Proficiency	3
Oral Communication Proficiency	3
Diversity Proficiency	3
Civic Engagement Proficiency	3

Major Requirements	Credits
CSC 103 -- Intro to Computer Science	4
CSC 104 -- Software Development	4
CSC 220 -- Data Science Fundamentals	3
CSC 225 -- Data Structures	4
CSC 310 -- Machine Learning	3
MTH 109/131 --- Calc I/Calc & Analytic Geom I	3 or 4
MTH 110/132 -- Calc II /Calc & Analytic Geom II	3 or 4
MTH 216 -- Applied Linear Algebra	4
MTH 217 or MTH 325 or FIN 217 -- Statistics	3
MTH 319 -- Applied Regression Analysis	3
MTH 320 -- Statistical Methods for Data Science	3
Computer Science Elective	3
Mathematics Elective	3
Applications Elective	3
CSC 485 --- Data Science Capstone	3

Graduation Requirements, Degree Notes
credits of coursework. This total includes both their core and major requirements
Data Science Majors fulfill the Quantitative Reasoning Core
Students at Providence College need a GPA of 2.0 or more to graduate

FRESHMAN YEAR					
FALL			SPRING		
Course #	Class	Credits	Course #	Class	Credits
DWC 101	Development of Western Civilisation 1	4 or 5	DWC 102	Development of Western Civilisation	4 or 5
MTH 109 or MTH 110	Calc & Analytical Geometry I (Quantitative Reasoning)	3 or 4	MTH 110 or MTH 111	Calc & Analytical Geometry II (Quantitative Reasoning)	3 or 4
CSC 103	Introduction to Computer Science w/ Lab	4	CSC 104	Software Development with Lab	4
CSC 100	First Year Computer Science Seminar	1	MTH 217	Introduction to Statistics or 217, 325 or FIN 217	3
	Core/Free Elective	3			
TOTAL		15 or 17	TOTAL		14 or 16

SOPHOMORE YEAR					
FALL			SPRING		
Course #	Class	Credits	Course #	Class	Credits
DWC 201	Development of Western Civilisation	4 or 5	DWC 202	Development of Western Civilisation	4 or 5
CSC 225	Data Structures (with Lab)	4		Data Science Elective	3
CSC 220	Data Science Fundamentals	3	MTH 319	Applied Regression Analysis	3
MTH 216	Applied Linear Algebra	4		Core	3
	Core	3		Core	3
TOTAL		18 or 19	TOTAL		16 or 17

JUNIOR YEAR					
FALL			SPRING		
Course #	Class	Credits	Course #	Class	Credits
CSC 310	Machine Learning	3		Data Science Elective	3
	Data Science Elective	3		Free Elective	3
	Free Elective	3		Core	3
	Core	3		Core	3
	Core	3		Core	3
TOTAL		15	TOTAL		15

SENIOR YEAR					
FALL			SPRING		
Course #	Class	Credits	Course #	Class	Credits
MTH 320	Statistical Methods for Data Science	3	CSC 485	Data Science Capstone	3
	Free Elective	3		Free Elective	3
	Free Elective	3		Free Elective	3
	Free Elective	3		Free Elective	3
	Core	3		Free Elective	3
TOTAL		15			15
TOTAL PROGRAM OF STUDY CREDITS					125 -- 129