

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 Mehtods 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	Total Year 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)	3 or 4		MTH 110 or MTH 111	Calc & Analytical Geometry II (Quantitative)	3 or 4	
CSC 103	Introduction to Computer Science w/ Lab	4		CSC 104	Software Development with Laib	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	29 -- 33

SOPHOMORE YEAR							
FALL				SPRING			
Course #	Class	Credits		Course #	Class	Credits	Total Year 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	34 -- 36

JUNIOR YEAR							
FALL				SPRING			
Course #	Class	Credits		Course #	Class	Credits	Total Year 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	30

SENIOR YEAR							
FALL			SPRING				
Course #	Class	Credits		Course #	Class	Credits	Total Year 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	30
TOTAL PROGRAM OF STUDY CREDITS							125 -- 129