

Data Science Course/Students Outcomes Mapping

Courses		Program Outcomes					
Course No.	Course Title	PILO1	PILO2	PILO3	PILO4	PILO5	PILO6
Faculty Requirements							
AR142	Introduction to Artificial Intelligence	√	√				
AR241	Artificial Intelligence Programming	√	√	√		√	
30801101	Computer Skills (2) for Science Colleges	√	√				
30801203	Object Oriented Programming	√	√				
30801204	Object Oriented Programming Lab.	√	√			√	
AR231	Introduction to Unix	√	√				
30202101	Calculus (1)	√	√				
30202102	Calculus (2)	√	√				
Specialization Compulsory Requirements							
AR211	Data Structures	√	√				
AR212	Design and Analysis of Algorithms	√	√				
30801214	Discrete Structures and Mathematics	√	√				
DS111	Data Science Fundamentals		√		√		√
DS233	Probability and Statistics for Data Scientists Lab.		√		√		√
30801243	Database Design and Management 1	√	√		√		√
30801244	Database Design and Management 1 Lab.	√	√		√		√
DS210	Data Science Programming Languages	√	√				√
DS212	Data Science Programming Languages Lab.	√	√	√			√
DS241	Data Analytics	√	√		√	√	√
AR243	Machine Learning	√	√		√	√	
DS245	Machine Learning Lab.	√	√		√	√	√
DS 248	Computers and Networks Security	√		√		√	
DS260	Web Application Development	√	√		√	√	
DS261	Web Application Development Lab.	√	√		√	√	√
DS266	Mobile Application Development	√	√		√	√	
DS267	Mobile Application Development Lab.	√	√		√	√	√
DS230	Data Mining	√	√		√	√	
DS232	Data Mining Lab.	√	√		√	√	√
DS339	Data Warehousing	√	√		√	√	√
DS350	Information Retrieval Systems	√	√		√	√	
DS461	Software Engineering for Data Science	√	√		√	√	
AR347	Pattern Recognition	√	√		√	√	√
DS351	Cloud Computing	√	√				
VAR423	Internet of Things	√	√		√		
DS471	Project 1 for Data Science Students	√	√	√	√	√	√
DS472	Project 2 for Data Science Students	√	√	√	√	√	√

DS474	Field Training for Data Science Students	√	√	√	√	√	√
Specialization Elective Requirements							
DS 411	Advanced Data Structures	√	√				√
30801340	Databases Design and Management (2)	√	√				√
DS480	Big Data Analytics	√	√		√		√
AR445	Social network analysis	√	√				√
DS360	Computer Vision	√	√				√
AR344	Natural Language Processing	√	√				√
DS482	Sentiment Analysis of Big Data	√	√				√
VAR306	Parallel Processing	√	√				√
DS 411	Advanced Data Structures	√	√				√
Supportive Specialization Courses							
30202131	Probability and Statistics	√	√				
30801281	Principles of Numerical Analysis	√	√				