Guidance plan for students of Bachelor of Data Science and Al

First Year							
First Semester			Second Semester				
Course No.	Course Name Credit Hr.		Course No.	Course Name	Credit Hr.		
-	University Req.	3	-	University Req.	3		
-	University Req.	3	-	University Req.	3		
-	University Req.	3	908100	Data Science Foundations	3		
901110	Computer 2 for IT students	3	901210	Object oriented programming	3		
901111	Computer 2 for IT students Lab.	1	901214	Object oriented programming Lab.	1		
			401101	Calculus 1	3		
	Total	13		Total	16		

Second Year						
First Semester			Second Semester			
Course No.	Course Name	Credit Hr.	Course No.	Course Name	Credit Hr.	
-	University Req.	3	-	University Req.	3	
401237	Probability and Statistics	3	-	Department Req.	3	
904233	Principles of information systems	3	904341	System Analysis and Design	3	
901200	Discrete Mathematics	3	908101	Statistics for Data Science	3	
-	Department Req.	3	901240	Data Structure	3	
			901325	Computer Networks	3	
	Total	15		Total	18	

Third Ye	Third Year						
First Semester			Second Semester				
Course No.	Course Name	Credit Hr.	Course No.	Course Name	Credit Hr.		
901332	Operating Systems	3	901470	Artificial Intelligence and Expert Systems	3		
908102	Visualizing Data and Exploring	3	-	Dept. elective course	3		
901330	Databases	3	908302	Data Science programming using R Language			
901340	Analysis and Design of Algorithms	3	902432	Data Mining	3		
902350	Web Page Design	3	901341	Software Engineering	3		
902354	Web Page Design Lab.	1	908402	Data Engineering	3		
	Total	16		Total	18		

Summer Semester					
	901498	Field Trainings	3		
		Total	3		

Fourth '	Fourth Year						
First Sem	ester		Second Semester				
Course No.	Course Name	Credit Hr.	Course No.	Course Name	Credit Hr.		
-	Dept. elective course	3	-	Dept. elective course	3		
908401	Deep Learning	3	-	University Req.	3		
908201	Big Data	3	908303	Machine Learning	3		
902450	Electronic Commerce and Electronic Government	3	908304	Natural Language Processing	3		
-	University Req.	3	908408	High Performance Computing	3		
908499	Graduation Project	3					
	Total	15		Total	15		