Program Structure for B Tech Artificial Intelligence and Data Science (Batch 2025-29) onwards					
Year of the Programme: First Year (Academic Year 2025-26)					
Semester - I			**Semester - II**		
S. No.	**Name of the Course**	**Credits**	**S. No.**	**Name of the Course**	**Credits**
1	Calculus	4	1	Linear Algebra and Differential Equations	4
2	Physics	4	2	Data Wrangling	3
3	Basic Electrical and Electronics Engineering	3	3	Elements of Biology	3
4	Computational Thinking for Problem Solving	4	4	Principles of Economics and Management	3
5	Engineering Graphics and Design	2	5	Programming with Python	2
6	Essential Electronics Practices	1	6	Product Realization	2
7	Engineering Ethics	1	7	English Communication	1
8	Indian Knowledge System	0	8	Environmental Studies	0
			9	Constitution of India	0
			10	Transforming Ideas to Innovation	1
Total	**8**	**19**	**Total**	**10**	**19**
Year of the Programme: Second Year (Academic Year 2026-27)					
Semester - III			**Semester - IV**		
S. No.	**Name of the Course**	**Credits**	**S. No.**	**Name of the Course**	**Credits**
1	Discrete Mathematics	3	1	Artificial Intelligence	3
2	Probability and Statistics	3	2	Machine Learning	4
3	Operating Systems	4	3	Database Management Systems	3
4	Signal and Image Processing	4	4	Design and Analysis of Algorithms	4
5	Data Structures and Algorithms	3	5	Object Oriented Programming	2
6	Program Elective - I	3	6	Program Elective - II	3
7	Data Structures and Algorithms Lab	1	7	Open Elective - I	3
8	Technical Communication	1	8	Database Management Systems Lab	1
9	Data Visualization and Interpretation	2	9	Object Oriented Programming Lab	1
10	Community Service	0	10	Design Experience I	1
Total	**10**	**24**	**Total**	**10**	**25**
Year of the Programme: Third Year (Academic Year 2027-28)					
Semester - V			**Semester - VI**		
S. No.	**Name of the Course**	**Credits**	**S. No.**	**Name of the Course**	**Credits**
1	Predictive Analysis	3	1	Deep Learning	3
2	Computer Networks	4	2	Program Elective - IV	3
3	Big Data Analytics	3	3	Program Elective - V	3
4	Program Elective - III	3	4	Open Elective - III	3
5	Quantum Machine Learning	3	5	Open Elective - IV	3
6	Open Elective - II	3	6	Management Accounting for Engineers	2
7	Design Experience II	2	7	Design Experience III	2
8	Responsible and Ethical AI	1	8	Agile Product Development with DevOps	2
			9	Interpersonal Skills	1
Total	**8**	**22**	**Total**	**9**	**22**
Year of the Programme: Fourth Year (Academic Year 2028-29)					
Semester - VII			**Semester - VIII**		
S. No.	**Name of the Course**	**Credits**	**S. No.**	**Name of the Course**	**Credits**
1	Applied Time Series Analysis	3	1	Project	10
2	Natural Language Processing	3			
3	Program Elective - VI	3			
4	Program Elective - VII	2			
5	Open Elective - V	3			
6	Capstone Project	5			
Total	**6**	**19**	**Total**	**1**	**10**

Total Credits for the Programme   **160**
Total no of courses   **62**