

Course structure for B Tech Artificial Intelligence and Data Science (Batch 2024-28)					
Year of the Programme: First Year (Academic Year 2024-25)					
Semester - I			Semester - II		
S. No.	Course	Credits	S. No.	Course	Credits
1	Calculus	4	1	Linear Algebra and Differential Equations	4
2	Physics	4	2	Probability and Random variables	3
3	Engineering Graphics and Design	3	3	Elements of Biology	3
4	English Communication	1	4	Basic Electrical and Electronics Engineering	3
5	Programming for Problem Solving	4	5	Principles of Economics and Management	3
6	Environmental Science	2	6	Python Programming	1
7	Critical Thinking	0	7	Digital Manufacturing Laboratory	1
8	Constitution of India	0	8	Electrical and Electronics Workshop	1
			9	Professional Ethics	1
			10	Design Thinking	0
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>20</b>
Year of the Programme: Second Year (Academic Year 2025-26)					
Semester - III			Semester - IV		
S. No.	Course	Credits	S. No.	Course	Credits
1	Discrete Mathematics	3	1	Signal and Image Processing	4
2	Random Processes and Estimation Techniques	4	2	Database Management Systems	3
3	Data Wrangling	3	3	Machine Learning	4
4	Statistical Methods	3	4	Artificial Intelligence	3
5	Operating Systems	3	5	Optimization Techniques	3
6	Data Structures and Algorithms	4	6	Management Accounting for Engineers	2
7	Technical Communication	1	7	Integral Transforms	3
8	Community Service	0			
<b>Total</b>		<b>21</b>	<b>Total</b>		<b>22</b>
Year of the Programme: Third Year (Academic Year 2026-27)					
Semester - V			Semester - VI		
S. No.	Course	Credits	S. No.	Course	Credits
1	Computer Networks	3	1	Computer Vision	3
2	Data Handling and Visualization	2	2	Deep Learning	3
3	Mobile Application Development	3	3	Agile Product Development with DevOps	3
4	Department Elective - I	3	4	Department Elective - III	3
5	Department Elective - II	3	5	Department Elective - IV	3
6	Open Elective - I	3	6	Open Elective - III	3
7	Open Elective - II	3	7	Open Elective - IV	3
			8	Interpersonal Skills	1
<b>Total</b>		<b>20</b>	<b>Total</b>		<b>22</b>
Year of the Programme: Fourth Year (Academic Year 2027-28)					
Semester - VII			Semester - VIII		
S. No.	Course	Credits	S. No.	Course	Credits
1	Applied Time Series Analysis	3	1	Project	10
2	Natural Language Processing	3			
3	Big Data Analytics	3			
4	Department Elective - V	3			
5	Department Elective - VI	3			
6	Open Elective - V	3			
7	Capstone Project	4			
<b>Total</b>		<b>22</b>	<b>Total</b>		<b>10</b>

**Total number of Courses** 56  
**Total Credits for the Programme** 155